

AN INVESTIGATION OF MOOD PHENOMENA IN A SAMPLE
OF VOLUNTEER FEMALE UNIVERSITY STUDENTS

by

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AN INVESTIGATION OF MOOD PHENOMENA IN A SAMPLE OF VOLUNTEER

FEMALE UNIVERSITY STUDENTS

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for the degree of Doctor of Philosophy,
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George R. Frampton

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PREFACE

It was through the author's therapeutic work with "moody" individuals and the search for a valid perspective on their experience that he became aware of the indeterminate status of "mood" as a topic in contemporary psychology. A review of the psychological literature yielded a bewildering array of definitions, incomplete models, mixed metaphors and inconclusive theoretical argumentation. Yet clinical experience consistently yielded basic dimensions, certain features of experience were repeatedly declared by clients themselves. This recurrence of elements suggested that mood might have unique attributes in terms of its qualitative structure as a process or realized potential; it appeared that there might be individual mood-specific constraints, and a global effect on cognition, affect, and behaviour. In order to confirm and possibly extend these initial observations and conceptual intuitions, a study of mood phenomena in a sample of 105 volunteer female university students was undertaken.

The study is most properly viewed as an exercise in propaedeutics: it seeks to determine the effects of one specially designed technique on mood; to examine the logic of the concept "mood" and criteria for the identification and classification of moods; to indicate the range and structure of subjects' mood experience, and to ascertain the causes and reasons for such experience.

It is hoped that the clinical data and the theoretical analyses of this work, taken conjointly, can contribute to establishing general defining features for mood. Perhaps a more refined conceptual organization and increased clinical discernment will be forthcoming from a systematic investigation of the different levels of mood, both as a concept and as an experience.

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ABSTRACT

The effect of a mood analysis technique on dimensions of mood in 105 volunteer female university students was examined. Subjects identified as "moody" by two different criteria were distinguished by variables on standard personality tests. Clinical data from 15 intensive study volunteers was analyzed to tentatively establish the features and attributes of mood. As a necessary supplement, the concept "mood" was dissected and the implications for mood research were set out.

The Nowlis Mood Adjective Check List (MACL) was used to assess mood change across four treatments: personality testing; an experimenter administration of the Mood Analysis Technique (MAT); engaging in quiet activities; and a self-administration of the MAT.

The experimental findings indicated that Session 2, the experimenter administered Mood Analysis Technique (MAT), has a global influence on mood, influences mood dimensions in ways different from the other experimental sessions, and influences negative moods in predominantly positive ways. Different patterns of personality variables were significantly correlated with the two types of "moody" subject studied. Psycho-linguistic data established that the term "mood" is used both to report feeling qualities and to perform social-judgemental actions.

The findings suggested: the MAT operates to change mood and increase awareness; "moody" subjects differ from their "non-moody" counterparts on major personality dimensions; mood experience has systematic features and attributes; and the concept "mood" is generated, logically, at the interface of psycho-social, physiological, and affective domains.

SUMMARY

Traditionally "mood" has been considered a "nuisance variable" in experimental psychology (Borgatta, 1961), a systematic modulator of mental state and behaviour, that is difficult to control and which introduces a fluctuating margin of uncertainty into experimental work. Like inclement weather, ill-health, or the "chance and absurdity factors", it was viewed as an unavoidable and undesirable complication, one that ideally would have been eliminated.

Clinically orientated researchers, while often aware of the distorting effects of mood, were sometimes content with a simple cognizance of mood as general feeling tone, believing that this was sufficient to explain the operation and "causal" properties of mood. However, this one-sided simplification runs counter to psycho-dynamic clinical experience, and even to the common linguistic usage of the term "mood"; in relatively few of the analyses and investigations surveyed was there an active fostering of an impartial and consistent listening to what individuals themselves actually say about their mood experience.

Clinical necessity coupled with an awareness of the difficulties that individuals often experience in talking about their moods, integrating them into their self-concept and personal cognitive structures, suggested the need for a technique that would facilitate the representation of mood to clients, clinicians, and clinical researchers. However, the attainment of a series of valid mood representations is not by itself sufficient to establish adequacy. Any analytic technique should aspire to examine critically its own presuppositions; to explicate its methodology and the network of correlated concepts, its particular perspective and implicit world view. The achieved result should be clearly situated with respect to other alternative viewpoints. For these reasons the logic of the

concept "mood" is examined, and considerable attention is given to demonstrating the logical commitments and biases, the perspectival constrictions of different mood viewpoints and experimental approaches.

Although in most cases the author believes he has fulfilled the duties of neutral arbiter between the different mood viewpoints, nevertheless the act of arbitration itself in conjunction with clinical experience has led to several biases. The reader may legitimately request to know these biases for a conceptual "settling of accounts". An explicit and comprehensive list divided into methodological and clinical biases would have to include:

Methodological Biases

1. The joint need for conceptual analysis and thorough data collection.
2. The need to establish in advance criteria for the identification of mood.
3. The equal importance of techniques for analysis and synthesis.

Clinical Biases

1. The clinical utility of a tacking procedure between two guiding "images" of mood--mood as a process and mood as experienced potentials.
2. The "being" or "truth" of a particular mood lies in its source, trend, and the conditions of its completion or termination.
3. The importance of acts of self-expression and self-awareness for understanding mood.
4. The necessity for qualitative description to be responsible to both internal potentials and concrete environmental situations.

AIMS AND ORIENTATION OF THE STUDY

The study is a multifaceted approach to the experience and the concept of mood. It utilizes techniques of clinical, experimental, and conceptual analysis to uncover the fundamental elements, structures, and qualities of mood.

General Aims

- i To determine the effect of one specially designed technique (The Mood Analysis Technique) on basic dimensions of subjects' mood.
- ii To provide a broad perspective on "mood" through examining the concept and its interconnections with empirical data.
- iii To outline the "problem areas" of mood on an experimental plane, an empirical plane, and a theoretical plane.

Specific Aims

- i To establish the parameters and necessary conceptual elements of the concept "mood"; to determine the basic elements in different theoretical perspectives in order to assess their congruence with clinical data, and to lay the ground work for a conceptual synthesis and increased clinical understanding.
- ii To establish the historically relevant studies that have predetermined the limits of contemporary approaches to mood study.
- iii To establish the personality variables correlated with different mood criteria and their defining concepts.

- iv To establish the global effect of the Mood Analysis Technique (MAT); its effect relative to the other experimental treatments; its effect on "moody" vs. "non-moody" subjects; and especially its effect on moods classified as positive, neutral and negative.
- v To establish through the analysis of subjects' own definition of "mood", a primary empirical base that any theoretical or conceptual analysis should be orientated to and capable of accounting for through its network of elements.
- vi To use psycho-linguistic data (particularly a functional analysis of sentences using the word "mood") to establish the outlines of what can meaningfully be said about mood both as an experience and a concept.
- vii To examine clinical mood data in order to determine qualitative features, recurring attributes, structural and systemic aspects, and causes and reasons for mood experience.

INTRODUCTION

This study is a multifaceted approach to the basic phenomena of mood. It gives attention to the experimental investigation of parameters of mood, the adequacy of current concepts of mood, the metalogic of sentences employing the term "mood", and the structure, causes and reasons for subjects' reported mood experience.

The relative adequacy and relative success of the work may be gauged in terms of its ability to present, articulate, and partially resolve empirical constrictions, conceptual ambiguities, and methodological impasses, that fall under these problem areas:

The Experimental Problem

The experimental problem has two aspects: to develop a technique that will institute explorations of mood and facilitate its representation to individuals through an organized but open-ended series of questions; and to establish with a reasonable degree of confidence the effects such a technique has on basic dimensions of mood.

The Conceptual Problem

The conceptual problem is the necessity of rendering the logic of the concept "mood" problematic, in order to develop a critical perspective capable of surmounting both conceptual orthodoxy for its own sake and the lure of attractive but non-utilitarian formulations.

The Problems of Voice, Language and Unity

Voice

The work is multivocal, but the different voices are not arbitrary, and stem from the stated aim of approaching "mood" from different perspectives and on different levels. The conceptual voice speaks a language of logic, hierarchies, and seeks the grounds of adequacy. The experimental voice speaks a language of statistical notation, presents probabilistic statements, and seeks experimental demonstration. The experiential voice speaks an expressive language of symbolic presentation, attempts constitution through the medium of language, portrays linguistically, and seeks essential metaphorical description.

Language

Language is capable of serving many different functions, e.g. the sharp delineation of facts

and the "knitting together" of the "interstitial tissue" of experience. The work makes full use of the total resource of language to ferret out, reveal and express the nature of "mood" as a concept and experience; it states facts, portrays experience, and attempts to precipitate a new awareness of "mood" and its problems.

Unity

The unity of the work lies in the inter-relatedness of its parts, the organization of values and structural hierarchies, the cooperation of its parts towards a goal and its consistent emphasis on the functions of adaptation and self-expression. It stresses the indwelling integrity of mood experience, the need for open-ended hierarchies, limited but precise integrations of conceptual elements and structural features of experience, and the development of experience through expressive portrayals.

The Physiological Problem

The role of physiological variables in mood states is bracketed and held in suspension. This is not to deny the role of such variables, but rather to delimit the focus of attention to those variables that are psycho-social in nature.

The Experiential Problem

The experiential "problem" can be framed in terms of the ultimate inability of cognition alone to establish the "truth" of moods. Cognition alone does not encompass the "meaning" of mood, rather it is awareness, clarity, and self-expression in conjunction with cognitive acts that reflexively establishes a momentary balance point equivalent to understanding.

The Concept "Mood"

An understanding of the concept "mood" requires several routes of access, a viewing from multiple perspectives. From the vantage point of common linguistic usage, where a reduction to static elements has been achieved through the analysis of dictionary definitions, we find these conceptual elements necessary:

"state of mind", "feeling", "inclination", "disposition", and "pervasiveness".

This analysis of historically stratified meaning was supplemented by determining how subjects define "mood" in terms of their own experience. Here, these elements were necessary:

"mood as a state of mind or feeling", "mood characterized as pervasive", "mood as having a causal effect", "mood as the result of both internal and external factors", and "mood as an attitude".

Linguistic use, the employment of the word "mood" in sentences whose action potential is explicated, suggests that mood sentences are used to perform social-judgemental actions and evaluations, and to report feeling experience.

Taken as a unit these three approaches suggest that the concept "mood" is generated at the interface of three interpenetrating realms--a psycho-social realm, a physiological realm, and a realm defined by a system of dynamic qualities applicable to sentient, motivated, and developing human agents.

It becomes apparent that the concept "mood" is open-textured, an overlapping of logically necessary and empirically salient elements; "mood" is also a contextual term, a significant proportion of its meaning is acquired through its deployment--the way in which it is inserted into human activity. Endemic to the concept are "images", "models", or "plans" of various orders.

On one level "mood" denotes hypothetical centres of powers and systemic properties (e.g. the disposition approach--reflected in common usage as "inclination"); it refers to conditions and attributes of a psychological sentient subject (e.g. the state approach--reflected in common usage as "state of mind" or "feeling"). It can also be maintained that "mood" is an iconic term, its meaning (its peculiar oscillation in reference) gives a "picture" of, or is isomorphic to, what by one definition it denotes--changeability that is simple, mediated, or complex; a complexity that includes the pattern of oscillation.

"mood" is also a self-expressive concept, a cover for tendencies to self-expression, subjective expressive unity, and the inner dynamism of a striving consciousness.

Part of its technical meaning stems from its employment as an hypothetical construct--it denotes experience but is also an organizational concept on more than one level. It may stand for an observed collection of behaviours, or for the abstracted arrangement of that behavioural array (e.g. Nowlis, 1965); it may logically bridge the gap between personality and environment--or between "self" and "world" (e.g. Stein, 1970). It can function as an higher-order theoretical term with a low coefficient of empirical reduction, or at an intermediate level may refer to a modulator and sensitizer that changes the values of multiple personality dimensions and affects the perceptual-interaction with the environment (e.g. Cattell, 1963).

Conceptual analysis, theoretical gleanings, and clinical experience, have established this inclusive range of meaning for the concept "mood":

1. protracted feeling states of moderate or high intensity
2. quickly changing or vacillating elements of affect
3. general feeling tone
4. susceptibility to spells of irritability and bad temper
5. basic desires or inclinations
6. peripheral affective shadings, background elements and structures of potential affect
7. some combination of affect, attitude, self-concept and perceptual set
8. a collection of behaviours, or higher-order organizations of affect and behaviour
9. a synthetic unit of "seeing", "feeling", and "being"; a sensitivity and resonance uniting conscious with the environment and revealing aspects of the self structure.

Theories of Mood

Theories of "mood" are not in an advanced stage of development. Strictly speaking, no mood viewpoint is sufficiently defined, ordered, and internally regulated to the extent of providing explicit formal language systems (pure or interpreted), axiomatic or deductive systems with determined predictive power. Definition systems are usually weak or vague, with a high coefficient of density and no clear explication. Certainly no viewpoint is capable of claiming to have satisfied the requirement of providing: 'a set of systematically

related statements, including some lawlike generalizations, that is empirically testable' (Rudner, 1966, p.10). Cattell has offered a theory of modulators, and here there is an interconnecting of descriptions with inferential linkages, but no clear operational definitions, criteria of identification, and uncertain predictive power.

However, several viewpoints offer empirical models, or systematized metaphors upon which their higher-order propositions are based. To give one example from the three major perspectives:

Disposition Models
(e.g. Nowlis, 1965).

Definition: 'Mood is the effect on a person of his own configurations of activity. These configurations may be conceptualized as fundamental patterns of general functioning and orientation....'

Type of Model: negative feedback, implicitly self-regulating; multi-dimensional

Constituent Elements: mood is the feedback effect on a person of his own configurations of activity; mood is mediated by a variety of cues and a reinforcement history; mood serves a monitoring and controlling function

Assets: closely linked with experimental and statistical procedures; mood measurement the product of an overt theoretical conception; attention devoted to a range of possible mood dimensions; stress on monopolar mood factors consonant with clinical data; recognizes the interconnection between mood and self-concept; provides a degree of conceptual analysis

Liabilities: insufficient attention given to qualitative and process aspects of mood; tendencies towards a "granular analysis"; a global conception provided, but without internal differentiation; imposes the logical forms of a natural science paradigm on psycho-social data; no clear demarcation of observation and theoretical terms.

CONCEPTUAL AND THEORETICAL CONSIDERATIONS

Chapter 1 is a detailed presentation and appraisal of major conceptual and theoretical issues in the domain of mood. The way is paved for an empirical study of mood by examining the concept of "mood" and several different theoretical approaches. It is determined that there is a necessity for having an adequate concept of mood and criteria for the identification of mood prior to any experimental undertaking. Concepts and criteria are seen to be interdependent.

The status of mood reports as "knowledge by acquaintance" is advocated. Such reports, however, are not incorrigible.

The conceptual pitfalls of a Cartesian bias, i.e. separating behavioural aspects of mood from the feeling aspects, are to be avoided. An alternative approach co-ordinating feeling, situation, and behaviour, is proposed. From this vantage point the concept "disposition" is seen prescriptively to have both a phenomenal and a behavioural reference.

Mood criteria involving parameters of intensity, duration, and pervasiveness, are given concrete applications. Model cases, related cases, and borderline cases are established.

The basic elements in ten different viewpoints of mood are set out. As disposition theories currently predominate, the logical and experiential difficulties are examined. Although

useful for research purposes, disposition theories are in need of supplementation and completion.

A SHORT HISTORY OF THE OBSERVATIONAL AND EXPERIMENTAL INVESTIGATION OF MOOD

Chapter 2 shows that the history of mood study has not been one of continuous linear development. Rather, it reveals a series of intermittent motions, stops and starts, advancements and periods of inactivity, hesitations and crosscurrents of dispute, sudden enthusiasms and emphases dictated by psychological fashion. It is a history largely ignored in current mood studies. Therefore to the extent that the present is both a culmination of the past and a prefiguring of the future, it merits a clear and careful examination.

A Schematic Presentation of the Developmental Trends and Contemporary Issues in the Study of Mood

The structuralists Wundt and Titchener recognized the natural vigour and quiddity of affective experience and held the firm conviction that self-observation (as introspection) and elemental analysis offered a reliable tool and procedure.

Their search for the "elements" or "constituents" of consciousness resulted in intransitive and disjunctive units separated from their wider context. It was not sufficiently acknowledged that these units may not be homogeneous, may require contextual definitions, and can participate in different logical and experiential orders.

In general, inadequate attention was given to establishing criteria of identification; logical and experiential orders were not distinguished; and the determining role of semantics was left unexplicated.

Early studies (e.g. Koch, 1913; Krueger, 1928) suggest the need for a molar process view of mood. Mood processes may be internally complex. Evidence to support both these views is provided by the qualitative data of this study. Ruckmick (1936) offers mood criteria potentially amenable to experimental study.

1934-1945 Mood conceptualized as the general feeling tone of the organism. Psycho-social factors are stressed. The role of physiological variables and the problem of mediation are considered. Psychoanalysts provide information on the developmental and psychodynamic aspects of mood.

The most frequent conceptualization of mood during this period was as the general feeling tone of the organism, either as a result of internal processes, or the impingement of the social environment. A variety of techniques were used for the study and induction of mood. The most popular mood measure was the bi-polar rating scale. It was used alone, in combination with questionnaires, in combination with experimental tests utilizing tests, behavioural and cognitive measures, and in combination with verbal reports.

1945-1959 Mood linked to specific motivational sub-systems. A homeostatic model is developed. Experimental research concerned primarily with the effects and correlates of mood. Insufficient attention given to the logical shifts that should accompany procedural

shifts. Self-rating scales widely used to measure mood.

New emphases began to emerge in the literature for this period, for some authors mood was still equivalent to general feeling tone, but now it was viewed as the resultant of a network of specific feeling tones grounded in operative aspects of the individual's motivational system. "Mood" was also conceptualized as the affective aspect of psychic equilibrium following the resolution of conflict or excitement. Strictly speaking this period was dominated by a study of the effects and correlates of mood, the relationship between mood and associative responses being the preferred area of study. The usual technique was to employ mood self-rating scales, a listing of associative responses and then to compare associative responses produced under different ratings of mood. The ratings most frequently chosen were "high" and "low" mood.

1960-1970 The disposition view of mood becomes prominent. Mood seen as a consequence of the interaction between personality and situation. Clinically, the fluctuations of mood over extended time periods are studied. Factor analytically derived mood adjective check lists used to measure mood. Dimensions of the Nowlis MACL are replicated. Labelling of affective states shown to be a joint function of physiological arousal and cognitive factors.

A new conceptual sophistication emerges during this period. It is emphasized that there are two broad approaches to refining the concept "mood", i.e. attention can be directed to the situations and sequences of situations that produce mood states and attention can be directed to the moods themselves, to the experience of mood. It was not however sufficiently noted that the situation approach must face the difficulty that there may be no necessary one-to-one correspondence between situation and mood, particularly if mood is a cumulative effect, or the result of the mutual interaction and polarization of physiological factors, personality structure, and psycho-social input (a summary effect of multiple interactions). In addition moods of internal origination may overridingly determine perception, evaluation, and behaviour, and in this sense "create" the environmental potentials perceived and assimilated. Such a subjective idealism matches some subjects' mood experience.

1971-1977 The representation of mood by monopolar factors is challenged. "Mood" as an entity occurring within a matrix of psychological, psycho-social, and physiological factors. Social-developmental and conflict models proposed. Evidence for interrelationships between cognitive styles and mood states. A systematic contemporary application of phenomenological principles is offered.

During this period it is widely assumed that the individual is always in one mood or another. However, this is not as straightforward a principle as it appears, it can involve a commitment to a variety of assumptions. Its meaning varies in the context of a particular theoretical view and in its theory-free inflection. It tends to equate mood with any affective state. At best it is a type of summary statement that ranges rather freely over an undefined, unregulated, and undifferentiated set of data.

METHOD

Subjects were all volunteer female university students between the ages of 16 and 32. Mean age was 19.12 years, with a standard deviation of 2.67 years. Sample size was 105.

Three personality measures, the Cattell Sixteen Personality Factor Questionnaire, the Edwards Personal Preference Schedule, and the Gough Adjective Check List, were used as part of an experimental treatment and to determine personality variables that significantly distinguish "moody" from "non-moody" individuals.

A Mood Analysis Questionnaire was developed and its overall effect on mood as well as moods classified as positive, neutral, and negative was determined. The Mood Analysis Questionnaire was also designed to elicit basic information on mood.

The Nowlis Mood Adjective Check List was used to assess mood change across four different treatments. Treatment 1 (N=105) measured mood change resulting from the completion of personality tests; Treatment 2 (N=105) measured mood change resulting from an experimenter administration of the Mood Analysis Questionnaire; Treatment 3 (N=105) measured mood change resulting from engaging in quiet activities; Treatment 4 (N=105) measured mood change resulting from a self-administration of the Mood Analysis Questionnaire; subjects also defined mood in terms of their own experience, and used the word "mood" in four grammatical sentences. Each subject had a feedback and discussion meeting with the experimenter.

An additional session was given to 43 subjects in order to discuss their mood states. Fifteen of these subjects volunteered for further intensive study of their moods. Descriptions were obtained of basic recurring mood states.

The statistical procedure involved both univariate and multivariate techniques of analysis.

Experimental and Empirical Questions Considered

The collection of experimental and qualitative data is orientated around a preliminary attempt at resolving a number of general and specific questions concerning "mood" and mood experience. The questions considered can be grouped under four headings: Personality Variables that distinguish "Moody" from "Non-Moody" individuals, The Influence of the Mood Analysis Technique (MAT) on Mood, Psycho-linguistic Data Pertinent to the Concept Mood, and Qualitative Data Presenting the Basic Features and Attributes of Mood.

1. Personality Variables that distinguish "Moody" from "Non-Moody" Individuals

Can standard personality tests provide a set of variables that distinguish "moody" from "non-moody" subjects? Do different criteria of "moodiness" corresponding to different conceptions of "moody" establish identical or dissimilar patterns of variables? Are some variables constant regardless of the criterion of "moody"?

2. The Influence of the Mood Analysis Technique (MAT) on Mood

Does the Mood Analysis Technique have a greater global effect on mood than the other experimental sessions? Is the Mood Analysis Technique influencing particular dimensions of mood differently from the other experimental sessions, i.e. is its influence selective? Is the Mood Analysis Technique influencing "moody" individuals differently from "non-moody" individuals? What is the effect of the Mood Analysis Technique on different categories of mood, i.e. positive, neutral and negative moods? What are the subjects' own appraisals of the Mood Analysis Technique?

3. Psycho-linguistic Data Pertinent to the Concept "Mood" -

Can subjects' definition of "mood" in terms of their own experience contribute to our understanding of what mood is and how it functions? What is the range of psycho-linguistic actions that mood sentences perform? What significance does this have for an adequate conceptualization of "mood"? Is "mood" primarily a state or a process concept? Can it be assimilated to an organizational concept for patterns of behaviour? Does it operate exclusively to make social-evaluative attributions?

4. Qualitative Data Presenting the Basic Features and Attributes of Mood

What is the range of mood experience? What kinds of mood do subjects typically have? How do subjects formulate the qualitative structure, the causes and reasons for their experience? Is there a wider matrix of contributing factors? When moods are grouped into positive, neutral and negative categories, are there common features across these categories? How do subjects perceive themselves and their environment when in specific moods? What aspects of self-concept may be said to be operating?

RESULTSPersonality Variables

The two criteria used to identify "moody" individuals (each criterion corresponding to a different conception of "moody") yielded at a level of statistical significance personality variables that distinguished "moody" from "non-moody" subjects. Each criterion yielded a different set of personality variables, and there were ten personality variables common to the two criteria.

The effect of the MAT on mood (overview)

The argument that Session 2, the experimenter administered Mood Analysis Technique (MAT), has a determinate and specifiable effect on mood proceeds through four sequential stages:

1. Establishing that the technique has a major global effect across the set of mood dimensions
2. Establishing that the technique has salient effects on particular mood dimensions
3. Establishing that the technique brings new elements of affect into awareness
4. Establishing that the technique has a differential effect on positive, neutral, and negative moods, and in particular functions to decrease the intensity or meliorate the quality of negative moods.

The evidence is not absolutely conclusive, but it is believed to be sufficiently persuasive to suggest that the Mood Analysis Technique does have a major global influence, influences mood in ways different from the other experimental sessions, may influence mood irrespective of whether or not the individual is a "moody" person, and in particular has a positive effect on moods classified as "negative".

Absolute magnitude of change scores

We might expect that Session 2, the experimenter administered Mood Analysis Technique (MAT), would have a relatively high absolute magnitude of change score (global change across the 12 Nowlis Mood Factors) owing to its design as a probe and facilitator of mood change. This expectation is fulfilled experimentally, at a level of statistical significance. However, we cannot say that the absolute magnitude of change score for Session 2 is greater than the absolute magnitude of change score for Session 1, the personality testing session.

Magnitude of change scores

An analysis of the magnitude of change scores (discrete change on the 12 Nowlis Mood Factors) shows that there is an overall difference in group means across the four experimental sessions at a level of statistical significance. Examining the individual Nowlis Mood Factors, those factors significantly distinguishing the four experimental sessions were: Aggression, Surgency, Social Affection, Sadness, Egotism and Scepticism. Focusing on Session 2, the experimenter administered Mood Analysis Technique (MAT), it was found: Session 2 increased the mood factors Aggression, Social Affection, Sadness and Egotism; and showed a lesser decrease in Surgency and Scepticism.

Component change scores

An analysis of the component change scores (internal change on the 12 Nowlis Mood Factors) shows that the most salient component change scores for Session 2, the experimenter administered Mood Analysis Technique (MAT) relative to the other experimental sessions, occurred on these factors: Aggression (Session 2 had the ability to generate new components), Anxiety (Session 2 had the ability to generate new components and make components disappear--it was the most active experimental session in terms of this dimension), Social Affection (Session 2 had the ability to generate more new components than any of the other experimental sessions), and Sadness (Session 2 showed more total change and more new components).

Interpretations

In general the patterns of effect for Session 2 were parallel to Session 4, the self-administered MAT, and both sessions tended to be dissimilar to Session 1, the personality testing session, and Session 3, the quiet activities session.

The magnitude of change score results can be explained in terms of the design and format of the MAT, its ability to locate present feeling in terms of past feeling, the latent and shadow aspects of present feeling, and the projection of future feeling--all aspects being made immanent through the search for expressive metaphors.

The component change scores suggest that Session 2 has the ability to generate more new components over several mood dimensions, and provide substantial support for the argument that Session 2 is functioning to bring new feeling elements into awareness and to reveal potentials for feeling.

The effect of the MAT on "moody" vs. "non-moody" subjects

An analysis of the effects of the different experimental sessions on "moody" vs. "non-moody" subjects revealed no statistical differences. With respect to the Mood Analysis Technique (MAT) this suggests that the MAT is influencing mood irrespective of whether or not the subject is a "moody" individual. However due to the general lack of statistical significance, this result must be interpreted circumspectly.

The effect of the MAT on positive, neutral and negative moods

Subjects' mood states were divided into positive, neutral and negative moods in order to determine the effect of Session 2, the experimenter administered Mood Analysis Technique (MAT), on different categories of mood, and in particular to determine the effect of the MAT on negative moods. It was found that Group 3 (negative moods) had a greater mean absolute magnitude of

change score than Group 2 (neutral moods). This suggests that Session 2 was globally influencing negative moods to a greater extent than more neutral moods. It appears that the negative moods are amenable to change and less resistant to change than the neutral moods. In order to establish that the greater global effect represents an improvement in the negative moods, individual Nowlis Mood Factors were examined in conjunction with subjects' indication of qualitative or intensity changes upon completion of Session 2. It was found that Group 3 (negative moods) showed a decrease in Anxiety; and increases for the mood dimensions Surgency and Elation. In each case these results can be interpreted as an improvement in the negative moods. The qualitative data establishes that overall, Session 2 operated to improve the quality of negative moods or reduce their intensity.

Subjects' comments and appraisals of the MAT

An analysis of subjects' comments upon completion of Session 2, revealed that the response categories "Changed Mood" and "Increased Awareness" had particularly high frequencies, and the response categories "Didn't Like Imagination Questions" and "Frustrating-Irritating" had particularly low frequencies. These results suggest that the MAT had the ability to influence mood, and did so in such a way that subjects' self-awareness and understanding of the generative conditions, the source and trend of the mood was enhanced. Some subjects felt the MAT was too long and repetitious, but this was a minority opinion.

Psycho-linguistic data

Subjects' definition of "mood"

An analysis of subjects' definition of "mood" in terms of their own experience showed:

Response categories with particularly high frequencies

1. Mood as a state of mind or feeling
2. Mood characterized as pervasive
3. Mood as having a causal effect
4. Mood as the result of both internal and external factors
5. Mood as an attitude

It is suggested that the data of this section provides an empirical base that any theoretical view should be able to accommodate.

Language acts of sentences using the word "mood"

An analysis of the language acts performed by sentences using the word "mood" shows that mood terms are used both to perform social-judgemental actions and to report feeling qualities. The data obtained is used as part of the continuing effort to determine the parameters of what can meaningfully be said about "mood" as both a concept and an experience. Specifically, the data is used to confirm or disconfirm two theses:

1. that mood is not any sort of experience or process and
2. that linguistic expressions referring to moods are not necessarily functioning to inform of psychological facts and that these expressions presuppose various social and institutional concepts.

In addition we wish to consider how this data in its interpreted form might contribute to the configuration of a comprehensive concept or model for mood.

Qualitative Data

Qualitative data is presented which will permit a determination of the causal factors and reasons for a range of mood types; for positive, neutral and negative moods, it will suggest the aspects of personal identity operating, the role of goals and the self-concept, the type and quality of interpersonal relationships fostered, the intrinsic modulations in self and environment perception, and the degree to which the subject herself may play an active and decisive role in the production and maintenance of the mood.

DISCUSSION AND CONCLUSIONSDiscussionPersonality Variables

Personality sketches of the two types of "moody" individual

The self-opinion criterion

(moody in the sense of having protracted feeling states of moderate intensity and/or susceptibility to irritability and spells of bad temper)

The individual is suspicious, tense, apprehensive--she knows doubt and self-division, and above all is strongly affected by her feelings. She usually has poor personal adjustment, but is open about her needs and feelings. In her contacts with the external world her relatively high autonomy need and low need for affiliation and nurturance may lend an air of confident superiority to her actions, but her internal matrix of feelings and attitudes belies this confidence.

The high and low mean variability criterion

(moody in the sense of variability in feelings over a given unit of time)

The individual is impulsive, unpredictable and emotionally explosive. Her aggressive assertiveness tends to establish its own law and authority. The variability of her feeling makes all her interests spasmodic, former urgencies are forgotten as new emotions demand different investments. Her low integration, disregard for social demands and restrictions, propel her into difficult and complex interpersonal situations. She finds that she cannot trust herself because of her changing feelings. The multiform nature of her affective life produces confusion, a sense of maladjustment and discontent.

The effect of the MAT on mood dimensions

Absolute magnitude of change scores

The main findings discussed are the lack of statistical difference between Session 2, the experimenter administered Mood Analysis Technique (MAT), and Session 1, the personality testing session. Also, the relatively low absolute magnitude of change score for Session 4, the self-administered MAT.

The reason for the lack of statistical difference lies in the similarity of the cognitive processes instituted by the two sessions. Both sessions constitute a serious probing of the subject's affects and behaviour (although the personality tests have a more shallow and scattered effect).

Session 4, the self-administered MAT, was the final experimental session, thus it did not have the novelty of Session 1, and there may have been a lingering practice effect from Session 2. This points to a deficiency in the experimental procedure.

Magnitude of change scores

The salient effects of Session 2, the experimenter administered Mood Analysis Technique (MAT).

Relative to the other experimental sessions, the salient effects of Session 2, were increases on the mood factors Aggression, Social Affection, Sadness and Egotism. It is most likely that in-depth and concerted attention on needs and feelings was responsible for the increase in Egotism. But this in itself does not explain the increases on such widely divergent factors as Aggression, Social Affection and Sadness. In order to put this finding into perspective, it should be re-emphasized that the Mood Analysis Technique was designed to focus on present feeling, to encourage its intensification and unfolding into new affect. In addition, it brought background and peripheral feelings to the foreground. Emphasis was also placed on "protensional vectors", i.e. the revelation of potentials for feeling through the postulation of possible feelings in the near future (e.g. the questions 'Do you think your mood needs something to be completed or fulfilled? Do you think the mood is stable, or will it change into a different mood?'). The imaginative portrayal of immediate feelings against both inner and outer horizons (proximal and distal limiting conditions) was simultaneously encouraged.

Thus although it is a post hoc argument, it becomes comprehensible that such diverse factors were increased, and that such a basic, almost primitive affective cluster as Aggression, Social Affection and Sadness was activated, manifested and developed.

The examination of the significant mood factors under the headings affective factors, energy factors, and cognitive factors permits the conclusion that the MAT is basically affect stimulating, energy reducing (but less so than Session 1), and cognition promoting. Increases on the factor Egotism, which is an indicator of self-involvement and self-concern, are interpreted not as increases in stagnant or morbid self-concern, but as the generation and development of a dynamic self-awareness that is one prerequisite for affective change.

Component change scores

Component change scores for mood factors that showed significant magnitude of change scores.

What we wish to determine is whether the argument that Session 2, the experimenter administered Mood Analysis Technique (MAT), is functioning to bring latent or peripheral feeling elements into awareness and reveal potentials for feeling, is cogent. If it is, then we should expect Session 2 to be associated with a greater number of new components.

The argument receives support from the component change scores on the mood factors: Aggression, Surgency, Social Affection, Sadness and Egotism.

Comparison of Session 2, the experimenter administered Mood Analysis Technique (MAT), with Session 4, the self-administered MAT

For the factor Social Affection, Session 2 showed more new components and more total change than Session 4. For the factor Sadness, Session 2 showed more total change than Session 4.

The differences can be viewed in either one or both of two ways. The experimenter's verbal involvement on Session 2 may have been responsible for greater changes in Sadness and Social Affection; or Session 4 being the final experimental session and basically a repetition of Session 2, may consequently have produced relatively less change on these dimensions. There is evidence that the differences between Sessions 2 and 4 cannot be wholly attributed to the experimenter's verbal involvement; it is more likely a joint function of experimental order and verbal involvement.

Component change scores for mood factors that did not show significant magnitude of change scores

There were several major mood factors which did not show significant magnitude of change scores across the four experimental sessions but which nevertheless did show significant component change scores. These factors provide further evidence that Session 2 is functioning to intensify mood, bring new feeling elements into awareness, and promote affective change.

In particular, Session 2 was the most active experimental session in terms of influencing the mood factor Anxiety. It had the ability both to generate new components and to make components disappear. Thus the factor Anxiety also tends to support the argument.

The effect of the MAT on positive, neutral and negative moods

The discussion section primarily focuses on determining the effect of the MAT on negative moods. Confidence in the utility of the MAT will be enhanced if it can be shown to influence negative moods by: bringing about a global change, modifying major dimensions in a positive way, and decreasing their intensity or shifting their negative quality.

Group 3 (negative moods) showed a greater absolute magnitude of change than Group 2 (neutral moods). This suggests that overall the negative moods are amenable to change by the MAT, and less resistant to change than the more neutral moods. But it must be clearly established that this greater global effect represents an improvement in these moods. This can be done by examining the individual Nowlis Mood Factors.

For the mood factor Anxiety, Group 3 (negative moods) showed a decrease, while Group 1 (positive moods) and Group 2 (neutral moods) both showed an increase.

For the mood factor Surgency, Group 3 (negative moods) showed an increase, while Group 1 (positive moods) and Group 2 (neutral moods) both showed a decrease.

For the mood factor Elation, Group 3 (negative moods) showed an increase, while Group 1 (positive moods) showed a decrease.

Thus the magnitude of change scores on the 12 Nowlis Mood Factors suggest that Session 2, the experimenter administered Mood Analysis Technique (MAT), was influencing negative moods by: reducing tension, uncertainty and apprehension; increasing the availability of exuberant energy; and increasing vitality, vibrancy and warm excitement.

Examining the quality and intensity changes for the negative moods in terms of improvements,

stabilizations and deteriorations, it was found that the MAT is generally effective in improving negative moods. In the case of the four negative moods that appeared to deteriorate, there were nevertheless new elements of understanding, an increased awareness of the total problem, the satisfaction of integration through self-expression, and a cognizance of the range, potential and pressure of the component feeling processes.

The effect of the four experimental sessions on "moody" vs. "non-moody" subjects

There were no statistical differences between "moody" and "non-moody" subjects across the four experimental sessions. Focusing on Session 2, the experimenter administered Mood Analysis Technique (MAT), this finding suggests that either the MAT is deficient and not influencing "moody" individuals, or that the MAT influences mood irrespective of whether or not the individual can be classified as "moody". The previous analyses of magnitude of change scores and component change scores, as well as subjects' comments upon completion of Session 2, suggest the latter alternative is the most adequate explanation.

Subjects' comments and appraisals of the MAT

By and large subjects' comments indicate that the MAT had the ability to influence mood, and did so in such a way that the mood experience was altered in predominantly positive ways and resulted in increased understanding and insight. Those cases where subjects gave negative comments (and it was part of the design to encourage this in order to avoid "acquiescent" and "socially desirable" responses) occurred in physically tired moods, or moods demanding immediate action and energetic physical responses.

Subjects' definition of "mood"

In examining the meaning and import of the statistically significant definition elements, the following issues are pertinent:

Mood as a state of mind or feeling

This element suggests that mood as experienced represents the affective realization of multiple tendencies and capacities. Mood as a state of consciousness should take precedent over higher-order disposition formulations. Mood as a state of mind or feeling suggests a condition of the mind, the self, the doer and the observer. With this emphasis the existential view of mood as "tone" or "attunement" is analogically descriptive. It further brings to light the issue of mood as a general condition of the organism. To speak of a general feeling in any sense other than as "dominant", "overriding", "pervasive", "diversely influential", "exclusive" or "resultant", may be ambiguous. "Mood" can exist conceptually, or may be experienced as a unity of awareness (sensing, perceiving, conceiving, experiencing through feeling, taken immediately and synthetically); this implies a colligation, a co-ordination, an interdependency of elements, and an inter-animation of dimensions.

Mood characterized as pervasive

This category is comprised of definition elements that conform closely to the usage of the adjective "pervasive", i.e. indicates the quality of something which permeates, saturates, or diffuses through; but no commitment is made to an hydraulic model, it is rather a metaphorical indication of general influence. The term "pervasive" can be reconstructed in two ways: as the experience of pervasiveness, in this form it bears affinities to the psychoanalytic idea of "colouration" and the existential ideas of "tone", "reverberation" and "attunement"; in the second way it refers to the avowal of pervasiveness, in the sense that the individual is

willing to say that the mood influences everything she thinks, feels, says and does. This latter reconstruction is in accord with several of the disposition approaches.

Mood characterized as having a causal effect

This definition element suggests that "mood" may have a direct and readily discernible effect on the individual. Under the rubric "causal" we can distinguish a strong sense of causal effect, where mood operates directly and immediately to determine one's thoughts, feelings, and actions--though not in the sense of implying an antecedent that invariably and unconditionally produces a specific set of responses. There is also a weaker sense of "causal", where mood operates to influence, to stimulate and functions as a co-determinator of one's thoughts, feelings and actions. In the existential view mood is not so much "causal" as "pre-emptive". Here, mood represents an inner complicity, a mutual prepossessing, that supports the actions which shape the world that shapes the psychological subject. It is the prepotent experience and relational vector by which the self discovers its agency and freedom in relation to a world.

Mood characterized as the result of both internal and external factors

Subjects provided definition elements that suggest, logically, that the locus of formation for mood concepts should lie in a region that integrates external factors (environment) and internal factors (feelings, associations--a personal network). The most common tendency was to ascribe formative power to internal and external factors acting conjointly. This suggests that the concept may stand (or be generated) at the interface of at least two unique but interpenetrating domains. The most adequate, coherent and experientially consistent configuration for "mood" may require the interlinking of a psycho-social domain, a physiological domain, and an affective domain.

Mood characterized as an attitude

It is important to determine to what extent the two concepts "mood" and "attitude" are similar. The differentiation of "mood" from "attitude" is a difficult problem both theoretically and empirically. Some conceptualizations of attitude are so global that almost any affective or cognitive phenomenon (or disposition) could be subsumed under them. There are some possible distinctions that should be kept in mind. They are:

1. Mood is primarily a phenomenal state with a central feeling component, which can usually be termed "pervasive".
2. The cognitive element in mood is often less marked, sometimes absent, and not necessary to the concept of mood. In the case of attitude, some central idea, evaluation, cognitively deployed preference or judgement, does seem to be essential.
3. Moods may be distinguished from attitudes in terms of their performing different functions.
4. Moods are probably more closely linked to physiological variables than attitudes are, but both entities are closely linked with psycho-social variables.

Language Acts of sentences using the word "mood"

The discussion of this section suggests that the use of linguistic expressions employing the term "mood" establishes mood discourse as being linked with:

1. Phenomena capable of being reported as felt and concerning which various discriminations can be made; this includes the notion of systematic regularities and correlations with different types of circumstance and cognitive and behavioural consequences.
2. Tendencies towards making judgements and appraisals concerning oneself and others.

However, the possibility is raised that only on a conceptual level can there be a complete

separation of these aspects. In the abstract it is difficult to see how these disparate meaning components or aspects (the one favouring a state and process view, the other favouring a cognitive and disposition view) can be reconciled. It is also seen that in at least some cases the two aspects may be complementary. This raises the question of the necessity for a complementarity principle for describing mood.

A conservative conclusion would be to say that the social-judgemental function of mood discourse predominates, but not to the exclusion of the function of reporting qualities of affective experience. It is most likely that both general functions are necessary to encompass the diversity of mood discourse and constitute the core meanings of mood terms.

The wider ramifications of these issues suggest that the identification and re-identification of mood is partially dependent on a public language embedded in a background of social convention, habits, traditions and personal intentions. But what makes mood identifiable as a particular individual's mood, is its quality of feeling, its general interconnectedness, its outward movement or its self-encapsulation.

A Structural Analysis of the Qualitative Data

In this section a composite representation is constructed for each of the three categories of mood: positive, neutral and negative. The analysis is structural in that the composite representations construe mood as a system and seek to articulate this system and the "laws" or "rules" that govern it. Attention is given to the smooth or reticulated surfaces of phenomena, and contributions are made to their elaboration, but the primary intent is always a seeking to fathom underlying levels and generative conditions.

In the case of the positive moods, the descriptive elements and metaphorical portrayals are united around four themes: the concentration of energy; an irradiation of the environment; untrammelled movement and communication; and feeling natural and bound to the earth. Focusing on the most "elevated" and dynamically charged positive moods, it was found that the subjects all experienced concentration of energy, dilated fullness, they themselves became an irradiating source. This concentration of energy can operate as wilful determination, proud self-sufficiency, liberating self-acceptance, or as an intransitive union in consciousness with an ideal object, without the intercession of mind or brain. But dissolution is inevitable, for the mood is internally mediated and sustained only by its unique intensity. In forging an external relationship it creates the nurturing condition for its own self-division. Nevertheless in the mood's passing something is achieved and one particular role in the overall system is enacted, the lineaments of a particular type of understanding are drawn. The achievement can be gauged by subjects' own statements concerning the mood's functioning.

In the later phases of the experience fear almost invariably comes to the surface. Although the mood revitalizes, it infuses where something has been lost--the inner conviction of the supportive quality of life. The fear is a projection of the fore-knowledge of the mood's collapse, an approaching divestment of strength. On the most concrete level, it is a fear of failure in emotional relationships, social disapproval, having no one to lean on, or conversely losing one's individuality. More abstractly, it is a fear of "corruption", "the untrustworthiness of the world", and "the condition that things are often not what they appear to be".

The general picture that emerges is the existence of internal potentials stimulated by either

one small event or larger events occurring against a background of positive social relationships. It is the personal value of environmental factors aligning with or gearing into internal potentials and rhythms, which is responsible for the positive moods.

Conclusions

Mood as Concept and Experience

"Mood" is the most general affective parameter; as a logical vector, it functions pre-positively and connectively, lodged in the "gap" between personality and behaviour, or between "self" and "world"; as a boundary form of affective discourse, it is capable of positing both individual qualitative experience and social actions; as a class of functions and behaviours, it is highly elastic, defined by a range of idiosyncratic elements.

"Mood" refers to an organized inflection in the subtle or mundane current of affective life. Mood is (and denotes) not only a personal liability, but also a sensitivity, an appropriation of individuality, and a self-revealing in an inimical or nurturant world.

Mood Attributes

General mood attributes are given under the headings: global modulation, organismic arousal, perception and environmental interactions, and self-concept.

Perspectival mood attributes are established from: teleological, process, state, structural, functional, disposition, relational, and cognitive viewpoints.

The Structure and Functioning of Mood

(a psycho-dynamic construction is offered which combines elements from diverse models; it is clinically useful but systemically incongruous)

The qualitative data of this study suggests that although moods may exhibit an original and prevailing feeling tone of singular quality, nevertheless there is often an internal complexity of various elements and processes. A mood has its own characteristic rate of change, its required phases and balance points. Moods tend to have dual roots, they are anchored in childhood experiences and needs, and in subliminal processes. Their evolution is primarily a cognitive differentiation which remains attuned to basic physiological rhythms. The basic mood potential involves a sensitization to a range of factors, and the individual typically will be constrained to feel, perceive, evaluate and behave in characteristic ways.

The Mood Analysis Technique (MAT)

The Mood Analysis Technique, which was designed as a facilitator of mood change and as an instrument to probe the different levels of mood in order to bring new elements of affect into awareness and increase understanding, has been shown to have a determinate and specifiable effect on mood. Confidence in its empirical effect comes from statistical analyses that indicate the MAT has a global effect across several mood dimensions, influences mood in ways different from the other experimental sessions, may influence mood irrespective of whether or not the individual can be considered a "moody" person, and brings about intensity and quality modifications in mood states. Especially noteworthy, is the ability of the MAT to influence "negative moods" in predominantly positive ways, i.e. to reduce the intensity or meliorate the quality of negative moods.

Personality Variables that Significantly Distinguish "Moody" from "Non-Moody" Subjects

It has been established that "moody" subjects can be distinguished from "non-moody" subjects in terms of personality variables revealed by standard tests and that different criteria of "moodiness" corresponding to different conceptions of "moody" are each correlated with unique sets of personality variables. However, ten personality variables were found to be common to the two criteria.

The personality data suggests the general conclusion that "moody" subjects can be distinguished from "non-moody" subjects in terms of personality variables revealed by standard tests. "Moody" subjects may be different from their "non-moody" counterparts in terms of their needs, values, actions and modes of responding. There is also sufficient evidence to conclude, conceptually, that the concepts of "moodiness" associated with the two different criteria should be given a degree of logical independence; and empirically, that the unique variables enclose different segments of personality dispositions. However, the existence of a core set of variables common to both criteria requires the conclusion that conceptually the two perspectives of "moodiness" may span a more fundamental logical entity; and empirically there may be a more basic entity, pattern, or factor underlying the revealed variables.

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AIMS AND ORIENTATION OF THE STUDY

The study is a multifaceted approach to the experience and the concept of mood. It utilizes techniques of clinical, experimental, and conceptual analysis to uncover the fundamental elements, structures, and qualities of mood. Projecting the goals of clarity and comprehension through the collecting and strenuous opposing of multiple perspectives, it gives primary importance to subjects' own descriptions of mood, and to the unfolding, concatenating, articulating, and integrating of mood experience.

General Aims

- i To determine the effect of one specially designed technique (The Mood Analysis Technique) on basic dimensions of subjects' mood.
- ii To provide a broad perspective on "mood" through examining the concept and its interconnections with empirical data.
- iii To outline the "problem areas" of mood on an experimental plane, an empirical plane, and a theoretical plane.

Specific Aims

- i To establish the parameters and necessary conceptual elements of the concept "mood"; to determine the basic elements in different theoretical perspectives in order to assess their congruence with clinical data, and to lay the ground work for a conceptual synthesis and increased clinical understanding.
- ii To establish the historically relevant studies that have predetermined the limits of contemporary approaches to mood study.
- iii To establish the personality variables correlated with different mood criteria and their defining concepts.
- iv To establish the global effect of the Mood Analysis Technique (MAT); its effect relative to other experimental treatments; its effect on "moody" vs. "non-moody" subjects; and especially its effect on moods classified as positive, neutral and negative.

- v To establish through the analysis of subjects' own definition of "mood", a primary empirical base that any theoretical or conceptual analysis should be orientated to and capable of accounting for through its network of elements.

- vi To use psycho-linguistic data (particularly a functional analysis of sentences using the word "mood") to establish the outlines of what can meaningfully be said about mood both as an experience and a concept.

- vii To examine clinical mood data in order to determine qualitative features, recurring attributes, structural and systemic aspects, and causes and reasons for mood experience.

HYPOTHESES

4.1.1.1 Null Hypothesis H_0 :

It is hypothesized that the two different criteria of moodiness (the self-opinion criterion and the criterion of high and low mean variability) will not yield different patterns of significant personality variables.

4.1.1.2 Alternative Hypothesis H_1 :

It is hypothesized that the two different criteria of moodiness (the self-opinion criterion and the criterion of high and low mean variability) will yield different patterns of significant personality variables.

4.2.1.1 Null Hypothesis H_0 :

It is hypothesized that the mean absolute magnitude of change score for Session 2, the experimenter administered Mood Analysis Technique (MAT), will not differ from the mean absolute magnitude of change score for Session 1, the personality testing session.

4.2.1.2 Alternative Hypothesis H_1 :

It is hypothesized that Session 2, the experimenter administered Mood Analysis Technique (MAT), will have a different mean absolute magnitude of change score than Session 1, the personality testing session.

4.2.1.3 Null Hypothesis H_0 :

It is hypothesized that the mean absolute magnitude of change score for Session 2, the experimenter administered Mood Analysis Technique (MAT), will not differ from the mean absolute magnitude of change score for Session 3, the quiet activities session.

4.2.1.4 Alternative Hypothesis H_1 :

It is hypothesized that Session 2, the experimenter administered Mood Analysis Technique (MAT), will have a different mean absolute magnitude of change score than Session 3, the quiet activities session.

4.2.1.5 Null Hypothesis H_0 :

It is hypothesized that the mean absolute magnitude of change score for Session 2, the experimenter administered Mood Analysis Technique (MAT), will not differ

from the mean absolute magnitude of change score for Session 4, the self-administered Mood Analysis Technique.

4.2.1.6 Alternative Hypothesis H_1 :

It is hypothesized that Session 2, the experimenter administered Mood Analysis Technique (MAT), will have a different mean absolute magnitude of change score than Session 4, the self-administered Mood Analysis Technique.

4.3.1.1 Null Hypothesis H_0 :

It is hypothesized that Session 2, the experimenter administered Mood Analysis Technique (MAT), will not differ from Session 4, the self-administered Mood Analysis Technique in terms of

- (a) the magnitude of change scores on the 12 Nowlis Mood Factors of the Nowlis Mood Adjective Check List, MACL, and
- (b) the number of mood components increased, decreased, disappeared, new and total change in mood components.

4.3.1.2 Alternative Hypothesis H_1 :

It is hypothesized that Session 2, the experimenter administered Mood Analysis Technique (MAT), will be different from Session 4, the self-administered Mood Analysis Technique in terms of

- (a) the magnitude of change scores on the 12 Nowlis Mood Factors of the Nowlis Mood Adjective Check List, MACL, and
- (b) the number of mood components increased, decreased, disappeared, new and total change in mood components.

4.3.1.3 Null Hypothesis H_0 :

It is hypothesized that Session 2, the experimenter administered Mood Analysis Technique (MAT), will not differ from Session 1, the personality testing session, and Session 3, the quiet activities session in terms of

- (a) the magnitude of change scores on the 12 Nowlis Mood Factors of the Nowlis Mood Adjective Check List, MACL, and
- (b) the number of mood components increased, decreased, disappeared, new and total change in mood components.

4.3.1.4 Alternative Hypothesis H_1 :

It is hypothesized that Session 2, the experimenter administered Mood Analysis Technique (MAT), will be different from Session 1, the personality testing session, and Session 3, the quiet activities session in terms of

- (a) the magnitude of change scores on the 12 Nowlis Mood Factors of the Nowlis Mood Adjective Check List, MACL, and
- (b) the number of mood components increased, decreased, disappeared, new and total change in mood components.

4.3.1.5 Null Hypothesis H_0 :

It is hypothesized that Session 4, the self-administered Mood Analysis Technique, will not differ from Session 1, the personality testing session and Session 3, the quiet activities session in terms of

- (a) the magnitude of change scores on the 12 Nowlis Mood Factors of the Nowlis Mood Adjective Check List, MACL, and
- (b) the number of mood components increased, decreased, disappeared, new, and total change in mood components.

4.3.1.6 Alternative Hypothesis H_1 :

It is hypothesized that Session 4, the self-administered Mood Analysis Technique, will be different from Session 1, the personality testing session, and Session 3, the quiet activities session in terms of

- (a) the magnitude of change scores on the 12 Nowlis Mood Factors of the Nowlis Mood Adjective Check List, MACL, and
- (b) the number of mood components increased, decreased, disappeared, new and total change in mood components.

4.4.1.1 Null Hypothesis H_0 :

It is hypothesized that the four experimental sessions will not differ in their effects on the 12 Nowlis Mood Factors for moody vs. non-moody subjects.

4.4.1.2 Alternative Hypothesis H_1 :

It is hypothesized that the four experimental sessions will yield different effects on the 12 Nowlis Mood Factors for moody vs. non-moody subjects.

4.5.1.1 Null Hypothesis H_0 :

It is hypothesized that Session 2, the experimenter administered Mood Analysis Technique (MAT), will not differ in its effect on the absolute magnitude of change scores for the three mood groups.

4.5.1.2 Alternative Hypothesis H_1 :

It is hypothesized that Session 2, the experimenter administered Mood Analysis Technique (MAT), will differ in its effect on the absolute magnitude of change scores for the three mood groups.

INTRODUCTION

This study is a multifaceted approach to the basic phenomenon of mood. It gives attention to the experimental investigation of parameters of mood, the adequacy of current concepts of mood, the metalogic of sentences employing the term "mood", and the structure, causes and reasons for subjects' reported mood experience.

The Experimental Problem

The experimental "problem" was twofold: to develop a technique that would institute explorations of mood and facilitate its representation to individuals through an organized but open-ended series of questions. The ability to interrogate one's own affective experience is considered fundamental to self-knowledge, person-perception, and individual growth. The second aspect of the experimental problem was to establish with a reasonable degree of confidence the effects such a technique has on basic dimensions of mood. The argument that this technique has a determinate and specifiable effect on "mood" proceeds through four sequential stages:

1. Establishing that the technique has a major global influence on mood dimensions (section 4.2).
2. Establishing that the technique has salient effects on mood dimensions (section 4.31).
3. Establishing that the technique brings new elements of affect into awareness (section 4.32) and
4. Establishing that the technique has a differential effect on different categories of mood, and in particular functions to change the intensity or quality of negative moods (section 4.5).

The Conceptual Problem

A technique implies a methodology and a network of correlated concepts; a technique that aspires to reflect the developing mode of awareness within the texture of affective experience requires a concept for its dynamic orientation. For this reason there is a conceptual "problem",

which is to say that the logic of the concept of mood is rendered problematic. In advance, the puckered rind of conceptual orthodoxy for its own sake--is rejected, as is the air-distended pith of attractive but non-utilitarian formulations. Previous attempts at conceptualizing "mood" should be considered and revised in light of subjects' individual experience. It is quite possible that the most adequate concept will surmount standard correspondence or coherence models of truth value. From this critical perspective (critical as both incisive and crucial) the operative concepts and theories of mood are approached with a view to determining their underlying structure and import with respect to the experience of mood. What is sought is the framework for a concept that is both rigorous and stable, and of circumscribed boundaries: a concept that can be limited and filled with the actualities of living experience--congruent with the force, motion, and individual life-relevant patterns of self-progression.

The work to be presented does not purport to be the final word, and only a working concept is presented. However the work does cast a wide net, does sift, gather up, and bring together the major elements for a concept that is both genuine and vital. The work presented is a laying down of boundaries, a clearing space that listens to all the varieties of mood discourse and speaks the essentials of what has been heard.

A word of caution is also necessary. The term "mood" in its common usage and in its technical solidifications shifts, realigns, twists and turns to accommodate a variety of entities and personal intentions. Major inflections are: mood as general feeling tone, mood as variability in feeling, and mood as a protracted feeling state of moderate intensity. "Mood" can be studied under any or all of these headings. It would perhaps be preferable to select one definition and trace it conceptually and experimentally through its various possible transformations. However, one aim of the study was to study "mood" in its diverse aspects, and for that reason "mood" was considered under each of these headings. The degree of disunity introduced by this multiplicity can be reduced if we consider the study as being primarily descriptive, approaching "mood" from several perspectives, and secondarily as being presentational and prescriptive--the problems are

identified, mapped out, and a general recommendation is made, i.e. any concept of mood should be congruent with experiential variables and responsible to environmental factors. The concepts associated with each of this work's subsections are: personality data - mood as variability of feeling and mood as a protracted feeling state of moderate intensity; experimental data - mood as the general feeling tone of the individual; qualitative data - mood as a protracted feeling state of moderate intensity.

There are two main pitfalls associated with the study of mood and mood concepts. Firstly, the concept of mood shorn of a particular context tends to be both ambiguous and misleading, or vaporized by successive abstractions it is easy to make the concept so general that it will fit any affective data. Secondly, there is the perennial threat of reification, a tendency to think that the term and concept "mood" brings into existence and attaches itself to an inertial "thing" in the same way that environmental objects are named. There may in fact be a double reification: the word "mood" taken as naming totally "concrete" and "palpable" entities (feeling entities) and feeling entities taken as existing in a substantive mode, rather than as experienced potentials and processes.

The Problems of Voice, Language and Unity

Voice

It might appear that the work is gratuitously multivocal, that it speaks with different inflections, to different purposes, in the various sections, and at no time consents to a univocal mode of discourse.

The work is multivocal, but the different "voices" are not arbitrary, and stem from the stated aim of approaching "mood" from different perspectives and on different levels. The conceptual voice speaks a language of logic, hierarchies, and seeks the grounds of adequacy. The experimental voice speaks a language of statistical notation, presents probabilistic statements, and seeks experimental demonstration. The experiential voice speaks an expressive language of symbolic presentation, attempts constitution through the medium of language, portrays linguistically, and seeks essential metaphorical description.

Each voice and language, within its own limited purview, establishes a valid perspective. The net effect of multiple perspectives is an expansion and contraction of vision, it intends a stereoscopic vision of a multidimensional entity (mood)*, and a place where the relative utility of particular concepts can be demonstrated.

There can be a depth created by multiple interlocking descriptions (part of the aim is to show just where the different descriptions do interlock), and both knowledge and freedom in balancing and opposing diverse perspectives. Where an overarching unity would be a falsification of what there is, an ordered diversity may establish a dynamic and constructive repose.

Language

Language is capable of serving many different functions, e.g. the sharp delineation of facts and the "knitting together" of the "interstitial tissue" of experience.

The work makes full use of the total resource of language to ferret out, reveal and express the nature of "mood" both as a concept and experience: it states facts, portrays experience, and attempts to precipitate a new awareness of "mood" and its problems. The reader may expect to encounter an increase in language density and complexity from Chapter 1 to Chapter 5. Chapter 1 seeks to exclude, to bring to light the minimum necessary conceptual elements that are basic to beginning an empirical study. Chapter 5, on the other hand, seeks to include, to collect and bring into focus the maximum number of valid perspectives (relative to the empirical data) and to establish their relevance. For example, each of the three mood categories, positive, neutral and negative (section 5.11) is linked with a particular grammatical formation. This act of linkage is not fortuitous, but neither is it sufficient for an understanding of the mood categories --it is an analogy, a correspondence, it is developed because it puts the data into an additional perspective that may qualify (support or

* Note: It might also be correct to say that the "vision" is multi-dimensional, converging on and being resolved by an unknown entity called "mood".

detract from) other perspectives, and functions to shape our overall understanding.

The establishing of multiple perspectives is seen as essential to explicating the plenum of "truth". It is the reflection of a dialectic or adversary system of knowledge--where the tensions and contradictions may ultimately, through a process of abrasion and paring away, result in an adequate representation beyond the distortions (limitations and omissions) of individual viewpoints. Language, through its attributes of malleability and functional diversity, is an adequate method for instituting, sustaining, and bringing this process to completion.

If we view "mood" only as a state or process, we will miss understanding how it functions as an organizational concept for a range of behaviours; and if we view "mood" only as an organizational concept, we will fail to see how it operates as a dynamic and motivational concept resting ultimately in the determination of individually felt qualities. We need to have all the perspectives, before any legitimate synthesis can be made. The collecting of multiple perspectives and multiple language functions, orienting them toward a body of empirical data, is the first phase of this abrasive process that intends a future synthesis. Each perspective highlights a different series or cluster of aspects and formulates it in a language that functions in a particular way; for example, from one perspective "mood" is an experience which may reflect individual needs while it is an action that moulds perception and understanding, appropriates qualities and values, and adjusts the individual matrix to the social matrix, and here we can expect that the use of expressive language will be one perspectival requirement.

Unity

The work to be presented has many modes, and it is legitimate to query the nature of its unity. Here we will not be arguing for the unity of the work, but rather will suggest in what realms it may be said to lie.

The unity of the work is not similar to the unity of an organic entity, i.e. its unity is not guaranteed by its own intrinsic nature--

it must be an achieved unity. Its unity is neither that of a singular determinate parameter nor a homogeneous construct--its unity is "open textured", an overlapping and crisscrossing of conceptually necessary and empirically salient elements. It is a unity made manifest through a series of both implicit and explicit synthetic acts that interconnect its subdivisions and provide an awareness of its content, development, and goals. To give some examples: Chapter 1 extracts the principal conceptual elements of several mood viewpoints and Chapter 5 relates these elements to a body of empirical data. Chapter 2 presents a history of mood study and in conjunction with Chapter 1 establishes that in many cases adequate conceptual preliminaries were not performed. Chapter 5 then shows how conceptual elements and empirical data can be related.

The expressive unity of the work is similar to the unity of a mood system itself, it lies in the primary coherence of facts and values that co-exist together because they are a faithful reflection and expression of what is the case. For example, the qualitative data presented in Chapter 4 is accepted as it is, as a valid representation of subjects' mood experience on an immediate level, however it is further articulated, reconstructed, and given a series of values through a structural analysis provided in Chapter 5. Also, the work as a constructed artifact has its unity in the intentions deliberately adopted or tacitly permitted--most especially in the intention to adequately, vigorously, and at times sceptically: present, articulate, and reconstruct the data of "mood".

In summary, the unity of the work lies in the inter-relatedness of its parts, the organization of values and structural hierarchies, the co-operation of its parts towards a goal and its consistent emphasis on the functions of adaptation and self-expression. It stresses the indwelling integrity of mood experience, the need for open-ended hierarchies, limited integrations of conceptual elements and structural features of experience, and the development of experience through expressive portrayals.

The Physiological Problem

The physiological "problem", i.e. the role of physiological variables in mood states, was bracketed and held in suspension. This is not to

deny the role of such variables, variables whose importance becomes apparent to anyone studying affective states, but rather to delimit the focus of attention to those variables that are psycho-social in nature. However section 5.9 offers speculation concerning the integration of physiological constructs into a concept or model for mood.

The Experiential Problem

The experiential "problem" can be framed in terms of the ultimate inability of cognition alone to establish the "truth" of moods, i.e. the source, trend, and completion of a given mood experience. Cognition alone does not encompass the "meaning" of mood, rather it is awareness, clarity, and self-expression in conjunction with cognitive acts that reflexively establishes a momentary balance point equivalent to understanding. The limits of cognition are not the limits of experience; cognition can add on to, articulate, and educe, but "mood" itself may be a type of self-constitution that points both outward and inward, a process and search that is in itself a miniature fulfilment. Mood as an experience is a beginning, a repetition, an anticipation, a shaping, a deployment of the self, and a point on a trajectory that ends just short of the horizon. It is for these reasons that the Mood Analysis Technique was designed to probe but also to facilitate, to give the opportunity for self-expression, and to permit the process of mood to evolve its unique potentials..

CHAPTER 1 : CONCEPTUAL AND THEORETICAL CONSIDERATIONS

Summary

This chapter paves the way for an empirical study of mood by examining the concept of mood and several different theoretical approaches. There is a necessity for having an adequate concept of mood and criteria for the identification of mood. Concepts and criteria are interdependent.

The status of mood reports as "knowledge by acquaintance" is advocated. Such reports, however, are not incorrigible. Linguistic considerations suggest an adequate mood concept should incorporate the elements: "state of mind", "feeling", "inclination", "disposition", and "pervasiveness".

The conceptual pitfalls of a Cartesian bias, i.e. separating behavioural aspects of mood from the feeling aspects, are to be avoided. An alternative approach co-ordinating feeling, situation, and behaviour is proposed. From this vantage point the concept "disposition" is seen to have both a phenomenal and a behavioural reference.

Mood criteria involving parameters of intensity, duration, and pervasiveness, are given concrete applications. Model cases, related cases, and borderline cases are established.

The basic elements in ten different viewpoints of mood are set out. As disposition theories of mood currently predominate, the logical and experiential difficulties are examined. Although useful for research purposes, disposition theories are in need of supplementation and completion.

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- 1.2 An analogy
- 1.3 Public objects and private states
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 - Stein : Mood as attunement
 - Kockelmans: Mood as part of a primordial praxis
- 1.12 A critique of disposition theories of mood

CHAPTER 1

INTRODUCTION

Any study claiming to be an investigation of mood must come to terms with the multiple reference and ambiguity of the term "mood". The term mood is a cover for a variety of concepts and theories which are neither simple nor straightforward. It is also possible that "mood" is an empty concept, a concept like that of "unicorn" which has no empirical fulfilment. Another possibility is that the concept mood may not map out a domain independent of other psychological concepts, e.g. is the concept "mood" independent of the concept "attitude"? (This question is considered in Chapter 5). These are the brute facts that must be faced.

Chapter 1 faces these facts. It clears the way for an empirical study of mood by examining the concept mood and several mood theories. Here also, the epistemological status of mood reports is considered. A "working" concept of mood as well as criteria for identification are established.

The Concept of Mood

The concept of mood can be approached and illuminated from three perspectives:

1. The perspective of its structure as a concept

This approach centres on the basic elements that constitute the concept mood. Linguistic usage (section 1.6 below) will show that the elements "state of mind", "feeling", "inclination", "disposition", and "pervasiveness" are basic.

2. The perspective of common linguistic use

This approach centres on the psycho-social actions individuals perform when using the word mood. The range of actions is wide, including acts of reporting one's own experience, evaluating (both oneself and others), characterizing mood experience itself, and idiosyncratic actions. The analysis of the contribution of linguistic use to an understanding of the concept mood is reserved

for Chapter 5. Here the implications of the relevant empirical data presented in Chapter 4, are examined.

3. The perspective of its status as a designator of experience

Although "mood" often functions as an hypothetical construct, e.g. in Cattell's disposition viewpoint (section 1.11), it also designates an affective experience. Much confusion has arisen because of the study of mood has not paid full attention to this oscillation in reference. For this reason careful attention is given to criteria for the empirical identification of mood (section 1.10). The concept of a "disposition" is examined (section 1.8) to emphasize that it refers to both feeling and behaviour. Disposition concepts are logically complex, they function both as hypothetical constructs and as designators of experience. This complexity requires that they be clearly related to their data base in the empirical world. These issues are explicated in section 1.12.

Theories of Mood

Theories of mood are not in an advanced stage of development. Indeed "theory" implies a degree of systematization and predictive power that is non-existent in current viewpoints. A review of the literature suggests that models, metaphors, and amplified definitions are descriptive terms closer to the true state of affairs. Chapter 1 (section 1.11) scrutinizes the various mood viewpoints, highlighting their achievements and throwing their liabilities into relief.

Currently there are three major approaches to mood: the disposition approach (Nowlis 1963, 1965, 1970; Pribram 1970; Ryle 1940), the psychoanalytic approach (Weinshel 1970; Jacobson 1957), and the existential approach (Stein 1970; Kockelmans 1970). The disposition approach has the advantage of being a formulation that is closely linked to experimental and statistical procedures. The work of Nowlis (1965, 1970) has been demonstrated to be a theoretical position with some statistical substantiation. However, logical and experiential difficulties suggest that the disposition view is in need of both completion as a theory and supplementation as a general approach (section 1.12). The psychoanalytic approach has the advantage of a

broad clinical base but is burdened by a top-heavy metatheory and adherence to a hydraulic model of the psychic apparatus (section 1.11). The existential approach, although suggestive and able to generate new concepts, e.g. the concepts of "attunement" and "syntony", remains highly metaphorical and the general validity of its application is questionable (section 1.11).

Sections 1.1 - 1.4 stress the need for both an adequate concept of mood and criteria for the empirical identification of mood. It would be irresponsible to conduct an investigation without circumscribing to a reasonable degree, the objects to be studied. It is this general lack of careful circumscription in the mood literature that makes the study of mood difficult.

Granted that a concept of mood and criteria can be established, then the epistemological status of mood reports becomes important. Are mood reports valid? Do they represent knowledge? This question of epistemological status involves the issues of error, certainty, and sincerity (sections 1.43 - 1.5). Attention is also directed to the type of distinctions individuals can and do make concerning their own affective experience.

Sections 1.6 - 1.8 focus on the contribution linguistic usage can make to the formulation of an initial concept and criteria for the empirical identification of mood. Major ingredients for an adequate and comprehensive definition of mood are collected. Before a synthesis of these elements is carried out, Section 1.7 suggests that we stand back and take a broad perspective on mood and acknowledge one type of bias, i.e. the Cartesian split, that may implicitly be distorting our view. Strawson (1973) has suggested that a mood concept should span both feeling and behavioural aspects. This recommendation is adopted. From this higher vantage point the concept "disposition" should be re-examined. Section 1.8 indicates that "disposition" should be construed as having both a feeling and a behavioural reference--an equal emphasis.

Section 1.9 sets forth the general conclusion that both a concept of mood and an empirical approach to mood must adequately formulate: experience, situational referents, and behavioural aspects. One possible "working" concept for mood research is proposed.

Section 1.10 advances three criteria for the identification of mood in terms of pervasiveness (either as a quality or an avowal of general influence), intensity and duration. These criteria are shown in concrete application. Model cases, borderline cases, and related cases are indicated.

Section 1.11 presents and examines ten different viewpoints on mood. Where pertinent, descriptive data from the mood study is introduced to support, modify, or contravene the principles (e.g. p. 36). Each mood viewpoint is characterized as to its fundamental elements. The intent here is to set out the basic elements so that evaluation may take place.

Section 1.12 gives a detailed examination of the disposition viewpoint advocated by Nowlis (1963, 1965, 1970) and Ryle (1949). The logical and experiential difficulties are set out and examined.

1.1 Preliminaries

In order to investigate the phenomenon of mood, and assuming that mood may be more than a concept or a convenient rubric for ordering data--more than a theoretical fiction, it will be necessary to have criteria for empirical identification. These criteria of identification must be capable of distinguishing mood from a variety of similar and related psychological phenomena.

Rooted in this methodological exhortation is a paradox and a circularity. In the beginning, whether we turn our attention to concepts or criteria, there seems to be no adequate way to begin --and that is no acceptable beginning. The circularity stems from two interdependent requirements:

- 1) Before criteria of identification can be established, a concept of mood is necessary. This concept should entail a rough cognitive pointing or indication of what a mood is, where and under what conditions it can be found.
- 2) At the same time, the fullness and cogency of the concept will depend on an empirical base, for in the empirical tradition concepts without percepts are empty.

Hence criteria must be guided by a concept, and the concept requires criteria of identification or application, if it is to have an empirical content. The two requirements are interdependent.

The suggested resolution of the paradox maintains that the concept and its attendant criteria are not formulated in a vacuum, and should proceed from a consideration of the major features of "mood", as a theoretical entity and empirical state, established by prior research and conceptual analysis.

1.2 An Analogy

The problem of establishing criteria and the more general problem of epistemological adequacy can be brought into focus by considering an analogy:

A naturalist has heard of some exotic animal, the locals call it a "Pim", and the naturalist has become very interested in investigating Pims. However, if the naturalist rushes forth in his enthusiasm, he is lost. There have been conflicting reports on the nature of Pims. They also seem to have a number of features in common with their neighbours, the "Poms". There have even been reports of crossbreeding to produce "Pim-Poms".

The point is, there exists a need for some basic parameters of identification and classification. Expressed succinctly, the naturalist needs to know a Pim when he sees one. This same point, although in different terminology, has been made by J. Mehrabian (1968).

1.3 Public Objects and Private States

At this point, it might be suggested that the analogy is misplaced, for if Pims exist and they are such things as can be found then they exist publically, i.e. they are open to public observation in a way that sensations, feelings, and moods are not. Unless a mood is nothing more than a collection of behaviours, there will remain a large portion of mood experience that is available immediately only to the subject of the mood

experience and hence beyond direct public confirmation or disconfirmation. Accordingly, some will insist that the epistemological credentials of descriptive statements concerning mood phenomena are questionable or of an inferior status. A number of issues are condensed here. If the investigator is prepared to accept reports of "private states" as having some validity, and this is not as contentious a position as it once was (Whitely, 1973), then the pivotal issue becomes the degree of validity such reports may be said to have and the type of knowledge they represent. A pragmatic approach to this issue, is to examine how discrepancies concerning reports of public objects are to be resolved, relative to how discrepancies in reports concerning the experience of private states (e.g. mood reports) are to be resolved.

1.4 The Resolution of Discrepancies in Psychological Reports

Consider the following cases:

1.41 Reports of Public Objects

(perception)

In the case of observing a public object a number of individuals are functioning under a given condition, e.g. the presence of a Pim in their perceptual field. They will give a description of their relevant experience, i.e. a verbal formulation of their perceptual experience under the given condition. Should major discrepancies arise in their verbal formulations, e.g. one person insisting that Pims are four-legged and another person insisting that Pims are six-legged, the resolution of this discrepancy will involve a further perceptual experience, i.e. looking more closely, paying attention to the legs rather than the overall shape of a Pim; this subsequent experience will also have a verbal formulation.

1.42 Reports of Private States

(an affect where the environmental source is known)

In the case of a mood, taken for the moment very generally, as a pervasive affective response of moderate intensity and duration, and occurring in response to known environmental

sources, there are a number of individuals functioning under a given condition, e.g. forest land that has been recently decimated by a fire. One individual may report sadness over the ravaged land and another individual may report anger at the careless act responsible for the destruction.

Now it is true that the type of discrepancy involved in the first case is different from the type of discrepancy involved in the second case. But the difference is not that the first type of discrepancy is resolvable and the second type is not. The difference lies in the fact that the first type of discrepancy is something to be settled by further experience and the second type is not something to be settled at all, but rather explicated, justified, or amended in a wider context.

In the first case and the second case there is an experience and known circumstances generating that experience, plus a verbal formulation of the experience. The status of the two types of experience, the one perceptual, and the other affective, becomes problematic only when there are discrepancies to be resolved. The former case requires further experience, the latter case a development and justification (statement or portrayal of relevant aspects and conditions) of that experience, e.g. a specification of the attitudes operating and the perspectives taken. Both cases are dependent on individual experience and its formulation in a consistent public language. It is suggested that we do not have a disjunction in objectivity, but rather a different emphasis in the methods used for discrepancy resolution.

Reports of Private States

(an affect where the environment sources are unknown)

For the purpose of this chapter, I omit the case where the environmental source is not the primary cause but merely the object of the mood, e.g. the individual is depressed over an insult received, but the actual cause (more significant

reason) is his deteriorating financial situation.

In the case of giving descriptions and making characterizations when the environmental source of the mood is either unknown, or vague, or ill-defined, e.g. the individual says he is depressed, but is unable to give the source or object of his depression, the case two type of justification and explication is not available. There is no public object toward which an attitude can be held or a perspective taken. Two questions then immediately arise:

- 1) Could the individual conceivably make any descriptive statements or characterizations concerning his feeling state?
- 2) If such statements could be made, what epistemological status (if any) would these statements have?

1.43 Answering the Epistemological Questions

The first question

In order to answer the first question, let it be assumed that the individual in question has a genuine desire to describe and characterize his experience in an open fashion, what can be called sincerity (or freedom from dissimulation), rather than making statements in search of help, sympathy, or consolation. If this is the case, then from the perspective of mood as a phenomenal state the following types of description and characterization could be made:

- a) The individual could with some degree of accuracy, make descriptions in the sense of relating intensity, duration, number of components, complexity of organization, and the periodicity of certain aspects.
- b) The individual could describe the feeling in the sense of giving some (but not necessarily all) of his feelings a bodily location.

In a more extended sense of the word "description", the individual could make characterizations of his experience under the following conditions:

- c) If the individual were able to attend to his bodily activity, to the patterning of sensation and internal bodily activity, then he might be able to further describe and qualify his experience, e.g. if a depressed person had general feelings of dullness, heaviness, and fatigue, he might qualify his experience as a "lethargic depression". On the other hand, if there were a tautness of the muscles, a pounding of the chest, a tremulous feel to the fingers, as well as a dull feeling, he might qualify his experience as an "agitated depression".
- d) If the individual were able to attend to his immediate situation, to its details, to its recent past and near future, to how it is opening up to him, to how it is now impinging on him, to his evaluation of it, then he might be able to further describe and qualify his experience. For example, the depressed person might become aware of impediments or hindrances to some goal he had established for himself. In this case he might describe his depression as one of frustration or defeat in the presence of unattainable goals.
- e) If the individual were able to say what his mood made him feel like doing, and how he would do this (e.g. briskly, with determination, etc.) then he might be able to further describe and qualify his experience. For example, a depressed individual might say that he felt like going off somewhere and being by himself, but he would probably even do this very slowly and listlessly.
- f) If the individual were able to make expressive metaphorical statements concerning his mood state, then he might be further able to describe and qualify his experience. For example, a depressed individual might say that he felt like a dinner table littered with dirty plates and utensils. A consideration of this and other statements might lead to further qualifications about the mood state, e.g. the type of self-evaluation operating.

The second question

In order to determine what epistemological status the above

statements might have, it is necessary to establish a family of epistemological interrogations. It is pertinent to ask: Could an individual be in error when making the kinds of determinations listed above? Could the individual be inaccurate? What type of knowledge does an individual have with regard to his own experience? Is it correct to speak at all of knowledge here? If so, what kind of knowledge is it? I propose to call these questions the family of epistemological interrogations for first-person descriptive and metaphorical statements concerning mood state. The central concern being the determination of the type of knowledge represented by such statements and the degree of certainty such knowledge may be said to have.

1.5 Types of Knowledge

(concerning one's own affective states)

Knowledge by acquaintance:

The individual can have "knowledge" of his affective states in the sense of experiencing them or undergoing them. This is a knowledge of acquaintance that is gained when an individual has a definite experience on a number of specific occasions and he is capable of becoming aware that this kind of experience is similar to other kinds of experience he has and yet is different to many other kinds of experience he has. It is the sort of knowledge which would permit him to answer in a confident way such questions as: In what other situations do you feel this way? Can you remember when these experiences began? What factors seem to make the experience more (or less) intense?

This type of knowledge can be called a disposition form of knowledge, because although the individual may never have explicitly set forth his acquaintance with the feeling, he nevertheless has the ability to do so when questioned. His knowledge is dispositional; he can say and knows that he knows, when we ask him. Yet this is inadequate as a claim to knowledge in the traditional sense. To count as knowledge in the traditional sense, the individual must not only know explicitly, i.e. have formulated it for himself on at least one occasion, given evidence that he knows, and know that he knows, but there must also be a difference between

being correct and merely thinking that one is correct about a given state of affairs (Pears, 1972). There should be an independent criterion and a process of checking. It is suggested that this is too stringent a requirement for the type of knowledge one does have concerning one's own affective states.

Knowledge by privileged awareness:

The individual might be said to have knowledge of his affective states in the sense of having a direct and privileged awareness of his own experiencing. If this is the case, then it must follow that there is an incorrigibility to the individual's statements concerning his own affective states. But surely this is too lax. Although the individual is in a unique position to describe and form judgements about his experience, and should be the final arbiter of any characterizations of his experience, he may be imprecise, hasty in forming his judgements, uncognizant of relevant circumstances, or biased to see himself in a particular light. Therefore, it is incumbent upon the investigator to encourage the individual to explore in an open manner a wide range of possibilities for the description, characterization, and evaluation of his experience.

Knowledge through behaviour:

Another approach to knowledge concerning one's own affective states is to de-emphasize any internal processes that may be operating and to emphasize the public behavioural aspects. In this view statements that claim to be descriptions of affective states or processes, are to be considered as learned linguistic behaviour. For example, the statement "I am in pain" is learned pain behaviour, i.e. a statement one has learned to utter in certain circumstances, but which has no ultimate reference to inner experience. It is sometimes stressed that our knowledge of affects (our own as well as others) is knowledge of behaviour. While this viewpoint avoids a number of philosophical difficulties concerning the nature and connexion of experience, language and behaviour, it reduces the basic phenomenal aspects of feelings, sensations, and moods, which subjects avow as motivators of many of their actions.

Discussion

It is often the case that although the individual doesn't "observe" his experience, he does reflect, consider, weigh, formulate and reformulate, highlight various aspects, and assign a lesser importance to other aspects of his experience. The individual does seek to determine essential components of his experience, and this is accomplished through an intention to do so, an intention that may be born of need, curiosity, or exasperation. To speak of knowledge here is to speak of a self-awareness established in the light of a familiarity with one's multiple goals, one's recurring pleasures and frustrations. The certainty of this knowledge is always provisional and dependent on the individual's "stage of life". It is always legitimate to inquire: 'How do you know?' 'Could you be mistaken?' 'What will the future be like?'

Conclusions

At this early stage of the investigation, it is suggested that an individual can make descriptive statements concerning his own affective states (as suggested in section 1.43). These descriptive statements are considered, tentatively, to have the epistemological status of being a form of knowledge by acquaintance, existing in either an implicit (disposition) form or in an explicit form when they are formulated in spoken or written language. These statements are not incorrigible, i.e. their validity is not guaranteed by any privileged awareness of the individual. These statements are subject to various processes of validation, in which the individual himself plays a major and unique role as the final arbiter for their truth value.

1.6 The Search for an Initial Formulation of "Mood"

(linguistic considerations)

In this section the contribution that linguistic usage can make to the establishment of an initial concept and criteria for the identification of mood phenomena, is considered. The procedure will be to examine an informal definition of mood, to set forth this definition in more general terms, and to compare it with several dictionary definitions of mood.

At this point someone might interject with a facile optimism and

say:

I was in a mood last Thursday. I was feeling pretty low, nothing seemed to be going right for me. I had no energy, felt sluggish, my thoughts kept returning to an argument I had with a friend. My thoughts were pretty negative, both about him and myself. I felt like being alone. It lasted most of Thursday, influencing most of my thoughts and feelings.

Formulated in general terms this definition becomes: a mood is a complex negative feeling state occurring over moderately extended periods of time.

Is this an adequate definition? For example, is it in accordance with common linguistic usage? The Concise Oxford Dictionary defines mood:

n. State of mind or feeling; in the mood, in no mood, inclined, disinclined, (for thing, to do).

With respect to the phrase, 'state of mind or feeling', the assumption is made that the 'or' is being used as a conjunction between two related possibilities, rather than to pose mutually exclusive alternatives. The phrase 'state of mind' seems to imply the presence of some aspect or condition of mind, perhaps regulated and structured in some way, persisting long enough to be identified as a state of mind. Accordingly, the minimal reference seems to be a phenomenal one. The introduction of 'feeling' also imparts a dynamic qualification to 'state of mind'.

These dynamic, structural, and phenomenal aspects of the concept "mood" have been combined in the initial formulation of mood as the idea of a feeling state. "Feeling state" should be considered as something which is internally complex, i.e. composed of a number of components and enduring over time. However, the notion of "inclination" is introduced, i.e. the idiomatic phrases of "in the mood for", "in the mood to", and their negations. How is this to be handled? The initial formulation does not specifically incorporate the notion of "inclination".

Rather than modifying the definition at this point, I will continue gathering the major ingredients for an adequate and comprehensive definition of mood. It will be necessary to consult a more comprehensive dictionary in the quest for conceptual clarification. It might be argued that this is not a valid procedure, because it is a reversal of the actual lexicographical process which first gathers then systematizes and reduces the linguistic data. However, the intent is not to establish a new definition of mood, nor to avoid the difficulty of complexity. The intent is to both face the complexity and obtain a clear and comprehensive view. This can be best done, it is suggested, by starting with the clear and concise, unfolding the background diversity and re-integrating the diversity. Webster's New International Dictionary defines mood in the following ways:

1. Mind; thought; spirit.

This is considered to be too general a level of definition for the present purpose.

2. A particular state or temper of mind.

This concept has been dealt with, but now something new has been added: 'especially as affected by emotion', and once again inclination, 'as to be in the mood to work'. It appears that an adequate formulation of mood will have to encompass the notions of "state of mind" (especially state of mind as a feeling state), "inclination", and the relationship(s) between mood and emotion will have to be mapped out.

3. Specifically: anger, temper. A sullen or morose state of mind; bad temper.

The word "mood" is frequently used in this fashion, but this usage is an instantiation of a more general sense. It is this general sense that is sought.

4. Temper of mind; tone or disposition of consciousness; humor; esp. the sum of those mental dispositions which give the dominant emotional character or cast of mind; as, a man of somber mood.

It is the element of "disposition", taken as providing the "tone" or "colouration" of consciousness, which is important here. At this stage, it is also necessary to note the dual aspect of "disposition", i.e. as a tendency or inclination and as a setting in order, an arrangement, the relative positioning of parts.

With the introduction of the notion of "disposition", the previously met ideas of inclination, organization, plus the coordinate idea of arrangement, are encompassed. In addition the sum of dispositions, or perhaps more accurately, the aggregate of dispositions, is viewed as leading to a tone or temper of consciousness.

As synonyms of mood, Webster lists:

Disposition, frame of mind, vein; whim, caprice, freak. Mood and humor agree in the idea of a more or less shifting and transitory state of mind or feeling. Mood often suggests a more compelling or pervasive temper of mind than humor, which emphasizes more strongly the element of whim or caprice.

Pervasiveness and its reconstructions

The notion of "pervasiveness" is an addition. However, its potential descriptive function relative to psychological phenomena, must be made clear. A mood does not diffuse, or spread over, or through anything. The mind is not a membrane that can be permeated by a fluid like something called a mood. Yet the notion of pervasiveness is important. To make it useful for psychological research it should be reconstructed. The notion of pervasiveness will be reconstructed in two ways:

1. In the first way, pervasiveness will be said to refer to a subject's avowal that a particular mood state influences everything that he thinks, feels, says, and does. On the theoretical plane this is represented by the postulate that the construct mood interacts with other constructs concerning the individual's cognitive, motivational, and affective subsystems.
2. In the second way, pervasiveness will be said to refer to

the experience of pervasiveness. Metaphorical descriptions of this experience gleaned from the study include:

- a) 'It comes out of every vessel in one's body and captures you.'
- b) 'It takes over your mind and emotions and affects your personality.'

1.7 The Cartesian Bias in Mood Theory

Before setting out a working conception of mood, it will be useful to stand back and take a broad perspective on mood, to acknowledge theoretical and epistemological biases that may, implicitly, be distorting our view. It can be said, and the suggestion is not new (e.g. Strawson, 1973) that there is a Cartesian bias (or split between mental and physical perspectives) operating in most formulations concerning affective experience. This produces a separation of the phenomenal aspects, what A experiences when he undergoes the mood X, from the behavioural aspects, what B observes about A during A's mood X. Welded onto this separation of the mental from the behavioural, is a tendency to postulate the necessity of the experiential over the behavioural, or conversely the behavioural over the experiential.

The consequence has been formulations of mood that on the one hand, stress the "private" experiential aspects, or on the other hand, stress the "public" behavioural aspects. Thus the experiential approach tends to cover what is experienced by A, but not what is observed by B, and the behavioural approach tends to cover what is observed by B, but not what is experienced by A (Strawson, op.cit.). It becomes apparent that these views are distortions in opposite directions, each distortion proliferating in the atmosphere of its own self-sufficient eccentricity.

With this in mind, it is useful to attend to the idea that mood is a concept which spans both feeling and behaviour (Strawson, 1973). The implication is that feeling words like "mood" are acquired with both a feeling and a behavioural reference, and that the two are interconnected. To have a feeling x, is to be

in a situation y, doing z. To be doing z, is to be in a situation y, feeling x. To be in a situation y, is to be doing z, and feeling x. Each element is not independent of the others, rather they go together in a complex network of mutual influence. When describing or formulating mood phenomena the essential characteristics of each element: experience, situation, and behaviour should be specified, and at least a ground-plan of their possible interaction should be established.

1.8 The Concept of a Disposition

The dual reference of the concept "disposition":

The dictionary has established the notion of "disposition" as a constituent of the concept of mood, and bearing in mind Strawson's suggestion that the concept of mood spans both feeling and behaviour, an attempt will be made to explicate both the feeling and behavioural reference of the concept. This is considered necessary because disposition formulations of mood occupy a prominent place in mood theorizing, and it is often "disposition" with a behavioural emphasis within a natural or physical science paradigm that has been advocated.

1. The behavioural reference

Nowlis (1963) writes:

To say that mood is dispositional is to place it in a large class of commonly used concepts which refer to properties which are not continuously available for direct observation but which must be defined in terms of tendencies. Typically, we attribute a disposition to an animate or inanimate object when and only when certain test conditions bring about certain specified results. Dispositional terms like "soluble", "breakable" and "magnetic" are applied to inanimate objects; terms like "instinct", "emotion" and "drive" are applied to organisms. Thus mood, as disposition, is never directly observed but is attributed to a person when certain features of the environment draw forth certain items of behaviour or experience. Furthermore, while some dispositions refer to enduring properties, mood is applied to temporary or recurrent reversible dispositions (p.74).

Nowlis is placing his emphasis on "disposition" as a theoretical term covering aspects of the environment that elicit specific behaviours (items of behaviour), behavioural chains, and experience. The base analogy is that of powers and properties of entities as used in the natural and physical sciences.

A number of important issues arise here, and should be noted at this point. They are:

- a) Nowlis assumes that the notion of "disposition", in the sense of a special power or property of a physical object can be carried over (presumably with little re-orientation of meaning) to the psychological sphere. Consider the term "soluble"; sodium chloride will dissolve in water, by the general laws governing the ionic structure of sodium chloride and charge displacement in the polar water molecule; but is there the same entailment (type of entailment) when 'certain features of the environment draw forth certain items of behaviour or experience'? A number of contemporary theorists would answer with a resounding 'No'. They are theorists of the school that emphasize the social and intentional attributes of persons, e.g. Roche, 1973.
- b) To formulate mood as a dispositional property of the individual, is to offer a concept that summarizes what the individual tends to do or feel, or is likely on the whole to do or feel, but this is not conducive to making predictions concerning what he will do or feel. It also fails to tell us what he is now doing or feeling. Hence it lacks explanatory power, in the usual hypothetico-deductive sense, nor does it increase our understanding of particular phenomenal occasions.

The quarrel is not with the inclusion of behavioural tendencies under the rubric of "disposition", but rather with an exclusive emphasis on such tendencies and the imposition of a natural or physical science paradigm that may not be appropriate to subjects' statements concerning

mood.

2. The phenomenal reference

The dictionary definition of "disposition" as a tendency or inclination and as an arrangement, the relative positioning of parts, provides the background for the phenomenal (or experiential) reference. It is suggested that experience can be viewed as a dynamic configuration of psychological elements: Essentially I am adopting the position of Schrag (1969) who writes:

In speaking of experience as a configuration we mean that it is an interlacing of the constituents of experience. These constituents we understand to include experiencer, act of experiencing, figure and background. The presentational complex of the experiential field is that of experiencer-experiencing-figure-with-background. The insertion of hyphens between the words is neither arbitrary nor accidental. They are grammatical indices of the bonds or connective tissues within experience and are essential for grasping the field notion itself. Experience, in its lived concreteness, is the act of experiencing figures (objects, events, situations, persons, moods, chimeras, hallucinations) not in isolation but contextualized within both determinate and indeterminate backgrounds (p.18).

Two important issues arise here:

- a) Although Schrag's conception of experience may be a useful approach to understanding experience, it is by no means obvious that these distinctions are given immediately in experience. I think that upon reflection and analysis, something corresponding to this scheme of distinctions can be discerned and the scheme justified.
- b) Schrag's concept underplays the behavioural and situational correlates of experience. It is suggested that any approach to experience is only intelligible if it can be connected with characteristic behaviours and/or characteristic situations.

1.9 Conclusions and Summary - a working concept

Conclusions

What is required is not only a concept of mood, but also an approach to mood, that spans the behavioural and phenomenal realms. Such an approach must adequately formulate the experiential aspects, and at the same time provide the situational referents and behavioural components or consequences of the mood state.

Summary - a working concept

In summary, an adequate initial formulation of mood, a working concept, should integrate the notions of "state of mind", "feeling", "inclination", "disposition" (as a conceptual element spanning tendencies toward both experience and behaviour) and "pervasiveness" (as a conceptual element referring to either the avowal of general influence, or the report of an experience of pervasiveness). The definition should be applicable to both experiential and behavioural aspects. It is formulated:

A mood is an organized, complex and recurring feeling state which is pervasive in its nature. Mood involves distinctive changes in the cognitive, perceptual, and motivational subsystems of the individual and tends to be expressed in the experience, the behaviours and the actions (including linguistic actions) of the individual.

1.10 Mood Criteria and their application

An initial concept of mood has been established and one criterion of identification (pervasiveness) has been set forth. Two other criteria of identification will now be established, in the light of the definitions of mood that exist in the psychological dictionaries. Wessman and Ricks (1966) write:

The definitions of mood in the psychological dictionaries (Drever, 1952; English and English, 1958; Warren, 1934) all indicate its shifting and temporal features. Moods are generally defined as states of emotional or affective arousal of varying, but not permanent duration. They are usually seen as milder than full-blown emotions, which are

more intense and of shorter duration. Often they are held to be emotions in a state of subexcitation or decay. They are also presented as predispositions to respond in certain emotional ways and experience certain feelings (p.9).

Two key indices embedded in this review are "intensity" and "duration". These have been selected, along with the felt quality of "pervasiveness", or the avowal of "pervasiveness", as the general identifying criteria of mood.

Specifically, if an individual (1) affirms that his present feeling state determines or influences everything he feels, thinks, says, and does (general influence) or reports an experience of pervasiveness and if (2) this state has been in effect from between three hours to three days, and (3) rates the intensity of his feeling state from moderately strong to intense (+1 to +3) on a seven point rating scale, then the individual is said to be in a mood, the quality of which is to be gauged by the description he proffers. All three of these criteria must be met. (This is not the only way mood could have been identified. However it is an approach resulting from an explication of the concept mood, and is considered to be potentially fruitful for the clinical study of mood.)

Can these conceptual distinctions be applied to actual experience? Several affective experiences will be considered, all elicited within the context of the mood study. In addition to the application of the mood criteria, it will be a useful procedure to distinguish model cases for mood, related and borderline cases, in the attempt to attain a goal of reasonable clarity and confidence.

Example 1*

I feel in a state of suspended or pent-up emotion (of some kind) which does not however make me feel tense, rather relaxed, receptive and very aware. I feel rather amused generally, as if something funny could easily happen. I feel as if it's important that I notice everything going on around me, as if it is significant.

* Note: The examples in section 1.10 are reports of affective experience provided by the mood study volunteers. Examples 1, 2 and 5 were in response to the question 'What are you feeling now?'. Examples 3 and 4 were in response to the request to bring in reports of affective experience.

Subject's ratings:

Intensity: +2
Duration: approximately 4 hours
Pervasiveness: The subject indicated that the feeling state had a general influence on her with a qualification:

It doesn't colour or influence everything I do in the sense that it changes my behaviour but it modifies my whole attitude to everything I think and to things going on around me.

This feeling state is judged to be a mood by virtue of the three criteria being met. The avowal of pervasiveness in the sense of the feeling state influencing everything the subject feels, thinks, says, and does, is partially deficient in that everything is modified through the mediation of an attitude.* This feeling state is classified as a mood, but a deviation from the ideal is noted.

Example 2

I imagine a planet where there is just water, on the water are islands, a floating mass of something, each one is individual, multi-coloured. There are animals and life on the islands, but they are very small, you could walk across them in five minutes. The waves of the sea are enormous but they never break. There are dolphins and porpoises in the sea, other creatures come out of the sea on to the land. The sky is pink and at different angles it is a different colour. There is a feeling of innocence, being untouched by evil humans. It's very exotic, each island masses together in the evening, they become one for five minutes and then go apart. The current forces them together. It never gets really dark, it always stays at a blue twilight. When it rains it rains very pale yellow drops that make little crowns when they fall. There is no stable land at all. The air is a higher form of intelligence that brings the islands together. I could live there and be myself, I wouldn't be white, I'd be green, a green man. We wouldn't talk, there'd be telepathic thought and I would communicate with the animals, no killing or violence, just natural death. There is evil there, but it has no form, you can always feel it. It threatens to bring humanity on to the

* Note: Strictly speaking the description of experience must initially, be taken as the subject gives it. Statements of attitude and behaviour in principle can be followed up by observing the subject. However, this type of corroboration was not attempted.

planet, death, injustice, etc. The evil is like a lamp in a room you're very used to, it's just there, it doesn't threaten you, no harm will come of it. I would swim, run around, hop from island to island, talk to the animals, talk about the evil that is there.

(This data was obtained from an intensive mood study volunteer during a session devoted to the exploration of affective imagery, in response to the question 'What are you experiencing now?')

Subject's ratings:

Intensity: +1
Duration: approximately 1/2 hour
Pervasiveness: The subject indicated that the feeling state did not influence everything she thought, said, felt and did, nor did she report an experience of pervasiveness. Hence the pervasiveness criterion was not met.

The subject indicated that she considered this a phantasy which seemed to absorb all of her attention. She was of the opinion that it was a 'temporary attraction' rather than a determinant of all her thoughts, feelings and actions. Feelings of sadness, hope, and longing did accompany the phantasy, but did not persist. Conceivably this phantasy could produce a mood, or develop into one, but in this case it did not.

Example 3

Walked home from campus at twilight in the rain, felt very quiet and pensive. Had a sudden vision of having a very small place among all the people. Also suddenly thought of the incredible number of theorists I have come across in studying social science and how little I cared for what they thought. Thought how essentially meaningless such things and most other things in life are. Thought about all the taboos, social rules, that exist. Came to the conclusion that whatever happens to me in life, I shall always be essentially alone. A certain loneliness and frustration accompanied these thoughts, but they were surprisingly bearable. Incredible feeling of self-sufficiency which I have felt before. I often find other people's actions and works are very empty - just in a split second I feel this. Then I reason and rationalize and "excuse" them. Just felt like walking along with my head bowed, very quietly and unobtrusively. Felt distress at having to come back to residence, needed to carry on walking that that. Wanted to walk and walk and walk and then fall asleep somewhere warm, comfortable and pleasant

and wake up tomorrow back in my own bed. Also felt a horrible thing, felt my own warm blood coming from a gash on my arms in my imagination. Thought to myself I must conquer this feeling of revulsion. When I walked into residence, felt essentially shallow and mean, horrified at the thought of making small talk, bright banter with flatmates.

(This data was obtained in the form of a written report from an intensive mood study volunteer on one of the additional sessions.)

Subject's ratings:

Intensity: +2
Duration: approximately 1/2 hour
Pervasiveness: The subject indicated that the feeling state had not influenced everything she thought, felt, said and did, nor had she had an experience of pervasiveness. Hence the pervasiveness criterion was not met.

The subject indicated that she experienced several different feelings in succession. The feelings seemed to intertwine with various thoughts, and a phantasy element. At the beginning of the experiential sequence, when the subject was walking home in the rain feeling quiet and pensive, there was a mood like state dominated by several cognitions and their related feelings. This seemed to culminate in a phantasy expressing vulnerability and isolation. Example 3 is certainly a borderline case. It escapes being classified as a mood due to its short duration and the criterion of pervasiveness not being fulfilled.

Example 4

Today the world is grey, full of pastel shades. It is a day without movement, but something is going to move. I'll will something to happen. People look just like shadows. Even shadows can stir events to happen. I'm sitting inside myself looking out. There is a block of flats opposite. I can see the figure of a man standing still as a statue, looking out. Maybe he's contemplating suicide. Maybe he's a figure of my imagination, maybe he's real. His hair is black and fuzzy on his shoulders. It's like a black fuzzy halo around his face. He has a white shirt on, a dark jacket and dark pants. He is absolutely motionless. Maybe he's part of the furnishings that looks like a man from here. The world seems so still except for the buzzing of the traffic. Silent and grey, the same as my world inside. He is still there, he can't

be real. I want action and there is none. I'm just willing something to happen. Nothing will happen. Last evening I dreamt about the strange figure at the window, it was - I don't know.

(This data was obtained in the form of a written report from an intensive mood study volunteer on one of the additional sessions.)

Subject's ratings:

Intensity: +2
Duration: approximately 3 hours
Pervasiveness: The subject indicated that the feeling state did influence everything she thought, felt, said and did.

In this experience there seemed to be strong elements of anticipation, expectation and striving. The subject was living out of her basic feeling. There are certain resemblances to an attitude here, but I would say that the mood became focused as an attitude toward this real or imaginary figure. This example is classified as a mood; the three criteria were met. It approaches being a model case, as it is internally complex, it has disposition elements, and definitely involved shifts in the subject's cognition, perception and motivation. Hence it is also classified as a mood in terms of the definition offered in section 1.9.

Example 5

I feel angry but indignant at the same time. I don't feel belligerent but just an irritated type of angry. I feel like striking back at the source of my anger and irritation, teaching that person a lesson. I'm quite warm and a bit tense - not completely relaxed. I tend to frown and my chest feels a bit tight. As I think about the situation I become more wound up and angry, you could say something between angry and furious.

(This data was obtained from a mood subject on Session 4, the self-administered Mood Analysis session. It was given in response to the question 'What are you feeling right now?')

Subject's ratings:

Intensity: +3
Duration: approximately 2 hours

Pervasiveness: The subject reported that the feeling state did not influence everything she thought, felt, said and did, nor did she report an experience of pervasiveness.

The subject's anger was the immediate reaction to an event (being short-changed by a fruit vendor). It was not the sort of feeling that influenced everything else she felt, said and did. It was more like a centre of irritation that flared up from time to time and filled her awareness. It has the characteristics of an emotion in that:

1. It is directed at a specific object;
2. It is of high intensity and
3. It constitutes a specific attitude toward its object.

It is perhaps unusual in that it persisted for a relatively long period of time. This could be due to the physiological arousal that was not expressed in motor activity. It is classified as a related case, an emotion. (A related case because it is a member of the affective family--feeling, emotion, and mood.)

1.11 Ten Viewpoints on Mood

Psychological viewpoints

Cattell: Mood as Modulator and Sensitizer

R. Cattell (1963) conceptualizes mood as a higher order disposition entity and as a modulating factor, which in a manner similar, but not equivalent to "role", serves to activate other factors. Most generally, mood as a modulating factor is a condition of temporary and systematic influence that changes personality and/or situational perception, to bring about changes in behaviour in a particular situation. Cattell (1967) defines a modulator factor in the following way:

A factor which is brought into action as a temporary state in a person, such as a role or mood, by some ambient stimulus which provokes the state and affects all subsequent behaviour for a while (p.371).

Cattell also classifies mood as an organism dimension modulator and offers this conceptualization:

These (organism dimension modulators) like moods, humors, and new learning experiences, produce reversible and irreversible changes on organism dimensions, in the form of a unique pattern for each modulator, and thus affect all situations while the modulation persists, through the ordinary specification equation (R. Cattell, 1963, p.12).

In his system, a specification equation or a behavioural equation is a linear equation in which each trait operating within the personality is given a value (for that person in that particular situation) and which is multiplied by a 'behavioural index' common to all people functioning in that situation.

Cattell is careful to point out that the modulating effect of a higher order mood factor is not simply a change in the weighting of a particular factor in a given situation, but rather, there is a multidimensional change within the organism, i.e. mood as modulator and sensitizer changes the loadings of a large number of source traits, as well as the 'perceptual-interaction' with the environment (Cattell, 1963, p.12). What Cattell seeks to gain with his concept of a modulator is a factor that will temporarily but systematically operate to modify both the perception of the stimulus condition and the trait system of the organism, without introducing a construct that will require an elaborate conceptual justification.

The construct mood acquires its distinctive identity as a general modulator through a contrast with "role", a more specific type of modulator. In the case of role, the modulating effect could be conceptualized as either a change in personality (the traits that constitute personality) or as a change in the perceptual meaning of the situation. In the case of role, Cattell argues for the latter alternative. However, in the case of mood, Cattell does not see it 'only as a change in the situational indices'; it is not a choice between a change in source traits and a change in perceptual meaning. The modulating effect of mood is global, it involves a change in both source traits and perceptual meaning.

The global effect of mood is a high level sensitization of factors.

In response to Cattell it should be noted that: the clear-cut distinction between role and mood may exist only on the theoretical level, particularly when the complexities of human motivation are taken into account. In the present mood study it was found that:

1. Some subjects assume a mood as part of a role-playing gambit, due to the reinforcement value of playing a particular role.
2. Some subjects describe their moods as merely an additional way of seeing things, i.e. a perspectival awareness that co-exists with a more neutral or non-perspectival awareness.

It could be argued that these are exceptional or aberrant cases. However, even if this is the case, they are still in need of classification. Such a classification is not provided by Cattell's scheme of theoretical distinctions.

A Clinical Consequent of Cattell's Viewpoint

From the classification of mood as an 'organism dimension modulator', it follows that in some sense the individual is different in each mood (although the pattern of traits or organism dimensions may remain the same), as the modulation effect influences large numbers of personality factors.

At a clinical level, individuals suffering from the vicissitudes of intense and well articulated mood systems do report that they seem to be different people in different moods. They often report that they are 'unable to trust themselves', i.e. their values and judgements in one mood may be dissonant with their values and judgements in subsequent moods of their mood system. Therapeutic intervention is sometimes required. Clinically, the problem may become one of integrating the different personality elements and establishing value hierarchies that are independent of the vicissitudes of mood.

Cattell's Situational Meaning Determinants of Mood

Cattell distinguishes between "focal", "ambient" and "global"

meaning situations. The focal stimulus meaning is the perceptual meaning of a given situation as established by the meaning (perceptual response) it would have for a hypothetical "ordinary" person. The ambient stimulus meaning, or role cue, is the meaning of a particular situation for an individual in a particular role. The global stimulus meaning then becomes equivalent to the sum of the focal stimulus meaning and the ambient stimulus meaning. This is expressed as:

$$\begin{aligned} s(j) + (rj) &= (jr) \\ (\text{focal}) + (\text{ambient}) &= (\text{global}) \end{aligned}$$

Cattell writes:

.....the same physical focal stimulus is differently perceived in the global context of the role. This implies that in the latter there exists for the role-trained person only, some additional ambient stimulus or role cue which is capable of converting the simple focal stimulus meaning into the modified global stimulus meaning, which indicates that he must react to it as being in a role....this ambient stimulus can be several things, e.g. something that occurs before the focal stimulus is re-encountered, but, whatever its nature, it results, for the role-trained person in an increment of meaning (1963, p.5).

How then can mood induction be viewed in terms of focal, ambient and global stimuli?

If we are prepared to conceive of mood as similar to a temporary role, except that it is:

1. maintained across a wider variety of situations and
2. is slower in onset, i.e. develops over time
3. involves a degree of change in source traits

then it is the ambient stimulus or role cue that becomes of primary importance. In Cattell's view this ambient stimulus institutes mood change which is referable to either a preceding experience, a learning experience, or to physiological conditions. Cattell (1963) has discussed the statistical procedures necessary to develop a taxonomy of such stimulus situations.

Here the obvious, though perhaps neglected, point is that an environmental stimulus (focal stimulus) typically does not operate independently of other factors. The effect of the stimulus is mediated by its meaning for a particular subject. The meaning is determined by the intrinsic properties of the stimulus and by prior learning.

Summary: The major elements of Cattell's view

1. Mood is an organism dimension modulator, a factor of temporary and systematic influence that produces change on a variety of organism dimensions in the form of a unique pattern for each mood.
2. Mood is a higher order factor which "sensitizes" other factors, bringing about a selective orientation and establishing tendencies toward similar responses in a wide variety of situations.
3. Mood is a function of both focal and ambient stimuli.

V. Nowlis: Mood as the Effect on an Individual of his Own Configuration of Activities

In Nowlis' view (1965):

Mood is the effect on a person of his own configurations of activity. These configurations may be conceptualized as fundamental patterns of general functioning and orientation, such as level of activation, level of control, level of concentration, direction of social orientation, and positive (pleasant) or negative (unpleasant) general appraisal. The effect of these general patterns on the person may be mediated by cues associated with them in the life history and involves affective, cognitive, motivational, and motor responses to the cues, such responses may in turn become functionally related to the general patterns and may modify, maintain, or even instigate them (p.353).

Nowlis believes the major function of mood is to monitor and control behaviour. A full discussion and critique of Nowlis' position is given below in the section on disposition formulations of mood.

The Determinants of Mood

In an independent contribution, Nowlis (1963) has classified mood inducers under the headings of "habitability factors", "organic factors", and "emotional provocations". He sets them out in the following way:

1. Habitability factors include: persisting aspects of the external environment such as temperature and other atmospheric features, light, colour, sound, vibration, size of chamber, and overall level of stimulation.
2. Organic factors include: drugs, endocrines, toxins, biochemical activities, nutritional factors, disease, degenerative and regenerative factors, physical trauma, and various other non-neural physiological activities of the body.
3. Emotional provocations include: successes, failures, frustrations, commitments, arrivals, departures, interruptions, resumptions, separations and reunions, tasks, duties, decisions, demands and the vicarious sharing of the emotions of others through stories, news, social interaction in all its forms, and through all the myriad forms of art, entertainment, and recreation (pp.83-84).

Summary: The major elements of Nowlis' view

1. Mood is the feedback effect on a person of his own configurations of activity.
2. Mood is mediated by a variety of cues and a reinforcement history.
3. Mood serves a controlling and monitoring function.

M.B. Arnold: Mood as the Feeling Response to General Organismic Functioning

M.B. Arnold (1960) views mood as 'the feeling response to general organismic functioning'. In her view any stimulus that can "enhance" or "interfere" with that functioning will produce an alteration in mood. She suggests that a pleasant surprise or a great joy will induce a mood of elation, while a disappointment, a sorrow, or a bout of anxiety will induce a depressed mood. She

writes:

But mood can also be depressed by ill health, by lack of exercise or of congenial activity, by anything that affects us adversely. Even dream emotions will have effects on organismic functioning and will contribute their share to the general mood (p.80).

Arnold and Casson (1954), after acknowledging the difficulty of distinguishing between feelings, emotions and moods, formulate mood in the following way:

When there is a feeling state which is not ascribed to a particular sensation, but which reflects the total inner state, the total functioning, and this feeling state is protracted, we call it a mood....Feelings and moods, then, are indicators of the smooth or difficult functioning of the organism. As such, they can act as danger signals to induce the individual to take steps toward re-establishment of effective physiological and psychological functioning (p.298).

Murray (1968) has set out Arnold's cognitive and physiological view of emotion, with respect to its developmental sequence:

1. Perception: the neutral reception of external stimuli (e.g. a bomber pilot sees a fighter plane approaching him).
2. Appraisal: a judgement of the stimuli as good and beneficial or bad and harmful (the pilot recognises the plane as an enemy who could shoot him down).
3. Emotion: a felt tendency towards stimuli judged as good and away from those judged as bad (the pilot has a tendency to flee).
4. Expression: a pattern of physiological changes organized towards approach or withdrawal, differing from emotion, which accompanies the felt tendency (the pilot's heart pounds, his muscles tense, his mouth dries, he breaks out in a cold sweat, and he has butterflies in his stomach).
5. Action: approach or withdrawal may occur if another emotion does not interfere (the pilot may not actually flee because of a sense of duty, a desire for glory, and so on)(p.51).

To what extent (if any) Arnold would wish to extend this account to mood is conjectural, however appraisal as a determining stage

in either emotion or mood has been criticized by Strongman (1973).

Strongman writes:

Arnold regards correct appraisals and consequent actions as requiring: (1) memories of sensory and motor events; (2) memories of previous positive and negative attitudes; and (3) the rehearsal in imagination of the appropriate actions.....It would seem that cognitive notions such as appraisal can basically never be more than subjective. It is unlikely that physiology will enable us to say how an appraisal occurs or where an affective memory is stored and in what way our imaginations allow us to rehearse appropriate emotional actions.....it is difficult to see what predictions can be made from her concept of cognitive appraisal, especially as it is a process which she regards as occurring almost instantaneously (p.81).

Two issues, one implicit and one explicit, arise from Strongman's criticisms. The implicit issue is whether the constructs of a cognitive theory of affect must at all points correspond to physiological constructs. Strongman seems to be suggesting that advancements in a cognitive approach must be constrained by the state of development of physiological theories. This is a reductive approach that arbitrarily limits the autonomy of any cognitive approach. To the extent that a cognitive approach utilizes physiological constructs, there is a need for correspondence between the physiological constructs and physiological facts--but this does not mean that all the cognitive constructs must be correlated with physiological facts. In fact there is some historical evidence that refinements in cognitive approaches may occur only when a particular cognitive approach is emancipated from a physiological context, e.g. Freud's abandonment of a neurological context (his general neurological theory of neurosis) for his conceptualization of neurosis, enabled him to develop his psychodynamic formulations of patient's complaints.

The explicit issue is whether the element of "appraisal" in a cognitive approach can give rise to determinate predictions. Independent of whether or not "appraisal" is a valid and useful construct, I believe Strongman has missed Arnold's point by a wide margin. In Arnold's theory "appraisal" is only one element in a chain of constructs. It is the entire chain or system as a whole that either can or cannot give rise to predictions. It would be

prudent and more accurate to say that Arnold's system remains untested and perhaps is untestable, but not to say (as Strongman does) that it is difficult to see what predictions can be made from one element of the system. Theories are overthrown, or rather superceded because of internal anomalies, internal inconsistencies, or the greater power of rival theories--but not because one element may be deficient.

Summary: The major elements of Arnold's view:

1. Mood is a protracted feeling state which is the result of the total organismic state of the individual.
2. Moods indicate the smooth or difficult functioning of the individual.
3. Moods may act as signals to enhance the functioning of the individual.

E.W. Ewert: Mood as a Diffuse Background Experience

In Ewert's view (1954):

Moods are background experiences of a diffuse nature. There is no differentiation of experienced self and experienced world. Thus moods do not refer to persons, things or events. They possess no object reference. Although it is likely that the total state of the organism has something to do with elated or depressed moods, it is possible to distinguish moods from organic sensations. Accelerated heartbeat, retarded respiration, menstrual difficulties, are experienced in the form of organic sensations and differ sharply from elated or depressed moods (pp.233-234).

As an illustration of his concept, Ewert distinguishes between grief and depression. In a state of depression an individual is able to discriminate grief over the death of a close friend (the object reference), from the more general background experience of depression which seems to "seep into" all his conscious experience. Metaphorically speaking, for there are no spatial coordinates to affective experience itself, grief is a "sharp" experience, clearly delineated by its object reference in the emergent foreground. Depression is the background experience, diffuse yet "supporting" the emergent foreground of grief.

The two major aspects of Ewert's conception are:

1. mood as a diffuse background experience and
2. mood as lacking in object reference.

In the case of 1, calling mood a diffuse background experience may be assimilated to characterizing mood as pervasive and suggesting that it is of a lesser intensity (not as sharp) as an emotion.

To this, Ewert adds the spatial figure-ground metaphor. The need for reconstructing pervasiveness as the experience of pervasiveness or as a judgement to the effect that mood influences everything the individual says, thinks, feels and does, has already been established (section 1.8). In the case of 2, to consider mood as lacking in object reference, is chiefly a conceptual or procedural choice, as it depends on the way in which "object" is defined. For example, in some moods the object reference may be something general, something intangible, or something presently non-existent: the depth and quality of one's friendships, uncertainty concerning future events, or approaching old age. Here to be uncertain about the object of a mood is to say that its objects may be vague or ill defined, not necessarily that there is no object. On the other hand, not all moods may have objects. It is conceivable that moods of purely physiological origin may have sources, e.g. the biochemical conditions they reflect, but not objects. For these reasons it is unwise to make the presence or absence of object reference a distinguishing criterion of mood.

Summary: the major elements of Ewert's view:

1. Mood is a diffuse background experience.
2. Mood is lacking in object reference.

Evans: A General Psychiatric View of Mood

Evans (1974) has set forth what he believes to be a representative psychiatric view of mood:

Mood is a complex background state of the organism, the subjective feeling state being accompanied by changes in cognition with appropriate colouring of the thought content, in motor behaviour, in autonomic activities,

and in state of arousal. Description of mood state will hence involve a complex statement of behaviour, feeling, bodily state, thought content, and a description of these components will also form the basis of the description of an affective disorder. The description will not be complete unless the environmental situation to which the response is geared is specified and the effect of the altered mood state on the subsequent behaviour is outlined.

In addition to the changes in mood owing to environmental factors, there is evidence in normal individuals of slow shifts in mood lasting hours or days at a time, apparently unrelated to immediate situational factors. Physiological events such as menstruation and the puerperium are often associated with shifts in mood (p.6).

Evans illustrates the application of the psychiatric schema by considering the typical components of bereavement and grief:

1. Cognition: ruminations about the deceased.
2. Perception: perceptual disturbances, illusions and mis-identifications.
3. Affect: frozen emotion, agitation and hostility.
4. Somatic symptoms: changes in autonomic activity, headaches, indigestion, constipation and weakness.
5. Behaviour: aimless activity, searching behaviour, tendencies to cling to the possessions of the deceased and general social withdrawal.

A description and classification of mood states along the co-ordinates of cognition, perception, affect, somatic symptoms and behaviour, is an important first step in the understanding of mood. However, it is only a classification of dimensions. To classify dimensions, is not necessarily to have full comprehension.

Psychiatric mood descriptions need to be more closely linked with outward criteria, e.g. situational aspects, behaviour and language functioning. In addition, when a mood is multi-dimensional, it is important to have a determination of the basic (most important) elements as they appear to the individual. Ideally these basic elements should be coordinated with constant or fluctuating aspects of the social and environmental situation.

Psychiatric phenomenologists, e.g. Ellenberger (1958), have shown that the manner in which the individual experiences the coordinates

of space, time, materiality, and causality are fundamental to the understanding of particular mood states. There is also a growing body of psychiatric literature, e.g. Harris (1971), that suggests that an important factor in the production and maintenance of mood states is the occurrence of events that influence the self-esteem or self-concept of the individual. A review of the clinical literature suggests that a theory of the self is important for the conceptualization of mood states.

Summary: the major elements of Evan's general psychiatric view:

1. Mood is a complex background state of the organism.
2. Mood involves characteristic changes in cognition, motor behaviour, autonomic activity and state of arousal.
3. The description of mood state involves reference to behaviour, feeling, bodily state, and thought content.

Weinshel: A Psychoanalytical View

E.M. Weinshel (1970) in his review of the current (up to 1969) and past psychoanalytical literature on mood, points out that although there are relatively few psychoanalytical contributions focused primarily on mood phenomena themselves, the majority of psychoanalytical theoreticians have commented on mood in their discussions of the more general concept of "affect". These authors include Rapaport (1951, 1953), Rapaport and Gill (1959, 1960a,b), Bibring (1953), Brierly (1937), Fenichel (1941), Glover (1939, 1946), Jones (1929), Novey (1959, 1961), Rangell (1955, 1967), Schafer (1964), Schur (1953, 1958), Landauer (1938), Lewin (1950), Greenson (1954) and Jacobson (1957). To Weinshel's list could be added Schur (1969), Niederland (1970), Pao (1970) and Leaff (1971).

After his survey of the psychoanalytical literature, Weinshel comes to the conclusion that:

A thoroughly comprehensive mood theory would have to include the relationship of moods to affect theory in general, to structure formation, and to the higher level regulatory principles such as the synthetic and organizing function. Further, it would be incumbent on such a comprehensive theory to differentiate moods more sharply

than we are presently doing from certain related psychological states. We recognize that moods are both complex and enduring affective configurations; but certainly not all affective states that are either complex or enduring, or both, can correctly be labelled as moods. We should distinguish moods from, on the one hand, such enduring affective states as chronic anxiety or 'love' and, on the other hand, from certain character traits (p.313).

It should be noted that R. Cattell and his associates have directed attention to this latter question, e.g. in their distinctions between anxiety as a trait and as a state. In addition Nowlis (1963) has considered the type of theory necessary for dealing with this issue. He writes:

The philosopher Broad has suggested that there is also a hierarchical structure of dispositions in organisms, so that the likelihood of acquiring a lower-order disposition depends on prior acquisition of a higher-order disposition. In common-sense psychology, temperament sometimes refers to a third-order and enduring disposition, mood to a short-term disposition of the second order, and emotion to a brief, first-order disposition. We may thus better understand why temperament is often defined as "susceptibility to moods", and mood as "susceptibility to emotions", since a higher-order disposition may be defined in terms of the probability of occurrence of relevant lower-order dispositions. But many serious problems arise in studying psychological events which may be classified with respect to dispositions of several orders, since there is little or no agreement on the criteria for identifying the order of disposition to which the events can most usefully be referred. It may be that the higher the order of disposition, the longer the temporal span through which we find it uninterruptedly potentially relevant to behaviour and experience (p.45).

Weinshel reviews the two major psychoanalytical definitions of mood that are presently available, i.e. Greenson (1954) and Jacobson (1957). Greenson sets forth mood as: 'A compound of different affects which give a specific character or coloring to one's emotional state'. Jacobson defines mood as: 'Temporary fixations of generalized discharge modifications induced by a significant experience whose discharge pattern lends its quality to all discharge patterns'. Jacobson (1957) summarizes her own view in stating:

Moods are ego states characterized by generalized discharge modifications which temporarily influence the qualities of all feelings, thoughts and actions. They are evoked by intense experiences which cause high energetic tensions leading to an overflow and spreading of energy throughout the ego by virtue of cathetic shifts. These processes go along with generalized transference phenomena, a point that emphasizes the difference between moods and object-directed feeling states. The latter are characterized by libidinous or aggressive investments in specific objects. But the moods transfer the qualities of the provocative experience to all objects and experiences; thus they impart a special coloring to the whole world and hence also to the self. Since they permit gradual, repetitive discharge with reality testing on many objects, they must be regarded as a primitive economic modality of the ego (p.86).

Weinshel maintains that Jacobson's formulations express what is observable at the clinical level. However, it is apparent that these formulations are heavily theory laden and contain a number of metapsychological intrusions, and as such could not themselves be directly observable at a clinical level. Many of Jacobson's statements are higher-order theoretical propositions, without specific empirical and operational linkages. Given this intractable state of affairs, analysis and evaluation becomes very difficult.

Rychlak (1968) has suggested four functions for the appraisal of theoretical terminology:

1. The descriptive function -
This function stresses the reliability of descriptions derived from the theoretical terminology.
2. The delimiting function -
This function stresses the degree to which a clear content area is mapped out by the theoretical terms.
3. The generative function -
This function stresses the ability of the theoretical network to generate testable hypotheses.
4. The integrative function -
This function stresses systematization, parsimony, and the ability of the theoretical network to account for diverse data.

It would be a major contribution to the understanding of mood phenomena if psychoanalytic theory could be reformulated to fulfil these four functions.

Weinshel's considerations can be divided into the following areas:

1. Mood as a complex psychological structure with affective, behavioural and cognitive components.
2. Mood as an ego state.
3. The pervasiveness of mood.
4. Mood as the result of a distortion of reality and as a compromise with reality testing.
5. Nosological difficulties with mood.
6. The functions of mood.

For the purpose of a critical discussion, Weinshel's major points are highlighted:

1. Mood as a complex psychological structure with affective, behavioural and cognitive components.

Weinshel emphasizes the necessity of giving equal weight to the affective, behavioural and cognitive components of mood states in the conceptualization of mood. For Weinshel, the affective component is perhaps the major feature and he suggests that attention be given to both the general affective tone and the constituent affective components responsible for the general tone, especially with regard to their stratification, interaction, and defensive functioning.

Jacobson stresses the general economic (energy regulating) function of mood, i.e. mood provides a means for the gradual release of moderate amounts of cathectic charge. Weinshel is at variance with this position. He suggests that the affective discharge may at times be massive (implying a global and/or intense discharge) and relatively archaic (implying an explosive mode of discharge, indiscriminate as to object).

Weinshel also suggests that, at other times, the discharge may be differentiated (by discharge through differentiated channels) and relatively neutralized (of sexual and aggressive investments), or

both extremes may coexist. It can be argued, that in the latter case it is controversial whether both modes of discharge could exist simultaneously for the same affect. Assuming that different affects could be discharged simultaneously in a given mood, it seems likely that the more archaic discharge pattern would pre-empt or mask the more differentiated mode of discharge, and hence we would be unaware of its presence.

In the former case (massive and archaic discharge) it might be more appropriate to speak of an emotional outburst or an affective storm than of a mood proper. In any case intensity and differentiation of discharge are not sufficient criteria for the ascription of mood states. Weinshel's more general point that mood is a complex state which involves reference to affect, behaviour and cognition, is accepted.

2. Mood as an ego state

In Weinshel's view: 'mood represents a revival under specific circumstances of a previous, invariably infantile, ego state which has undergone certain modifications and elaborations' (p.315). As an ego state mood can be considered to have both a manifest and a latent structure. The latent structure is equivalent to a dynamic organization of infantile events, various representations of the infantile events, the response tendencies to the infantile events, and correlative self representations. The manifest structure is equivalent to a surface layer of contemporaneous events eliciting the mood and their organization by the process of reality testing; mood itself is the affective response to the synthesis of manifest and latent structures.

Weinshel is alerted to a major difficulty in this notion, i.e. the status of mood as the revival of an infantile ego state. This position would require:

1. A knowledge of infantile ego states.

Information in this area is very scanty. It tends to be highly inferential due to the lack of language development in the infant and young child.

2. A knowledge of the mechanism of retrieval.

This psychological mechanism of retrieval or revival would have to be consonant with the general psychoanalytical viewpoint.

In response to the issue of infantile ego states, Weinshel merely reaffirms the psychoanalytical bias. He writes: 'the analysis of adult moods would appear to demonstrate quite convincingly the relationship of adult moods to the repression and fixation of early experiences, of significant frustration and/or gratification' (p.315). It might be maintained by Weinshel that a mood contains at its core as a major element affective memories. These memories are connected with "significant" infantile experiences, and the mood experience itself operates as an affective sign that is intentional with regard to those particular infantile experiences, and is activated by conditions that are similar to those that produced the infantile experience. However a psychoanalytical mechanism for the revival or retrieval of the infantile ego state has not been put forward.

3. Pervasiveness

Jacobson (1957) stresses that moods do not have a unique object or content by which they can be defined, rather they: 'find expression in specific qualities attached to all feelings, thoughts and actions, they may indeed be called a barometer of the ego state'. Weinshel commenting on Jacobson writes:

Moods, she stresses, represent a unit with a ubiquitous and uniform coloring and with obvious connections between its various manifestations; and...it is this quality which permits us 'to guess a person's mood from his facial expression and behaviour even if he is not fully aware of it'. Jacobson puts particular emphasis on the complementary shifts that take place in both the patient's self- and object-representations under the influence of a particular mood (p.316).

The analogy of pervasiveness as a "colouration" is adequate up to a point, i.e. as an initial verbal formulation of one aspect of mood experience. It should also be noted that the analogy is functional as a metaphorical description embedded in ordinary

language, e.g. as a subject in the mood study said: 'A mood is like a coloured slide placed over all your senses so that everything you feel is coloured in a certain way'. However, the metaphor should not be given the status of an explanatory entity. Specifically, pervasiveness as a colouration in the psycho-analytical sense of imbuing or impregnating diverse entities with a particular quality, especially as a quality that can be "attached" to all feelings, thoughts and attitudes, is lacking in a clear denotative sense.

It has already been indicated (section 1.6) that "pervasiveness" can be reconstructed as either the experience of pervasiveness or as an avowal that the mood influences everything the individual says, thinks, feels, and does. Theoretically this amounts to saying that the theoretical entity "mood" influences cognitive, affective, behavioural and motivational subsystems.

Also vulnerable to criticism, is the notion that it is the colouring quality itself which permits us 'to guess a person's mood from his facial expression and behaviour even if he is not fully aware of it'. The intended force of the "permits" as well as the "to guess" is not clear.

There is no pre-emptive requirement to postulate a special feeling quality as necessary for the ascription of mood terms to persons. This is not to deny the possibility of a special feeling quality in a particular mood, but rather to deny its necessity or sufficiency in all cases for the ascription of mood terms. It should also be added that the connections between the various manifestations of a mood state need not be obvious. Ryle (1949) maintains that the different manifestations of mood are only 'loosely affiliated' and indeed, in the psychoanalytical view it may take major excavation (resistance and transference analysis) to reveal the unconscious motivational sources that can render the different manifestations coherent and intelligible.

Weinshel maintains:

The mood then reflects the common qualities of the sum total of discharge processes which develop over a certain

period of time; there then results a 'temporary fixation of generalized discharge modifications' which will affect the pattern of response to all stimuli (p.316).

It is possible, by analogy with physics, to conceive of a discharge process as having intensity and direction, i.e. as being a vector quantity, but the addition of 'common qualities' to the 'sum total of discharge processes' would require extensive justification, even within a paradigm based on physical processes. However, some notion of mood as a generalized or global feeling response to a variety of physical or psychological processes (Weinshel's 'sum total of discharge processes') seems to be important at a theoretical level. The notion is present in both Nowlis' and Arnold's theoretical views, though in less of an inflated form than Weinshel's.

Nowlis speaks of the effect on the individual of general configurations of activity and he believes that mood involves the total individual. Arnold speaks of the feeling response to general organismic functioning. Either of these formulations seems preferable (more parsimonious) to Weinshel's formulation, particularly as Weinshel links his 'common qualities' to Jacobson's 'temporary fixation of generalized discharge modifications', producing a rather baroque theoretical amalgamation.

4. Mood as a distortion of reality and as a compromise with reality testing.

Weinshel maintains that every mood involves a distortion of reality to a varying degree, such that the greater the distortion, the more pathological the mood state. Weinshel is presuming some standard or yardstick for reality (presumably the psychoanalyst's) that can be uniformly applied. There is perhaps a commonsense validity to this, yet on the other hand, the mood state is to a greater or lesser extent, the individual's reality at the moment he is experiencing it. If it deviates from the consensus on reality, then what we want to know are the salient features and constitutive structure of that reality. What is required is a return to the individual's reality as experienced and the establishment of "justifications" (essential structures and reasons) for the

individual's special sensitivity to (and in) a situation. Weinshel writes:

Under the influence of the mood an individual perceives the world and himself not as they are, but through the specific coloration (or discoloration) of the mood. This involves a considerable amount of 'selective perception', which may be quite subtle and limited in some cases, but quite gross and extensive in others. The hypercathexis of some percepts, together with the mechanisms of repression, negation, isolation and projection - and complex combinations thereof - all play a significant role in this regard; and it should be pointed out that this 'selection' extends to memories as well as to external perceptions. Those memories which are consistent with the mood are admitted into consciousness; those which would tend to contradict the trend of the mood are not (p.316).

If mood is conceptualized as something akin to an attitudinal set or role (Cattell, 1963) that influences broad repertoires of experience and behaviour (Nowlis, 1963), then the concept of selective perception is a useful coordinate concept. In addition, the notion of the operation of defence mechanisms is a contribution to the understanding of mood. However, a systematic interrelationship of mood as an attitudinal set or role, selective perception, and the defence mechanisms, is presently not available.

Weinshel suggests that anticipation plays an important role in mood states and is one of the factors responsible for the distortion of reality that accompanies or is a part of mood states. It is the operation of unconscious phantasy that determines the form and content of the anticipation component. In Weinshel's view the three major elements of anticipation are:

1. a mass of previous experience of frustration and/or gratification
2. the presence of both conscious and unconscious phantasies and
3. the individual's assessment of the salient features of his internal and external environments.

There is a parallel here, as far as the external environment is concerned, with Arnold's appraisal view of emotion.

Weinshel writes:

Thus the anticipation of what the world will be like helps shape our behaviour patterns and may help to evoke from the external world and its objects precisely those responses and reactions which are best designed to perpetuate the mood (p.317).

This suggests that for Weinshel, through its anticipatory component, mood becomes a positive feedback system which functions to guarantee through self-augmentation its own continuing existence. Whether Weinshel intends this to be characteristic of all moods is not clear. This function of mood is clinically observable in such phenomena as "injustice collecting" and the self-criticism that occurs in some forms of depression. However, this positive feedback model may only be appropriate to "pathological" moods or moods with an unconscious self-destructive element. It should be noted that Nowlis is offering a negative feedback model, i.e. a model where the effects of mood feed back information to the organism, altering experience and behaviour in response to the environment--rather than in response to intrapsychic functioning.

5. Nosological difficulties concerning mood

Weinshel makes the point that the classification of mood phenomena has proved a difficult task. He suggests that the major classificatory systems are of two types: 1. classification by emotive content or the feeling reaction to that content, and 2. classification according to the anticipation of gratification or the anticipation of frustration.

There are at least two other classificatory schemes worthy of note that have become prominent (one prior and the other subsequent to Weinshel's review). They are:

1. classification according to the numerical value (obtained from self-ratings on a mood adjective check list) of various general patterns of activity that are operating, e.g. ratings on the dimensions of aggression, anxiety, surgency, elation, concentration, fatigue, vigour, social affection, sadness, egotism, deactivation, and scepticism (Nowlis, 1965) and
2. classification according to the differential role of cognitive, affective, and conative components (Fleetwood, 1970).

The first classification system is important because it permits the measurement of mood dimensions; and the second system allows a description of mood experience along three major qualitative axes.

6. Hypothesized functions of mood

The following functions of mood can be extracted from Weinshel's discussion:

1. Mood serves as economic function

Mood regulates the flow and flux of energy in the psyche. It serves to bind and tame primitive affect. Weinshel writes:

As structures, moods provide a variable and relative degree of stability....which not only permits the repeated discharge of small quantities of cathexes but also play a part in preventing a more haphazard affect discharge. Without the anchorage offered by these mood structures, the discharge of affects.... could under many circumstances become disordered or relatively chaotic (p.318).

The notion that mood can permit the discharge of primitive or intense affect in a relatively ego syntonic fashion is supported by one subject in the mood study who defined mood: 'A mood is a strong emotional feeling which must be experienced by an individual to allow him/her to let out the appropriate feelings from within and by so doing, feel better afterwards'. This subject's experience suggests that mood can function as a safety valve for the gradual release of pent up feelings that might otherwise disturb the homeostatic balance.

2. Mood serves as integrating function

In Weinshel's view, mood integrates with varying degrees of success a diversity of mental processes and elements. He writes:

Consideration should be given...not only to the complexity and the stability of these mood structures

but to the 'elegance' with which the ego is often able to combine diverse psychic elements, emanating from varied sources and reflecting multiple levels of development, into some semblance of unity and harmony. I would also like to stress, of course, that this is not distinctive of all moods and that the degree of elegance, harmony and stability shows a marked variation in different moods and in the same mood at different times (p.318).

3. Mood serves a general adaptational function

Weinshel cites Hartmann (1939a,b; 1947 and 1956) as indicating that for the optimal functioning of the individual, there must be a viable combination of the archaic with the differentiated, the rational with the irrational, and primary process modes of experiencing with secondary process modes. It is suggested by Weinshel that mood is one way of accomplishing this.

In conclusion Weinshel suggests that future investigations should be orientated toward answering the questions: How are moods maintained over a period of time? How does a given mood end? How can we explain oscillations of moods? What is the relationship of moods to object relations and to identifications?

I would add that two important general questions are: What are the most effective techniques for the analysis of mood? What are the limits of what can be meaningfully said about mood phenomena? The present study is in part an attempt to develop an effective technique for the analysis of mood, to establish a framework for what can be said about mood phenomena, and to provide some answers for the type of questions Weinshel sets out.

Summary: The major elements of the psychoanalytical view

1. Mood is a complex psychological structure with affective, behavioural and cognitive components.
2. Moods are ego states, they have a manifest and latent structure and operate in accordance with ego functioning, i.e. they perform the functions of synthesis, adaptation, the binding of instinctual energy, and executive controlling.
3. Moods can be characterized as "pervasive", they permit a generalized discharge of psychic energy through diverse

channels. They influence thinking, feeling and action tendencies.

4. Moods are evoked by intense psychological experiences and transfer the qualities of those experiences to a wide range of objects.
5. Moods serve a variety of functions. In particular they serve an economic function, they permit reality testing through the repetitive discharge of psychic energy on a variety of objects.

Pribram: A Physiological View

K. Pribram (1970) directing his attention to the neural organization of moods, writes:

Feelings arise from the operation of multiple interconnected core brain structures characterized by short fine-fibered, many-branched neurons. The pattern of organization of neural potentials can be expected to depart considerably from that which occurs in flat sheets of horizontally connected cells cutting across parallel lines of nerve transmission. Little is known as yet of the results of excitatory and inhibitory interactions which take place in such networks. From the anatomical picture one might conjecture that these interactions blend into a device which governs the reciprocity between excitation and inhibition (operating somewhat like a gyroscope to keep the system tuned)... This special combination of control and sensitivity could be expected to make of these brain structures superb instruments for continuously monitoring their own state, a requirement basic to any conception of mood (p.51).

Summary: the major elements of Pribram's view:

1. A model of mood can be developed from neurological facts.
2. A gyroscope type model may be appropriate for mood phenomena.
3. Such a model should combine the principles of control and sensitivity.
4. Such a model implies that mood functions to monitor its own state.

Philosophical viewpoints

Charlton: Mood as a Mode of Awareness

W. Charlton (1970) maintains that to feel angry (an emotion) or to feel depressed (a mood) is to be aware of objects in a particular way, i.e. to perceive and think about things in one, or a variety of ways, that can be considered as different cognitive modes basic to the affective experience. Closely linked with the cognitive emphasis, is the well justified assertion that part of being in a particular affective state, is exhibiting the behaviours commonly associated with that state. To be in an affective state x, is to be characteristically aware of an object, or a range of objects each under a particular description and to act in accordance with those descriptions. Charlton writes:

Is there anything more to anger or fear than thinking of something in a certain way, and behaving appropriately? Some philosophers feel it perverse to deny that there is also an inner feeling, discernible by introspection, but their case is not, I think, made out. True enough, a man sometimes knows better than anyone else what his emotional state is, but he need not know this by introspection; it may simply be that he knows better than we the descriptions under which things appear to him. It is also true that an emotion may involve bodily sensations, feelings of sickness, cold and the like; but these are not so much objects of introspective awareness as themselves awarenesses or modes of awareness of changes and the like in the body, sometimes even of external things (p.88).

A number of issues should be raised at this point, not so much to provide definitive solutions, as to provide point and counterpoint, to provide some conceptual "easement" or access across a complex terrain, and to prevent a settlement for a simplified but inadequate view. Charlton has obviously eliminated feeling in the sense of an "inner feeling" that I have acquaintance with through introspection. Clearly Charlton is performing in the vein of many modern philosophers in rejecting the Lockean tradition which postulates an "inner mental faculty" or "mind's eye" capable of perceiving an indubitable inner feeling. There is no quarrel with rejecting this analogy, as an analogy. It is what remains

after this analogy is dispelled that is the important question.

In Charlton's view, what remains are descriptions of the way objects appear, the thoughts about these objects, and the appropriate behaviours. However, this is not quite all, for Charlton suggests that we are 'moved by' (emotion as e-movere) the objects under these descriptions and we sense patterns of bodily sensations. It is suggested that Charlton is merely emphasizing the cognitive and behavioural factors in emotion and mood, and makes a further contribution to the literature that rejects introspection as "perception" by an inner mental faculty. He has not eradicated the dual functioning of mood words in everyday language, as designators of feeling and motivation. It may be that the feeling use can be made to collapse into the cognitive and behavioural use, but Charlton has not demonstrated this.

Charlton distinguishes between object directed and non-object directed affective states. Emotion is an object directed state, and mood is not. He writes:

Some feelings, for instance depression (here different from grief), and gaiety, have no definite object. There seems also to be objectless feelings of anger, fear and the like. Let us call these undirected emotional states moods. A mood is not, any more than a directed emotion, an object of introspection. To be in a mood is not to be conscious of a special feeling in yourself, but to be conscious of other things in a special way. You notice things which you normally overlook, and vice versa; you have sensations you would not normally have, and the reverse; and what you would normally think of in one way, you think of in a different way....being in a mood is still, just as much as having a feeling directed at an object, a matter of thinking of things under certain descriptions. It follows that feelings generally are themselves accurately describable in words. Words like 'anger' and 'depression' are indeed generic in character; they are not expressions for specific feelings like 'equilateral triangle', and 'regular tetrahedron' are expressions for specific shapes. Rather, each covers a perhaps unlimited number of similar feelings (p.89).

The question of object reference as a distinguishing characteristic has already been touched upon and will not be taken up again (Ewert's view, p.43). Rather, an examination is made of Charlton's statement that: 'To be in a mood is not to be conscious of a

special feeling in yourself, but to be conscious of other things in a special way'. What can this mean? It hinges on the notion of "special" and "feeling". Charlton cannot be denying the existence of feelings in some sense, because in the last line he has said: 'Rather, each covers a perhaps unlimited number of similar feelings'. It is not clear whether this is consistent with his previous statement: 'Is there anything more to anger or fear than thinking of something in a particular way, and behaving appropriately?'

The main thrust of Charlton's position is the denial of the presence of a special feeling that is the essence of a mood. By special feeling, it is believed that Charlton means one particular feeling that would uniquely characterize the mood and which could serve as the necessary and sufficient condition for the ascription of that particular mood. In support of Charlton, there are notorious difficulties in the notion of a unique "special feeling". These are largely problems of identification and re-identification: How could the individual ever be certain that this particular feeling is the feeling that he calls feeling x and how does he become aware of it? What are the criteria for correctly recognizing this as an x feeling and the same as x feelings that were experienced in the past? What meaning would the word "same" have?

It is suggested that there can be a "central feeling", which at a conceptual level can be said to be a complex composed of bodily sensations, feeling tone, and action tendencies. This central feeling is something the individual undergoes or experiences in either a constant or an intermittent fashion. It is identifiable in terms of situational referents, behaviour, and reports of feeling state. This complex is often conveyed in metaphorical terms by subjects.

Consider the feeling an individual might have when he finds himself being reprimanded by a superior. This can be metaphorically expressed as a "sinking" feeling and a "cringing". He finds his heart palpitating and his hands sweating, there is a felt tendency (or behavioural disposition) to flee, yet at the same time he finds

himself apologizing and making excuses. This complex state may endure over time, the general arousal and the strength of the response tendencies may lose some of their initial intensity, but can still influence everything the individual thinks, feels, says and does. It is precisely through these different but related processes that the feeling is known and identified as that feeling the individual has when being reprimanded by a superior.

It is the combination of these elements which in the context of a particular situation, and a life-history of experiencing, makes possible the identification of the central feeling. The correct assignment of the feeling to a general class of feelings is dependent on the individual's sincerity, his attention to situational cues, his use of language, the knowledge he has of his own personality, and the ability to question his responses. Expressed tersely--Charlton's stress on the cognitive and behavioural aspects of mood does not make the feeling and motivational aspects disappear.

Summary: the major elements of Charlton's view

1. To be in a mood is to be aware of things in a special way, to be thinking of things under certain descriptions and to behave appropriately.
2. The word "mood" is generic in character and does not stand for specific feelings.
3. Moods are not the objects of introspection.
4. Moods are not object directed.

Stein: Mood as Attunement

W. Stein (1970) sees mood as "the prototype of feeling", and suggests that it displays, as an attunement, the individual's relationship to the world. Before proceeding further with Stein's view, it will be useful to review the dictionary definition of "attunement". Webster's Dictionary defines attunement and the related concept of "syntony" as follows:

at-tune verb transitive; at-tuned; at-tuning 1. To tune or put in tune; to make melodious or harmonious; to

adjust to, or use with, the right pitch or tone; specifically in Physics, to bring into syntony; as, to attune the voice to a harp. 2. To arrange fitly; to make accordant.

attunement; noun. An attuning; specifically Physics, syntony.

syntony, Physics. State of being adjusted to a certain wavelength; agreement or tuning between the time period of an apparatus emitting electric oscillations and that of a receiving apparatus, esp. in wireless telegraphy.

Stein is aware that she is using the concept of mood as an attunement, in a metaphorical way. In developing the metaphor she writes:

An attunement requires at least two tones which are in tune, though once the attunement is achieved, the two tones can no longer be clearly distinguished. A mood surrounds and envelops one, as sound does, so that one experiences himself as in it, in contrast with finding himself over against an object which he sees. Enveloped as he is in his mood, he cannot distinguish the "tone" in himself from the "tone" of the world. For instance, when I feel good, I at the same time feel that things are going well, that the world is good too. This means that when one is actually in a mood, the "feeling tone" is both in the subject and in the world as their attunement....In a mood, then both I and my relation to the world which I see and now experience as having a feeling tone, are present. The mood simultaneously vibrates in me as feeler and reverberates in the world and reverberates in me. Since this attunement is seldom perfect, I continue to distinguish between my own tone and the tone of the world. Such lack of attunement plays a role in considering the expression of moods...A mood, and I think particularly of Heidegger's and Freud's anxiety, does not have a specific object. It lingers on, hangs over, or reverberates in the world as such and presents man with the fact of his being in it (p.220).

It is the imperfection in attunement prior to the achievement of syntony, and the instability of the state of syntony itself, that provides the necessary hiatus or disengagement which enables the individual to attain "knowledge" of his predicament. Mood in this sense is protoepistemological. Mood is an embryonic meaning structure or vehicle for meaning. It is however in need of reflection and symbolization, in order to be developed and raised

in status to knowledge.

For Stein, one finds oneself in a mood in the midst of a concrete and enveloping relationship with something "other" than the self. But the self is so aligned with, adjusted to, and harmonious with, the "otherness", that there is an impression of sameness. At the same time a degree of difference and self identity remains in the enveloping "sameness". This is similar to Mahler's (1968) psychoanalytic view of "symbiotic union". This concept represents a relationship where there is a maximum of similarity (bodily collusion, syncretic identity, and a primitive psychosomatic empathy) and a minimum of "otherness" (differentiation, separation, and heterogeneity) between the mother and her infant during the first years of life. As Stein phrases it: 'Enveloped as he is in his mood, he cannot distinguish the "tone" in himself from the "tone" of the world'. This may be the feeling analogue of the earliest parent-infant object relationship. It implies that a greater understanding of mood may be attained by the study of early object relationships.

Stein's metaphor retains some independence from the psychoanalytic concept, through its stress on the presentational function of mood. Mood presents the world, the self, and the interconnectedness of world and self, to the individual through the medium of affect. Stein writes:

Man simultaneously perceives objects and finds himself in a mood which presents him with himself and his relation to the world as an attunement. For us to have the kind of experience we do have of ourselves in a situation, we must perceive (or the situation would not appear) and feel ourselves in relation to this situation (or we would not appear, and there would be no way of speaking of a relation between ourselves and the world). I would like to call this basic position of man in relation to the world "cosmopathy". Man experiences things in the world in terms of his momentary mood because it is only through a mood that he and his relation to the world appear (p.221).

Stein draws a distinction that is pertinent to, though divergent from, Charlton's position (p.p.58-61). Her view centres on a distinction between visual perception and feeling. In her view visual perception simply presents a world, while feeling as mood

presents a self and its relation to a world. The origin of mood, however, is perceptual. She writes:

It is important not to forget that I perceive this other as originating the tone I feel resounding in me, for the resonance I experience is a particular variation of my attunement to the world which I perceive. In the same way, something cannot arouse a resonance in me unless I perceive it (p.222).

Continuing Stein's thought and utilizing the concept of "syntony" within an existential paradigm, the following analogy is suggested: The world is the emitter and the individual the receiver of the "tone", to which he adjusts his "tone", or better, the world emits a spectrum of tones, out of which the individual selectively perceives one wavelength and adjusts himself to that tone (thus both subject and environment are active). Here there is a two stage creation of mood, the selection of "tone" and the adjustment. The imperfection of adjustment, the inability to achieve a complete sympathetic identity with the world paves the way for reflection, symbolization, and a realization of the presentational function of mood.

Summary: the major elements of Stein's view

1. Mood is an attunement or adjustment between the individual and the world.
2. Mood serves the function of presenting to the individual his relationship to the world.
3. Moods do not have specific objects.
4. Mood as an experience may be metaphorically said to surround and envelop the individual.
5. The origin of mood is perceptual, but a model for mood should be patterned on auditory experience rather than visual experience.

Kockelmans: Mood as Part of a Primordial Praxis

J.J. Kockelmans (1970) conceives of mood as a fundamental component of a "primordial praxis", a root activity of man in which he is "concernfully" involved with the objects and tools of his world.

The individual expresses his nature in an active and concerned dealing with objects (as potential artefacts) and individuals (as co-equal embodied regions of consciousness). This practical activity occurs against a background route-void structure of world, i.e. world as a collection of concatenating routes (natural, social, and psychological) where things devolve and mutually refer to each other, in a contingent fashion (the void structure). Kockelmans writes:

The essential relationship between man and world which mediately comes to the fore in each concerned dealing with this or that concrete thing is contained in an original "mood" which is necessarily connected with each concrete interpretation of meaning and with each understanding characteristic of the "primordial praxis" (p.102).

This humanistically oriented relational metaphysics sets the stage for two prime functions of mood. Kockelmans writes:

Undoubtedly "mood" communicates to us something about our own mode of being in relationship to the other as a whole; but it is very difficult to determine why one is disposed or "tuned" in a determinate way, and what this disposition tells us about ourselves and the other. The "original mood" informs man about his position in the midst of things in the world. In this "insight" different elements are contained which must be carefully distinguished. First, in his mood man is aware of his own being, of the fact that he is. Without wanting it, and without freely having chosen it, man is. His being appears to him as a being "thrown"; he appears to himself as thrown among things. In mood man not only becomes conscious of the fact "that he is", but also of the fact that "he has to be", that his being has to be realized by himself as a task.... Mood is an implicit, continuous "judgement" regarding man's self-realization. Hence man can be disclosed to himself in a more primordial way through "mood" than through theoretical reflection. However, if it is true that man ek-sists, i.e. is as being-in-the-world, then mood must also disclose to him not only his own being as "thrown" but also other men and things (p.103).

Kockelmans seems to be emphasizing that in dealing with concrete things, objects, persons, events, and situations, in the process of interpreting them, valuing them, and bestowing meaning upon them in a practical context, there is given something mood-like,

something original and primary that is co-given with this practical activity. It is as if there were a mood-like shadowing of all practical activity. However, the existence of such a process or state has been implied, but not demonstrated. If criteria are not provided, and an empirical demonstration given, then it seems superfluous to go even further and suggest that an "original mood" contains the essential relationship between man and world.

Let it be suggested that as a result of his practical activities the individual sometimes finds himself in a mood-like state, and he is beginning to become aware of what Kockelmans has called 'the different elements' of the mood. This is not implausible - individuals in the midst of their activities do at times come to a halt and through an affective provocation begin to reflect, e.g. on the nature of themselves and their concerns. What follows upon this reflection is crucial for Kockelmans' notion.

In order to clarify some of the issues, consider the example of a small farmer tilling his soil. It is likely that there will exist a complex relationship between himself, the soil, and the activity of tilling. His livelihood depends on the fertility of the soil, on the allocation of particular portions of his total land area to particular crops, on his ability to have the tilling and planting completed by a particular date, and upon the vagaries of meteorological conditions. Part of the meaning these practical activities bear are traditional and historical meanings, e.g. the farmer may come from a long line of farmers, he may retain their inculcated beliefs and prejudices, he may be proud or dissatisfied as a farmer, this particular year may be the anniversary of a devastating drought, and there are symbolic meanings, e.g. the sexual symbolism of tilling.

Today, as the farmer tills, the various meaning elements coalesce and precipitate a particular mood, and the farmer reflects. Will he be presented with the fact that he is? That he was "thrown" into existence? That it is his task to "realize" himself? Perhaps, but equally possibly he may try to shake off his vague thoughts and pursue his job to completion. He may simply decide he needs a vacation. In this case do we call him inauthentic, or

do we question the universal applicability of the existential view? If a Heideggerian metaphysician were on the scene to administer the "facts" to him, will he recognize them? Let it even be granted that he assents to the formulations of his metaphysical mentor, is it then necessary to postulate an 'original mood' to account for the situation?

Summary: the major elements of Kockelmans' view

1. Mood is connected with the practical activities of individuals in their environment.
2. Mood presents to the individual his relationship to the world.
3. Mood brings the individual's existence, his contingency, and his task of self-realization to light.

1.12 A Critique of Disposition Theories

Theorizing about mood phenomena has placed a special emphasis on a disposition formulation of mood. This has been evident in both analyses of mood words and mental concepts in general, e.g. Ryle (1949) and experimental studies of mood, e.g. Nowlis (1963; 1965; 1970). In recent behavioural approaches, e.g. Ryle's 'logical behaviourism', and the psychological viewpoints of Nowlis, Cattell, and Pribram, a disposition is a tendency toward a behavioural or affective response which is determined both by the abilities and capacities of the organism and the stimulating conditions of the environment. This use of the concept of a disposition is derived from physical science where in the case of non-organic, non-sentient entities, a disposition is a power or property of that entity. Examples would include the solubility of sodium chloride in water, the refractive index of water, and the magnetic property of iron.

When applied to sentient organisms, in particular to individuals, a disposition refers to in Ryle's (1949) words: "The person's abilities, liabilities, and inclinations to do and undergo certain sorts of things, and of the doing and undergoing of these things in the ordinary world" (p.199). Ryle applies the notion of "disposition" to mood phenomena in the following way:

In saying that someone is in a certain mood we are saying something rather general, not that he is all the time or frequently doing one unique thing or having one unique feeling, but that he is in the frame of mind to say, do and feel a wide variety of loosely affiliated things (p.95).

It is important to note what Ryle is denying and what he is affirming. Ryle is denying that a mood can be uniquely characterized or identified by a particular feeling or a particular behaviour that occurs continuously over, or even frequently in, a given span of time; a mood is not a state or process of feeling, but rather it is an overarching tendency to feel and behave.

In response to Ryle, what I wish to maintain is that mood may be more or less adequately conceptualized as a set of tendencies or dispositions, but from the subject's point of view mood is the experienced manifestation of that set of tendencies. It may be the case that mood is not a continuous affective process, but neither is it only a set of tendencies to respond.

Ryle is affirming that "mood" refers to a tendency or set of tendencies '...to say, do and feel a wide variety of loosely affiliated things'. What is meant by a "loose affiliation" is not made clear. Ryle seems to want to have some connection among the different activities, but does not specify what the connection is. Nowlis (1963) also has found the problem of connection or configuration recalcitrant to theoretical formulation. He writes:

I find that the application of mood terms to behaviour and experience has represented a variety of relatively unsuccessful attempts to identify some intriguing yet perversely subtle and obscure ways in which behaviour seems to be organized (p.48).

These unsuccessful attempts are all the more embarrassing as the notion of configuration is inherent in the concept of disposition itself. Consider the definition of "disposition" in The Concise Oxford Dictionary: noun. Setting in order, arrangement, relative position of parts. This definition coexists with: bent, temperament,

natural tendency, inclination to. It is suggested that the error here is in thinking that there must be a connection or configuration, interpreted in any strict way. The connection, to the extent that there is one, is in the "vectorial tissue" of the individual's own experience. It is the organization of the individual's attitudes and intentions and his feeling reaction to them.

Nowlis (1965) defines mood as: 'A multidimensional set of temporary reversible dispositions'. As a general definition and paradigm he offers the following:

Mood is the effect on a person of his own configurations of activity. These configurations may be conceptualized as fundamental patterns of general functioning and orientation, such as level of activation, level of control, level of concentration, direction of social orientation, and positive (pleasant) or negative (unpleasant) general appraisal. The effect of these general patterns on the person may be mediated by cues associated with them in the life history and involve affective, cognitive, motivational and motor responses to the cues; such responses may in turn become functionally related to the general patterns and may modify, maintain or even instigate them (p.353).

Nowlis' view can be seen to depart from a traditional behavioural orientation in his emphasis on intraorganism variables. He does, however, offer a means for the measurement of these variables and he stresses that mood is the effect of these variables, which he links with predisposing and eliciting environmental stimuli. His emphasis on the hierarchical disposition nature of mood, i.e. mood as a middle order disposition situated between temperament and emotional reaction, and his implicit negative feedback model, perhaps entitle us to classify him as a behaviourist with cognitive and cybernetic leanings.

Logical and experiential difficulties in the disposition formulation

The difficulties in the formulation of mood by the several disposition approaches, are of two types: logical and experiential. The logical difficulty, logical here being used in a broad epis-

temological sense, has two aspects:

1. Ryle (1949) in his attempt to reformulate the concept of mood to fit the mould of the concept of disposition has denied that mood as a concept refers to states or acts. He writes: 'Inclinations and moods, including agitations, are not occurrences....they are propensities, not acts or states' (p.81). Ryle is here considering the words "mood" and "propensity" as logical or category words and analyzing them in terms of their roles in linguistic expressions. In section 4.8 below I will offer linguistic evidence that goes contrary to Ryle's position. It will be shown that the word mood is employed by subjects to denote states and acts. However, he soon leaves this logical realm to make definitive statements about the empirical world.

Thus Hampshire (1950) can say:

To say of a particular word that it is the name of, or designates a mood and that moods are not occurrences, amounts to saying (misleading) something about the kind of evidence or tests of truth which are appropriate to any statement in which this word occurs (p.25).

Hampshire's criticism of Ryle is that Ryle is using distinctions based on logic to make decisive distinctions concerning the empirical world. For Ryle, logic (his "logic") is legislating absolutely for reality. But even if we were to let this confusion pass, there are still other difficulties. Ryle most of the time, and Nowlis some of the time, tends to exhaust the notion of a disposition with its behavioural reference.

It follows that the type of evidence used to verify statements which include mood terms is behavioural evidence. Coordinately, the type of evidence used to ascribe mood (as a state or disposition) to individuals is also behavioural evidence. If behavioural evidence is taken as the sole type of evidence relevant, then this is an arbitrary oversimplification. It omits other kinds of obviously basic evidence. To use Hampshire's (1950) example:

We usually test a child's concentration by testing his performance, but we do not identify the performance and the concentration precisely because although the first may often (not always or necessarily) be properly accepted as sufficient evidence for the other, it is not a necessary condition in the sense of being in all circumstances the only kind of relevant evidence available, either to the child himself or to the teacher (p.32).

It is not unreasonable to assume that there can be multiple independent approaches to the verification of mood phenomena; because we frequently refer to a person's behaviour in deciding what mental state they are in, it does not follow that the mental state can be exhaustively identified with that behaviour or the result of any other single method of verification. It is suggested that "mood" as a comprehensive theoretical term refers to an individual in a situation x, feeling y, and doing z. The theoretical term can be procedurally defined by the set of approaches to verification that are adopted in the particular situation.

Reliance on behavioural evidence alone for the verification of statements concerning mood, where mood is taken as a disposition entity, is inadequate. This approach to the verification of statements about mood, if it is coupled with an exclusive reliance on behavioural criteria for the identification of mood, would set up a programme that is an unfaithful reflection of the notion of a disposition itself. A disposition can be operating, as a readiness to respond, without any specific behavioural manifestations. Consider the case where from past experience the environmental conditions under which a particular person is likely to become irritable is specifiable, i.e. at t1, t2, and t3 under these conditions the person has become irritable and has shown irritable behaviour b1, b2 and b3, but at t4, under precisely the same environmental conditions, he does not show irritable behaviour. He tells us he feels his old irritation, but he has resolved 'not to let those conditions make him act out of his irritation', and he manifests none of the irritable behaviour he has before (he may of course show new irritable behaviour). His report of irritation, though there are none of the old behavioural

manifestations, is still intelligible.

Conversely, irritable conditions may (for him) be present and he may show irritable behaviour, but he may still not be irritated, i.e. his rapid hand movements, his shouts and general agitation indicate (he tells us) that he is trying to attract the attention of an old friend who has just passed on the street.

2. The second logical difficulty stems from the disposition view that a disposition statement is a statement that summarizes what tends to happen, or is liable on the whole to happen, as a result of the organism's tendencies, capacities, and environmental conditions. A disposition statement therefore does not state what will happen on a particular occasion, i.e. disposition statements do not generate determinate predictions. As the majority of disposition theorists seek to construct a theory within the natural science paradigm, the lack of determinate predictions becomes a major obstacle to the fulfilment of their goal. It might be argued that it is open to disposition theorists to develop a statistical-inductive model, however such a model has not been offered and there are major difficulties here as well (Lambert and Brittan, 1970).

The experiential difficulty

The experiential difficulty stems from disposition theory's conception of mood as a set of tendencies to say, do, and feel a wide variety of loosely affiliated things, where this set of tendencies is equated with 'an infinite series of propositions' and the experiencing subject with 'the topic of sets of testable hypothetical and semi-hypothetical propositions' (Ryle, 1949, p.46). Ryle has a distressing tendency to transform individuals into logical and grammatical vectors. His view can be criticized as inadequate to account for the unity and self-identity of the experiencing subject. This is to say that mood is eminently a human phenomena, an experience or set of experiences that the individual undergoes and which makes a difference to him. This implies a continuity and identity enduring within the texture of the individual's experience. The disposition view abrogates this

identity and continuity.

It is a general liability of the disposition approach that it tends to:

1. Take place at such a high level of abstraction that the individual's experience is not retrievable from the abstractions and
2. Divides mood up into discrete units of behaviour in such a way that the individual's experience cannot be reconstituted from this "granular analysis" (Schrag, 1969).

More often than not the full complexity and articulation of the psychological state, e.g. desires, intentions and goals, is lost. Theoretically mood may be more or less adequately formulated as an organized system of dispositions, but experientially mood is the felt manifestation of that disposition system. If the disposition approach has explanatory aspirations within a natural science paradigm, then it is the failure of the disposition approach to:

1. make explicit the type of explanatory model it is offering, e.g. deductive, inductive-statistical, or teleological type (Lambert and Brittan, 1970);
2. make explicit the rules of logical connection between lower order, middle order, and higher order postulates and hypotheses. Berg (1955) has pointed out that no disposition theory has provided logical rules for handling hierarchical disposition terms;
3. make explicit the theory's pertinence to the individual's experience

that constitutes the basic liability of this type of theory. Disposition theories are in need of supplementation and completion if they are to account for the full range of mood experience in the sentient human organism.

The problematic state of Ryle's example

Consider Ryle's example of a frivolous mood in light of the foregoing discussions:

A person in a frivolous vein is in the mood to make more jokes than usual, to be more tickled than usual by the jokes of others, to polish off important matters of business without anxious consideration, to put heart and soul in childish games and so on indefinitely (Ryle, 1949, pp.95-96).

This seems to be quite a plausible description of an hypothetical person's tendencies to behave in a frivolous mood. But it can be asked: Does Ryle intend this to be a model for all frivolous moods? Does it represent all, most, or just some of one person's frivolous moods? Can necessary and sufficient behavioural criteria be established, so that we can reliably attribute a frivolous mood to this person? Are there situational and/or intrapsychic determinants of this set of tendencies toward frivolous behaviour?

It is also important to consider whether cognitive factors may be playing a significant role in Ryle's "frivolous mood". An outline of questions would include:

1. If there are major situational determinants of the mood, is the individual's perception of these determinants mediated by his attitude and belief system?
2. Is the frivolous mood something the individual undergoes in a mechanical fashion, or can he play a role in creating, augmenting, or inhibiting the mood?
3. What is the relationship (if any) between choice and the manifestation of disposition?
4. Is it possible for someone to be in a frivolous mood and not know it, i.e. is there a necessary reflexivity to moods?
5. Do goals and intentions play a part in the production and maintenance of a frivolous mood?
6. What (if anything) is in the individual's awareness as he behaves frivolously?

This is not to suggest that it is incumbent upon Ryle to provide answers for all these questions, and the author is prepared to admit that some of the questions may be poorly framed or involve logical mistakes. What is being suggested is, that Ryle may be throwing out a good part of the grain with the chaff. It is believed that this results from a lack of consideration of the

full range of avowals individuals make concerning their mood experience. In sum it is suggested that conceptual clarification should proceed coordinately with thorough data collection.

A Critical Examination of Nowlis' Disposition View

Metatheoretical Critique

Nowlis maintains that he is establishing a 'general definition' of mood and offers the following formulation:

Mood is the effect on a person of his own configurations of activity. These configurations may be conceptualized as fundamental patterns of general functioning and orientation, such as level of activation, level of control, level of concentration, direction of social orientation, and positive (pleasant) or negative (unpleasant) general appraisal. The effect of these general patterns on the person may be mediated by cues associated with them in the life history and involves affective, cognitive, motivational and motor responses to the cues; such responses may in turn become functionally related to the general patterns and may modify, maintain or even instigate them. Hypotheses about the dimensions of mood can be developed from a specification of general patterns of functioning and orientation. The methods for describing or measuring can be based on an understanding of the cues and responses functionally related to each general pattern. Additional hypotheses about mood dimensions may be derived from whatever patterns these cues and responses are found to exhibit (Nowlis, 1965, p.353).

There are a number of difficulties with Nowlis' general definition. To begin with: Is a "general definition" in fact what he is offering? Clearly, he is not offering a simple definition, for neither is his definition linguistically equivalent to the word "mood" nor is it in practice commonly identifiable with the word "mood". But this is in order, for Nowlis maintains he is providing a general definition. This claim should be examined more closely. A definition can be general in several senses:

1. A definition can be general in that it juxtaposes and inter-relates the major features of a variety of definitions or models. Nowlis (1963) refers to the work of Ryle (1949), Skinner (1953), and Jacobson (1957), but he fails to establish the major definition elements of each approach, nor are the

various analogies and discrepancies established. Instead Nowlis sets forth what he believes are the 'five common applications of mood'. He sets them out as follows:

- (a) Mood is used in referring to dispositions; moreover, these dispositions are temporary and reversible, usually lasting minutes, hours or days.
- (b) Mood always refers to the whole person or self.
- (c) When the common conceptual scheme assumes that dispositions are hierarchical, mood refers to higher-order dispositions.
- (d) Mood refers to constancies in behavior and experience during the interval to which it is applied.
- (e) Mood refers to dispositions which have heterogeneous determinants; these determinants may be relatively remote and obscure, or they may be obvious, like the weather, but relatively inaccessible to manipulative control; thus mood is used in referring to known and unknown constraints on behavior and experience.

(Nowlis, 1963, p.74).

From Nowlis' presentation it is unclear whether his common applications are referring primarily to the concept of mood or to the behaviour and experience which fall under the concept mood. In the main he seems to be dealing with the concept "mood". However, the second and fourth applications may be more directly empirical. It is doubtful whether each of these applications is common to each viewpoint Nowlis cites. For example, Jacobson's psychoanalytic view is a psychodynamic view stressing the discharge modifications of psychic energy; this formulation is incompatible with a disposition formulation. It is suggested that the common applications Nowlis lists are the emphases of his own disposition view.

2. A definition may be general in the sense that it establishes a common factor or factors by reason of which a collection of xs may be said to be y. When a set of factors is found attempts are made to unify the set at a higher theoretical level. This seems to be part of what Nowlis is trying to do with his common applications and general definition. The

general definition is an attempt to unify the five common applications. However, doubt has been cast on his position that the applications are common to the viewpoints cited. If the applications are not common, then the conditions for this type of general definition cannot be met.

Nowlis may be misguided in his search for common factors. All the viewpoints cited are complex and this reduces the likelihood of simple common factors being discovered. Methodologically, the search for common factors within diverse entities has been largely abandoned in favour of listing major elements that can be demonstrated to overlap and crisscross in various ways (Bambrough, 1960).

3. A definition may be said to be a general definition in the sense that it sets up a paradigm case which can be used as a "yardstick" for classifying the phenomena under consideration. This is perhaps closest to Nowlis' intentions. He writes:

It appears that the phenomena to which the layman and the scientist refer in using mood terms are important but are poorly analysed and classified. In so far as references to these phenomena supply the context in which mood terms appear, we should begin our explication by reviewing its applications in everyday discourse. As Strawson (1959) says, these applications may form "a family, the members of which may, perhaps, be grouped around a central paradigm case and linked with the latter by various direct or indirect links of logical connection and analogy". Such a procedure is sometimes called "meaning analysis", and is...the first step in the potential transformation of a vernacular term to a scientific or technical term (Nowlis, 1963, p.74).

Nowlis goes on to suggest: "...if there is a central or paradigm case in this family of applications, I would suggest it is this: Mood refers to the effect on the self of its own configurations of activity" (p.74). It has already been pointed out that the range of applications Nowlis considers is limited; of necessity this restricts the general validity of the paradigm case. Also, Nowlis has not performed the important task of linking the paradigm case to his family of common applications. For these reasons Nowlis' formulation

can only be a recommendation within the framework of a disposition viewpoint.

If Nowlis has not provided a simple definition nor a comprehensive general definition, what has he provided? It is suggested that he has set forth a loose confederation of theoretical statements concerning mood, e.g. mood is the effect on an individual of certain configurations of activity, and a hypothetical mechanism that provides a functioning model for the operation of his theoretical entities. The words "configuration" and "pattern" announce the presence of theoretical terms and the hypothetical mechanism is a negative feedback model. If this is the case, and if Nowlis is operating within a natural science framework, then it is legitimate to request:

1. Some demarcation of the theoretical terms and the observation terms and some statement of their interrelationships if the formulation contains both theoretical and observation terms or
2. If a particular formulation contains only theoretical terms, then it is important to know what potentially testable empirical statements can be derived from the formulation (Carnap, 1966).

However, there are good reasons to suggest that neither request can be met. Briefly stated:

1. The major terms within the hypothetical-causal framework of Nowlis' formulation, e.g. 'effect' (mood) and 'pattern of activities', each possesses both a theoretical and an empirical status which is substantially the same for both entities. The effect (mood) is specified and measured in terms of factors a....n (on the Nowlis Mood Adjective Check List), and the cause (the general pattern of activities) is also specified in terms of factors a....n (on the MACL). Hence there is no clear demarcation of the theoretical and observation terms. Since the type of relationship intended by Nowlis is most likely a causal one, and since a true causal relationship requires that

its terms be independently specified (i.e. for "a" to be in causal relationship to "x", "a" must be specified independently of "x"), a causal hypothesis becomes untenable.

2. The major terms of Nowlis' theoretical formulation can be said to be vague. Lachenmeyer (1971) has defined vagueness in this way:

A term is said to be vague when the range of object predicates forming a term's referential meaning has not been specified: the term's connotative meaning is greater than its denotative meaning. In extreme cases, a vague term may have multiple, equiprobable, specifiable object predicates and no specified object predicates (p.30).

To contravene the charge of vagueness with respect to Nowlis' formulation, it would be necessary to know if his list of mood dimensions forms a closed set and if he has identified each of the constituent members of the set. If Nowlis' list of dimensions is an open set then it is necessary to have rules for the identification of possible successful candidates for inclusion in the set.

CHAPTER 2 : A SHORT HISTORY OF THE OBSERVATIONAL AND EXPERIMENTAL INVESTIGATION OF MOOD

Summary

The structuralist schools of Wundt and Titchener provide the background to modern experimental approaches to mood.

The search for "mental elements" reveals the problems of establishing criteria, the confusion of logical with experiential orders, and the determining role of semantics.

Early studies (e.g. Koch, 1913; Krueger, 1928) suggest the need for a molar process view of mood. Mood processes may be internally complex. Ruckmick (1936) offers mood criteria potentially amenable to experimental study.

1934-1945 Mood as the general feeling tone of the organism. Psycho-social factors stressed. The role of physiological variables and the problem of mediation. Psychoanalysts provide information on the developmental and psychodynamic aspects of mood.

1945-1959 Mood linked to specific motivational sub-systems. A homeostatic model is developed. Experimental research concerned primarily with the effects and correlates of mood. Insufficient attention given to the logical shifts that should accompany procedural shifts. Self-rating scales widely used to measure mood.

1960-1970 The disposition view of mood becomes prominent. Mood seen as a consequence of the interaction between personality and situation. Clinically, the fluctuations of mood over extended time periods are studied. Factor analytically derived mood adjective check lists used to measure mood. Dimensions of the Nowlis MACL replicated. Labelling of affective states shown to be a joint function of physiological arousal and cognitive factors.

1971-1977 The representation of mood by monopolar factors is challenged. Mood as an "entity" occurring within a matrix of psychological, psycho-social, and physiological factors. Social-developmental and conflict models proposed. Evidence for interrelationships between cognitive styles and mood states. A systematic contemporary application of phenomenological principles to mood study is offered.

Content Summary

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CHAPTER 2

INTRODUCTION

This chapter reviews the history of the observational and experimental investigation of mood. The history is divided (somewhat arbitrarily) into five time periods. Some of the individual studies are presented in rather more detail than is customary for such a review. This was done in order to

1. show the clarity or unclarity of their formulations of "mood"
2. indicate their methodological rigour or lack of it, and
3. provide depth to balance the range of studies presented.

The descriptive material presented for each time period is followed by an important section that summarizes the period in terms of major conceptualizations of mood, techniques employed for mood study, criteria for the identification of mood, and general considerations. Most of the critical appraisals will occur in these sections.

The general purpose of Chapter 2 is twofold: to give a better understanding of "mood" through viewing it in historical perspective and to indicate the genealogical roots of the present study. The history of mood study has not been one of continuous linear development. Rather, I believe, it shows a series of intermittent motions, stops and starts, advancements and periods of inactivity, hesitancies and crosscurrents of dispute, sudden enthusiasms and emphases dictated by psychological fashion. It is a history largely ignored in current mood studies. Therefore to the extent that the present is both a culmination of the past and a prefiguring of the future, it will merit a clear and careful examination.

Section 2.1 examines the contribution of Wundt, Titchener, Koch and Krueger to the legitimization of affect as a central focus of experimental study. It is difficult to faithfully reflect the ethos of this period, the particular influx and colligation of innovative forces, the intellectual ambience. However, it may be said that there was a sensing of the natural vigour and quiddity of affective experience--coupled with a firm conviction that self-observation (as introspection) and analysis offered a reliable tool and procedure.

The concept of "elements" or "constituents of consciousness" was formulated in an intransitive and disjunctive way; "atoms" of affective experience were disengaged and separated from their wider context, their supportive web. The result was the determination of "crystalline granules", each with a specific weight and density; each ordered, tagged and determinately named. Within this tradition, Koch was one of the first experimenters to realise the necessity for adequate criteria in order to make empirical distinctions and classifications. The point bears emphasis even today: only with the explicit formulation of criteria, an acknowledgement of their limitations and an exposure of their logical commitments, can experimental progress be made towards a consistent theoretical unification.

Koch's finding that subjects were unable to distinguish between feelings and organic sensations does not, in itself, carry the inference that he made, i.e. that non-differentiation is equivalent to identity. In contradistinction to this position, I have provided data and linguistic considerations which suggest that subjects' primary discriminations can be combined with an awareness of different modes of language functioning and constancies in affective vocabularies, in order to clarify the issues. More immediately pertinent to mood study was Koch's advocacy of a molar process view of mood. Koch emphasized the internal complexity of mood, and the importance of component processes sometimes amplifying, sometimes interfering with, and by extension, sometimes opposing or cancelling out one another. This is an observational and experimental finding that is also upheld clinically.

Against the general reductive trend, Krueger emphasized the importance of the total field of experience. In his view the overriding configuration as a determining pattern exercises control over its constituent elements. From my own experience with mood subjects I would add that a particular configuration of elements can also have conformational variations, i.e. the same elements, the same pattern, but a different emphasis or articulation within the field of awareness.

Section 2.2 presents the work of C.A. Ruckmick. He presented a tri-dimensional topographic representation to clarify the relations between mood, emotion, and feeling. He carefully enumerated the components of his mood conception, offering one of the clearest views of mood as a

protracted feeling state of moderate intensity. His viewpoint is still worthy of attention. For Ruckmick, mood in a sense was (or was like) the deterioration state of an emotion--broad, amorphous, and lacking in cognitive elements. My observational work leads me to differ with Ruckmick on several points: he suggests that mood is primarily a background effect, exerts no tyrannical control, has no connative impulse, and does not lead to definite action. In my experience this may be typical of one sub-class of mood, those airy sinuous moods of neutral feeling tone, e.g. detached apathy, but this is only a small segment of the mood spectrum.

Section 2.3 reviews the experimental work of the period 1934-1945. Mood as the general feeling tone of the organism, was the most frequent conceptualization during this period. Johnson (1937) investigated intra-individual patterns of mood, their associated behaviours and characteristic subjective accompaniments. In her sample of female university students, those subjects who experienced recurring depressions, were found to have approximately a fifteen day interval between depressions. However, not all subjects had these depressive cycles, and many were largely free of moods.

From my own qualitative data I would tend to concur with Johnson's view on the fifteen day interval for depressive cycles. This interval is only approximate--environmental pressures and situations that generate fear or insecurity may increase the length and frequency of the depressions; they may induce depression in basically non-depressive subjects, and for this latter type certain negative factors in the environment may be periodic. Whatever the reason, a conspicuous minority of subjects maintain that over a monthly time span they feel enervated and depressed half the time.

Therapeutically, it is often useful to have the individual keep a written daily record of their elevations and depressions of mood, this will give some indication of the presence and action of a periodic rhythm; the type of social reinforcements that influence mood and if possible their mechanism of operation should be formulated. A psychodynamic sketch of the historical patterns of motivation and defence, when combined with self-expressive and personality-syntonic activities, often opens the way to personal growth.

In another contribution Johnson (1934) defined "moodiness" as changeability of mood, and measured it by peer ratings. She concluded that although moodiness could be a liability in intra-familial situations it was not necessarily a detriment to a wider sphere of social relationships. Johnson has couched her conclusion in rather cautious and dilatory terms. The present study has found that subjects do find it easier to express a negative mood to members of the family group. This may be necessary when the negative mood is stimulated by destructive, controlling, and esteem reducing interactions within the family; or perhaps, in a self-destructive fashion the individual may try to immolate her most intimate relationships.

The negative mood certainly can be a liability when expressed amongst peers. In those cases where it is not a liability, there is usually an elated mood of such dynamism and intensity that for the peer group it overshadows the more negative phases. Also, an individual who has marked elations and depressions, may seek new social relationships when in the elated phase, and withdraw from social contact when in the depressed or irritable phase, or as indicated she may express the negativity towards a few "selected" individuals. Thus her popularity and success in social relationships may be contingent upon her maintaining a wide flexible rotating circle of relatively superficial relationships. (See Section 5.1 for a discussion of the positive aspects of "changeability of mood".)

During this period the issue arose of the degree of relationship between mood and environmental factors. Young (1937) suggested a direct relationship between social stimulation and moods of cheerfulness and depression. On the other hand, Johnson (1938) viewed the relationship as more indirect, social stimulation being mediated by rhythmical biochemical changes and neuromuscular tonus. This question of mediation was, is, and probably will remain, a contentious issue.

Clinical experience has demonstrated to my satisfaction, that for some subjects, mood is the felt manifestation of internal rhythms. However, as Schachter and Singer (1962) have shown, the physiological activation is interpreted in terms of the cognitions available to the individual and the social context. In addition, there are some individuals, both sensitive and impressionable, for whom social factors

alone appear to be the necessary and sufficient conditions for the production of moods. There may even be a substantial intermediate or mixed type: one subject maintained that she sometimes had depressions for no apparent reason, though in general she was impressionable and much influenced by social conditions.

Section 2.4 reviews the experimental work of the period 1945-1959. During this period the major conceptualizations were:

1. Mood as general feeling tone, specifically, as the resultant of specific feeling tones linked to motivational factors.
2. Mood as the affective aspect of psychic equilibrium, specifically, equilibrium linked with conflict resolution.

Both of these conceptualizations received empirical support in the present study. To mentally possess the value and comprehend the limitations of these two viewpoints, we should consider both the supporting and the discrepant data. Supporting evidence comes from subjects who maintained that their moods were a 'balancing or blending of emotion in the psyche', and from those subjects who felt that their mood could be a settling down after intense affective stimulation. This latter view was occasionally combined with an emphasis on a cathartic function, e.g. one subject said: 'A mood is a strong emotional feeling which must be experienced by an individual so as to allow him/her to let out the appropriate feelings and by so doing, feel better afterwards'.

However, neither the view of mood as the resultant of specific feeling tones, nor mood as an aspect of psychic equilibrium, was able to account for the full range of data collected in this study. For example, in contradistinction to these two positions--mood can be experienced as a dynamic monolithic quality and a constraint to action, an original unidirectional impetus towards the environment. Hence in order to refine and temper our understanding of these two conceptualizations, we will consider the greater body of evidence that is supportive, and the evidence that eludes accommodation, or is incompatible with the two concepts.

Supporting Evidence

(subjects' definition of mood based on their own experience)

'A mood is a strong feeling or blend of similar emotions....'
(tends to support conceptualization 1)

'A mood is something which consists of a number of emotions interacting to form this mood.'
(tends to support conceptualization 1)

'I feel mood is a visible either consciously or unconsciously demonstration of the conflicts, experiences, and emotions the individual has recently experienced or is experiencing as a result of an interaction.'
(tends to support conceptualization 2)

Non-Supporting Evidence

(subjects' definition of mood based on their own experience)

The type of evidence that is not well accommodated by these two conceptualizations are definitions that stress:

1. the process aspect as opposed to a static balance
e.g. 'A mood is a passing emotion or set of emotions, that is caused by exterior events, or your reaction to these events is a mood. It might last quite a long time because you lose yourself in it, you become submerged. I always think of a mood as being sad--even when it is a happy mood the person knows it will pass so it is very insecure.'
2. the homogeneous quality and modulation aspect as opposed to the resolution of internal conflict
e.g. 'A mood is something which envelops my whole life and affects everything I do and say. It can be formed by the slightest thing--a stranger may smile at me and make me feel great, or it may build up for days. I can feel it there, waiting but not coming. It is usually quite short--rarely more than a day and sometimes only lasting for a minute.'
3. the heterogeneous or rapidly oscillating quality as opposed to a single resultant of specific feeling tones
e.g. 'A mood is a state of mind that one is in at a particular moment. This of course can change rapidly, hence one can be depressed one minute and ecstatic the next.'

Section 2.5 reviews the experimental work of the period 1960-1970. A number of important studies took place during this time period, e.g. the work of Reynolds on mood and the menstrual cycle; Schachter and Singer's work on the interaction of physiological and cognitive variables; and the correlations established by Wessman, Ricks and Tyl between mood variability and self and ideal-self concepts. Here I would like to give selective attention to the second aspect of Borgatta's approach to mood--the need for directing attention to the experience of mood and its phenomenal aspects.

Subjects frequently maintain that "mood" unfolds as a process, or a changing quality that is process-like in nature. This is to say in more formal terms that mood experience fills in segments of phenomenal and objective time, is something which can be interrupted, arrested, aborted, or completed. It can be divided into phases (with phase-specific attributes), may establish momentary stabilization points, and often has a general direction of change. Admittedly, this may be to impose a teleological framework on the data, but it is an imposition required by a significant proportion of mood data.

The process aspect is stressed at this point, not because it is the only legitimate perspective, but as a corrective counterpoint and a reinstatement--"process" has been largely abandoned for other points of view as section 2.5 demonstrates; parenthetically we might add that the alternative points of view are (1) mood as disposition, (2) mood as steady state, and (3) mood as a more or less random fluctuation of affect. Unless we are prepared to accept that in many cases "mood" is a concretely experienced process, we will misunderstand, misinterpret, and most detrimentally--be unable to communicate with individuals undergoing this type of experience. Two examples taken from Session 2, the experimenter administered Mood Analysis Technique, will perhaps confirm this point:

Example 1:

I feel happy and on the whole carefree....In a way I feel sad but I think all in all I am happy. A problem is that I seem to now be happy and sad both at the same time. I feel most peculiar because I feel happy and sad both at the same time and with the same intensity. When I started I felt happy but the more I started thinking about events in the past the sadder I began to feel, but I still feel happy.

In addition to the process aspect, this example also illustrates the oscillation in dominance of component elements and the achievement of a rather precarious stabilization.

Example 2:

I have a feeling of held-in energy--I want to jump and skip, I'm looking forward to the day ahead. I have the feelings that I connect with my childhood when physical activities were spontaneous. The desire to laugh is becoming uncontrollable--enjoyment. I need to use some energy. I feel like a star, all of me is open and receptive. In the background is a fear that I can't hold on to the joyful mood--realization of how transitive it is. I feel like a diamond--that's not quite right--a diamond is too rigid. But it has energy and sparkle, its fire depends on how it's handled. I feel lithe and bouncy but now there is something spiky--the joy is ebbing away, now I am beginning to feel wistful, quieted and sad. (See section 5.11 for an explication of the qualitative structure of this mood type.)

This mood description prescribes a process formulation, and assigns energy expending, affect dilating and genetically determined attributes to the basic mood state.

Section 2.6 reviews the experimental study of mood for the period 1971-1977. It was a time of expanded interest in mood as a topic of experimental study, and revealed a more subtle awareness of the problems and intricacies of conceptualization, the biases of individual methodological techniques, and the fact that mood occurs within a matrix of psychological, psycho-social and physiological factors.

Meddis indicated one way in which the concept of mood and its coordination with experience were affected by assumptions embedded in the structure of the "instruments" used to measure mood, and questioned the validity of monopolar mood factors. (A discussion of Meddis' criticisms is offered in section 3.24.) Wright and McDonald provided a synoptic view of several behavioural approaches to depression, emphasizing the nature and patterning of reinforcers, reasons for the reduction in potency of reinforcers, factors contributing to the maintenance of depression, and the role of social skills in depression.

Reimanis proposed that elation or happiness in university students is related to psychosocial development and that developmental crises are related to the degree of anomie or social disorganisation. In his view, negative mood states are correlated with the unsuccessful resolution of

psycho-social conflicts. Gorman and Wessman demonstrated inter-relationships between individual cognitive styles and mood states. They stressed the conjoint operation and interdependence of cognition, affect, and behaviour.

Lauterbach posed the question of whether or not a relationship exists between the quality of mood and the amount of conflict (measured as cognitive imbalance) present in the area of personal problems. He found that several mood factors typically correlated positively with conflict, but the correlated factors tended to be different for different subjects. This is an issue with respect to which the qualitative data obtained on Session 2, the experimenter administered Mood Analysis Technique, has bearing. Two pertinent examples will be given, the first substantiating Lauterbach's position, and the second questioning its general application.

Example 1:

I feel happy but worried. It's because I am deciding about my future. Being happy about everything, and alive and not tired is what I want. The worry is my conflict over deciding what to do on graduation--to join a travelling ballet troupe or to seriously consider marriage. My mood is like a long stretch of nothingness, with a few sparse trees, but quite light and dry. [For the subject no matter which choice is made, there will be positive and negative consequences, satisfaction and regret, yet the decision must be made in clarity and with determination] The conflict has produced a yearning for something to make me feel happy and contented, a happening that will take away the worry. [The subject petitions for the strength of resolution, hopes for some guiding sign, desires perhaps to have the onus of decision removed by the course of events] This conflict produces emotional vacillation--I am like a wave that is constantly changing and restless, never still.

This mood clearly confirms Lauterbach's position, the internal differentiation and vacillation of the mood is a reflection of conflict--particularly, cognitive imbalance in the area of personal concerns. The correlated mood factors are a mixture of agitation, apathy and connative impulses.

Example 2:

Right now I am in a limbo mood. This 'none' mood is shaping depending on my activities. I don't feel anything is influencing me--it's a state of 'I am'. It's coming from within me, I feel a waiting inside, a sense of expectancy. It hasn't taken final form, everything seems tentative, there is a shifting swirling shade to everything. There

is a feeling of something missing, the mood is taking shape but it needs a crystallization point to become definite. I know the proper point will be found sometime during the day--like a piece of a jigsaw puzzle. I feel I must begin to move and go about my business if the mood is to develop the way I would like. If I remain still and quiet my dark mood may take over.

This mood appears to have an internal origination; there are no elements of conflict, no personal problems in the foreground or background of awareness. It is a mood in the process of being constellated, and as such it is not amenable to Lauterbach's conceptualization.

This, and the preceding exercises in comparative criticism, warrant in my opinion an adjuration: each mood viewpoint should specify its constituent concepts, map out their implicit logical commitments, identify the range of the mood spectrum being studied, provide criteria for the identification of specimens within that range, and indicate how discrepant cases might be accommodated by alternative models.

I would further add that theoretical nicety must be attuned to the clear, confused, or troubled voice with which subjects themselves speak--a formally unified and elegant theory is sterile unless it can increase our understanding of concrete experience. Experimental mood study should begin with a relatively presuppositionless attitude, and when later mapping the received data into a given model, the experimenter should be aware that subjects' representation of their mood is already a refraction through the medium of language--hence simultaneously, it is an expression, an attempt at presentation, a bodying forth and a necessary distortion. Such a realization dispels any tendency towards experimental egoism, and fosters the desire to search with subjects for the most adequate representation of their mood experience.

Section 2.7 brings together and synthesizes the principles for one contemporary phenomenological approach to mood study. The approach is designed to make evident the different "moments" of experiencing, illuminate the internal detail, the general structure, and the implications of a given mood experience. Its aim is to clarify mood experience

in the sense of rendering that experience transparent to the individual. Descriptive data from the mood study is used to illustrate the application of the principles. To comply with our own adjuration: it is a process approach, it has teleological commitments, i.e. views mood as moving towards ends established by the individual's intentions, desires, and phantasies. It is most applicable in those cases where there is a degree of, or potential for, internal movement. The approach is less applicable for inert states or statically balanced states (though here it may upset the balance), and least applicable for those states in which behavioural aspects or action needs predominate (for a justification of these statements see subject's comments in the Appendix). Discrepant cases can usually be accommodated by a disposition, or a simple stimulus-response behavioural model.

2.1 The Forerunners: Wundt, Titchener, Koch, and Krueger

Historically, the experimental study of mood must acknowledge as a progenitor, with respect to content if not method and conceptualization, the introspective study of emotions, feelings, and sensations that developed within the structural schools of Wundt and Titchener. The atmosphere in Wundt's early psychological laboratory was heavily reductionist; the goal was to exhibit the elementary constituents of consciousness. As physics and chemistry had established previously, and philosophy was soon to follow, e.g. Russell's programmatic 'logical atomism', the search was for the building blocks, which in various combinations and permutations, would be capable of accounting for the more complex entities of the investigator's particular division of reality.

For psychologists, the particular division of reality was subjective experience, the focus: affective experience. Both Wundt and Titchener believed it necessary to distinguish between sensation and feelings, but they were sharply divided in their determinations of the basic "feeling" elements. Wundt, in an attempt to account for the complexity of emotional states, set forth a Tridimensional Theory of Feeling based on his own introspections. He maintained that the basic feeling elements were: pleasantness/unpleasantness, tension/relaxation, and excitement/quiescence. Titchener, on the other hand, maintained that introspection revealed only pleasantness/unpleasantness as a feeling element. In Titchener's view all feeling elements, in contradistinction to sensations, were difficult of access, as introspection tended to dissipate feeling elements.

M.B. Arnold (1961) writes:

Both Titchener and Wundt found what they were looking for, neither of them I hasten to add, found figments of his own imagination. They both reported actual experience. But Wundt started from emotional experience, which he believed to be a complex of simple heterogeneous feeling elements, and tried to isolate the elements. Titchener, on the other hand, tried to isolate mental elements, starting from the simplest experiences of pleasantness/unpleasantness, and paid only scant attention to the way in which these elements are composed (p.23).

A partial list of Titchener's simple mental elements includes: feeling hungry, feeling dizzy, feeling comfortable, feeling poorly, and feeling first-rate. These would be classified as sensations in Titchener's system as only sensations are clearly accessible to introspection. These sensations would also be subject to Titchener's general law of mental occurrences. As Titchener expressed it: "I believe that we are here in presence of a general law or uniformity of mental occurrences; that all conscious formations show like phenomena of rise and fall, increase and decrease in complexity, expansion and reduction" (1908, p.34).

As indicated the above mental elements are to be classified as sensations, and they should all possess the characteristic of clarity. Also, they should all exhibit patterns of rise and fall, increase and decrease in complexity, and expansion and reduction. However, even intuitively, it would seem that feeling hungry and feeling first-rate are both of a different logical and experiential order. If this is the case, then Titchener's uniformity law should be supplemented with an indication of how disparate entities follow like processes; in the absence of such a clarification, the law of uniformity becomes so general that it lacks any theoretical or methodological value.

Alechsieff (1907 - cited in Arnold, 1961) attempted to determine the properties common to Wundt's feeling elements, as a means toward distinguishing feelings from sensations. He suggested that feeling elements differ from sensations in that the former are non-localizable, non-objectifiable, independent of specific sense organs, dependent upon the prior condition of consciousness for their quality, and difficult to describe.

Koch (1913) decried the lack of criteria for assigning mental elements to the categories of sensation and feeling. To remedy this lack, he assembled eleven criteria that psychological investigators had set out as adequate for the empirical distinction between sensation and feeling. Koch then instructed his subjects to utilize these criteria in reporting on their experience. His major conclusion was that although subjects could reliably distinguish

between feelings and external sensations (sensations arising from external stimulation), they were unable to distinguish between feelings and organic sensations, e.g. ache, pressure, nausea, and thirst, sensations which arise from the viscera and visceral systems. Koch came to the conclusion that because feelings and organic sensations are indistinguishable, they must be identical, and hence he defined feeling elements as diffuse organic sensations.

Arnold (1961) in a reassessment of Koch's data, argues that the majority of the criteria advanced do distinguish feelings from sensations, and that subjects reporting on their affective experience regularly do distinguish feelings and organic sensations.

I would like to suggest that the problem of whether or not "feelings" can be distinguished from "sensations" especially organic sensations, is a problem of terminology and conceptualization as much as it is one of empirical discrimination. The semantic matrices of the two concepts overlap at certain points and diverge widely at others. It is suggested that:

1. The ambiguities in the use of the concept "feeling" stand in the way of a clear conceptual separation of "feeling" and "sensation".

The Concept "Sensation" and the Concept "Feeling"

The concept of a sensation in most of its subdivisions appears to be the clearer concept. Sensation refers to the conscious or experienced result of a physical entity or force coming into contact with receptor organs that influence areas of the cerebral cortex through their respective sensory pathways. The senses and organs of sensation are most often given under the headings: Distance Senses (visual, auditory), Chemical Senses (taste, smell), and Somaesthetic or Body Senses. The latter are divided into Cutaneous Sense (pressure or touch, warmth, cold, and pain), Kinaesthetic Sense (active motion of the body in space), Vestibular Sense (bodily position), and Organic Senses (e.g. ache, organ pressure, nausea, hunger and thirst).

Examining the special senses in terms of the location of their

receptors and the accompanying primary sensory qualities yields:

1. Vision. The specific receptors are the rods and cones which form the endings of the optic nerve in the retina. The primary sensory qualities are light or colour, and shape.
2. Hearing. The specific receptor is the organ of Corti in the inner ear. The primary sensory qualities are tones or noise, given in terms of pitch, intensity, and timbre.
3. Taste. The specific receptors are the taste buds arranged mainly on the edges and over the dorsal surface of the tongue. The primary sensory qualities are sweet, salt, sour, and bitter.
4. Smell. The specific receptors are the olfactory nerve endings located high in the nose. The primary sensory qualities are camphoraceous, musky, floral, pepperminty, ethereal (ether-like), pungent, and putrid.
5. Cutaneous. The specific receptors are nerve endings located in the skin. The primary sensory qualities are warmth, cold, smoothness, hardness, and other sensations resulting from pressure on the skin.
6. Kinaesthesia. The receptors are nerve endings located in the muscles, tendons, and joints. The sensory qualities are the result of an awareness of position and movement of the limbs.
7. Vestibular. The specific receptors are the semicircular canals and the vestibules of the inner ear. The sensory qualities are the result of an awareness of starting and stopping movements, balance, position, turning, and the motion of the body as a whole.
8. Organic. The organic sensations which arise from within the body, e.g. the abdominal cavity, are less clearly

delineated and understood. The category organic sensations refers to a collection of sensations located in the viscera and bodily cavity.

The presence of specific sense receptors localized within the body and giving rise to primary sensory qualities (experienced but not so easily described) has resulted in a sensation language that functions denotatively to indicate the presence of particular sensations. This sensation language is characterized by semantic elements of intensity, location, and primary quality, e.g. 'I have an intense throbbing pain in my left foot'. This sensation language is less adequate in referring to organic sensations which tend to be less clearly localizable and experienced as relatively "diffuse", e.g. 'I am aware of pressure in my chest cavity'. The parameters of such sensations are less clearly demarcated (though none the less real) than that of non-organic sensations, e.g. having a twinge in the right shoulder. In addition the intensity dimension is less applicable in some cases.

If a subject attempts to describe an organic sensation he is confronted by a dearth of vocabulary. Therefore descriptions of organic sensations tend to be brief and sometimes metaphorical, i.e. a borrowed vocabulary is used. For example, 'I feel tense inside my body, everything is pulled tight, it's like holding your breath'. In other cases the borrowed vocabulary may be the vocabulary of feeling words, e.g. 'I feel anger in my throat'. When this statement was discussed with the subject, it became apparent that her throat felt constricted (organic sensation) and she was angry (feeling).

The concept of "feeling" is complicated by the fact that as a verb, "to feel" can take three kinds of grammatical constructions: a direct object, e.g. 'I feel my anger', 'I feel the cold', 'I feel a twinge' (and in the latter example it is appropriate to ask, a twinge of what and where are you feeling it); an adjective, e.g. 'I am feeling sick', 'I am feeling despondent', 'I am feeling at ease'; various types of clauses, e.g. 'I feel that you would be wise to reconsider your decision', 'I feel

that the time to speak out hasn't yet arrived' (Kenny, 1969).

Hence the verb "to feel" can take a sensation or a feeling as a direct object or as an adjective, i.e. it can be used to qualify a state of mind or indicate a sensation in two of its grammatical constructions, and in a third can set out a conviction or generally posit an attitude. This should make us wary of any single type of reference for the noun "feeling". We may, of course, restrict the reference of the term to one unified meaning for particular purposes. However, in such a case the relatively free linguistic pool of "common" speech with its variety of meanings will most likely shatter our simplification.

The grammatical affinity of "feeling" for various prepositions, conjunctions and conditionals suggests that "feeling" can generally stand for any connective or relational experience (experience existing in relation to other actual or potential experiences). As William James put it:

We ought to say a feeling of AND, a feeling of IF, a feeling of BUT, and a feeling of BY, quite as readily as we say a feeling of BLUE or a feeling of COLD. Yet we do not: so inveterate has become our habit of recognizing the existence of substantive parts alone that language almost refuses to lend itself to any other use.

(1905, pp.245-246)

Parenthetically it should be pointed out that 'a feeling of BLUE' is grammatically and semantically ambiguous because visual perceptual vocabulary cannot be translated into feeling vocabulary. However, there is a sense in which "to feel" is synonymous with "to be aware".

Perhaps, in the case of sentient human organisms, the most straightforward view is to say that "feeling refers to the qualitative responsiveness, the dynamic viability of consciousness, and the motivational force in relation to circumstances, bodily symptoms (including characteristic sensations), and actions both performed and intended. If this is adequate as

a minimal formulation, then "feeling" will be superordinate with respect to "sensation". Feeling involves sensations but cannot be reduced to them.

2. The language of sensation words and the language of feeling words are each composed of special domains of reference and have circumscribed modes of employment. Specifically:
 - (a) The language of sensation words is a language of bodily events, its vocabulary is one of bodily function and activity in terms of its own inner operation and its activity in relation to the environment. As a language it is primarily denotative, functioning to name and locate relatively discrete units of bodily experience.
 - (b) The language of feeling words is a language of an individual's dynamic concern with his own psychological states and objects and events in his environment. As a language it not only functions to denote experience, but also can be manipulated by the individual to give descriptions that represent and expressively portray his experience. The individual will tend not only to describe phenomenal aspects of his experience but also to integrate them in terms of "animating aspects" or patterns of quality.

In general the feeling of vocabulary is quite extensive and well marked off from sensation vocabulary (the vocabulary of quivers, throbs, twitches, and tingles). A number of basic feeling vocabularies have been recommended.

Davitz (1969) lists: admiration, affection, amusement, anger, anxiety, apathy, awe, boredom, cheerfulness, confidence, contempt, contentment, delight, depression, determination, disgust, dislike, elation, embarrassment, enjoyment, excitement, fear, friendliness, frustration, gaiety, gratitude, grief, guilt, happiness, hate, hope, impatience, inspiration, irritation, jealousy, love,

nervousness, panic, passion, pity, pride, relief, remorse, resentment, reverence, sadness, serenity, shame, solemnity, and surprise (pp.32-84).

Schrag (1969) lists: admiration, anger, anxiety, aversion, awe, bliss, boredom, comfort, confidence, despair, discomfort, disgust, distrust, fascination, fatigue, fear, fright, grief, hope, horror, love, melancholy, pain, pleasure, rapture, regret, remorse, repulsion, resentment, self-negation, self-worthiness, shame, shock, sorrow, spite, sympathy, tremor, trust, and zest (p.92).

- (c) One area of overlap between these two vocabularies (sensation vocabulary and feeling vocabulary) is in the case of terms predominantly used to refer to general bodily condition.

This is especially noticeable when states of general activation, tension, or wellbeing are being described. To feel "ill at ease", for example, may be to feel tense, uneasy, nervous, and irritable without having localizable sensations (I feel "ill at ease" because forthcoming events are worrying me, there are anticipated difficulties, I am nervous about whether I am adequately preparing for them and I am irritable because it is all impinging upon me bringing resentment and general mental and physical imbalance). Thus feeling "ill at ease" may refer to my expectations, feelings, general attitude, and general bodily feeling. But to feel "ill at ease" may be to feel tension in my head, nervousness in my stomach, and to feel insecure. Here it refers to localizable sensations and feeling. On the other hand, to feel "ill at ease" may be simply to feel unhappy and worried. Here the bodily reference is relatively minimal.

Table 1 presents data from the mood study pertinent to these issues. It shows subjects' responses to the question: 'What bodily sensations are you having?'. An examination of the responses shows that subjects do

TABLE 1

CLASSIFICATION OF SUBJECTS' RESPONSES TO THE QUESTION: 'WHAT BODILY SENSATIONS ARE YOU HAVING?' ON THE MOOD ANALYSIS QUESTIONNAIRE ACCORDING TO THE CATEGORIES "SENSATIONS", "AWARENESS OF GENERAL BODILY CONDITION", AND "FEELINGS OR THOUGHTS".

	Sensations	Awareness of general bodily condition	Feelings or thoughts
1.	tension in head (0)		
2.		general tenseness	
3.	back sweaty hot temperature bottom on hard surface		hair revolting
4.		relaxed energetic	
5.	headache (0)		
6.	heart beating (0) pain in back		
7.	tension in chest tension in throat	general lethargy	
8.	headache face flused and hot	tired all over	
9.	-	-	-
10.		heavy, relaxed feeling	
11.	tension in neck heaviness in head (0)		
12.	mouth - smiling face & facial expressions		
13.	stomach-ticking sensation (excited buzz)		mind feels full
14.	headache (0) eyelids dropping		
15.		generally limp sensation	
16.	prickly sensations (from woollen clothes)		
17.	heart beat pulse in left wrist		
18.	head feels clear (0)	whole body alive and tingling	I feel I look bright and cheery (self-evaluation, attitude toward body)
19.	temperature (hot)	well-being	
20.	knees (sticky) one leg tingling upper body (light) (?)		
21.	tension in stomach foot itchy		

22.	menstrual cramps (O)		
23.	hands		aware of my hands because I don't like them
24.		drowsy very relaxed	
25.		body feels light and energetic	
26.		general relaxation	
27.		relaxed, comfortable	
28.	head heavy neck stiff		
29.	breathing (O)		
30.		overall tiredness general peacefulness(?)	peacefulness(?)
31.	face (hot) heart beat (O)	heavy	
32.	dull headache (O)	general well-being	
33.	"heart beat" in stomach (O)		
34.	hands tingling top half of body		
35.		tense in all my actions	mind whirring
36.	feet tired eyelids heavy	lazy and comfortable body active	
37.			mind active
38.	eyes sore feet (position)		
39.			angry feeling in my throat
40.	cheeks burning	body throbbing	
41.		hyperactive sleepy	
42.	mouth (responsive, unset)		
43.	feet hurt	relaxed	
44.	numbness in brain (O) pressure on back muscles	general heaviness	
45.	foot tingling head		
46.	butterflies in stomach (O)	feeling weak	
47.	butterflies in stomach (O)		
48.	stomach (O) (pressure on from tight clothes)		
49.	breathing (O) heart beat (O) pressure on legs		
50.	legs and arms feel energetic(?)		
51.	eyes		
52.	head heavy and dull (O) breathing		
53.	stomach (O)		
54.	warmth of skin		
55.	stomach (O) foot going to sleep	general well-being	

55.	headache (O) feet and hands fidgety		
57.	-	numb all over	
58.	-	-	
59.	headache (O) eyes (sparkling) stomach turning (O)		
60.	tingling in arms and feet	generally relaxed	
61.	heart beating (O)	general well-being energetic (from anticipation) well-being	
62.			
63.	headache (O)	listless (?)	listless (?)
64.	tension in shoulders eyes drooping		
65.		body relaxed	
66.	head	relaxed completely	
67.	pressure in chest especially cardiac area (O)		
68.		body feels dull	thoughts get muddled
69.			aware of my mind, as if I'm living in my thoughts almost
70.		relaxed - placid	
71.	dull ache in back		
72.	-	-	-
73.	warm	tired	
74.		inexcitable rhythm and fullness healthy well-being	withdrawn alone and lonely freedom
75.			
76.	warm chest tight (O) face frowning	tense	
77.	muscular tension in neck and upper back head and throat sore	relaxed - calm	
78.	heart beating (O)		
79.	head breathing (O)		
80.	lightness of heart (O) head heavy		
81.	stomach is relaxed (O)		
82.	sensations in fingers		
83.	headache (O) difficult breathing (O)		
84.		feeling of wholeness (?)	feeling of wholeness (?)
85.	face		
86.	tension at top of spine		
87.	cold	heavy	

99.	heart rate (0)	generally relaxed and healthy	
99.			mind active
90.	bubbling in centre of body(0)		
91.	foot has gone to sleep		
92.	skin		
	hair	generally feeling good	
93.	warmth inside (0)		
	head light		
	posture relaxed		
94.		weakness, general slackness	no enthusiasm
95.		well-being	
96.		pulsing of life through my body	
		shape & body, its moving and working	
		relaxed	
97.	position of back		
98.	muscle quivers in arms		
	head drooping		lethargy, indifference
99.	headache (0)		
100.	-	-	-
101.	-	-	-
102.		relaxed, calmness	calmness (?)
103.	tingling down back		
104.	knee vibrating		
	headache (0)		
	eyes heavy		
105.	-	-	-

make discriminations (without being given any instructions to do so) that can be classified according to whether

- (a) they refer to sensations (including organic sensations which are designated "o")
- (b) they refer to an awareness of general bodily experience or functioning
- (c) they refer to feelings or thoughts.

Sensation words such as tingling, pulse, numbness, tension, and quiver were frequently followed by prepositions that indicated a specific bodily location. Sensation words that referred to organic sensations were in most cases also given an area of bodily location. Words referring to general bodily experience or bodily functioning were often prefaced by the word "general" (again without subjects being given any instructions to do so). Feeling words were not assigned a bodily location with the exception of one subject who said that she had an angry feeling in her throat. As already indicated (p. 96), further examination of this response showed that her throat was constricted and that she was feeling angry.

The semantic overlap between words referring to general bodily experience or bodily functioning and words referring to feeling can also be seen. For example, the words peaceful, listless, calmness, and wholeness, without any further information from the subjects can be said to refer to a general bodily experience or to a feeling. To shed light on this issue and how one would go about resolving it, I will consider the response "peacefulness".

Firstly, it should be noted that "peacefulness" is part of a family of approximately synonymous words: peaceful, calm, tranquil, serene, and placid. The general connotation is one of being free from disturbing or exciting influences. Further reflection suggests that "peacefulness" could be construed in any of three ways:

- (a) Peacefulness as an awareness of harmony of or integration in the body's overall functioning (peacefulness as awareness of general bodily condition).
- (b) Peacefulness as an indication of bodily deactivation and repose (repose as absence of tension in specific areas of the body), perhaps also associated with pleasant thoughts and a lack of exciting and disturbing stimuli (peacefulness as involving a sensation or set of sensations).
- (c) Peacefulness as a felt reaction to events flowing smoothly, to equanimity of mind; or peacefulness as not feeling like doing anything in particular other than enjoying one's surroundings (peacefulness as feeling and motivational condition).

It should also be pointed out that various hybrids of a, b, and c are possible, e.g. a and c. In order to reduce the semantic overlap and to refine subjects' discriminations, the following questions can be asked:

Is the experience localizable as a sensation? Is it localizable in a specific area or is it more diffuse, e.g. as a dullness, a pressure, a lightness, in a sector, region, quadrant, or field of the body, upper vs. lower, right vs. left side of the body? Is it more an awareness or indication of how the body is functioning--a sense of an overall tension or well being? Is it a felt response to how the body is functioning, to external events, to thoughts, memories, or anticipations?

3. A judgement is made that the assigning of experience to the categories of feeling or sensation is less important than encouraging an individual to describe, portray, and represent his experience to himself. From this primary point of reference and an awareness of the ambiguities in the concept of feeling in conjunction with
- (a) an understanding of the different modes of language functioning and
 - (b) a familiarity with the sensation and feeling vocabularies.

Corrective steps such as those outlined above may lead us to a resolution of the problem of "feeling" and "sensation" as categories of experience.

Krueger (1928) believed that a more fruitful approach to affective phenomena was to study feeling as a reaction to a total experience field. Wundt had approached a given feeling experience by considering the proportionate participation of the different feeling elements, e.g. if the affective reaction to a musical chord were being studied, the total affective impression would be described as consisting of the partial feeling effects of the partial tones and intervals that comprised the chord. On the other hand, Krueger insisted that the emphasis be placed on the totality of the inner experience. In particular, feelings should be considered as immediate qualities arising from the total field of momentary experience. Furthermore, in Krueger's view, any attempts at an explanation of affect were premature until basic descriptions of phenomena (in their totality) were available. This would require a language that employed new models and metaphors to reflect the

functioning of feeling within a total structure, and as a reaction to the total structure.

In Krueger's words (1928):

In reality, the experience of a normal individual (and also all social experience) consists in its main bulk of indistinctly bounded, diffused, slightly or not at all organized complexes in whose genesis all organs and functional systems take part....Never are the differentiable parts or sides of real experience as isolated from one another as the parts of physical substance, i.e. its molecules or its atoms. All things which we can differentiate there, by comparison, always grip into one another and around one another in the greatest elaboration. And every time it is, without exception, imbedded within a total-whole, by which it is penetrated and more or less completely enclosed...Feelings are the qualities of experiences of this total whole (p.67).

The influence of Krueger's concept of feeling persists, in basic theme and units of analysis chosen, in Arnold's conception of mood as the feeling response to general organismic functioning. Krueger's emphasis on molar units of analysis was part of the programmatic platform of Gestalt Psychology in both its Continental and American phases. However, Krueger's view has not endured as originally formulated. Gestalt Psychology and its experimental precursors sometimes suffered from a low standard of methodological rigour and an opaqueness of theoretical formulation.

Even in Krueger's time, a growing mistrust of introspection as a reliable method (Wundt himself near the end of his career adopted a comparative social-genetic approach to the study of emotional life) coupled with a general disagreement over criteria for the identification of mental elements, soon led to a change in emphasis. The shift in emphasis was one of content, to emotion rather than feeling, emotion being considered a complex feeling but having the advantage of being more "palpable" and with direct manifestations that were open to public observation (Nafe, 1924). There was also a proliferation of new approaches, at first theoretical within the methodological context of introspection and then methodological, a result of the tension between new theory and an outdated method. A bare outline of these approaches would include:

1. Emotion as meaning, residing in the individual's approach or avoidance of the stimulus (Carr, 1925).
2. Emotion as a construct resulting from the training and systematic biases of the observer (Young, 1927).
3. Emotion as the result of success or failure in achieving a goal (McDougall, 1933).
4. Emotion as a judgement that something is to be approached or avoided, but without a special conscious content (Peters, 1935).
5. Emotion as an attitude involving the acceptance or rejection of an object as the result of experience of the object (Carr, 1925).

One of the earliest references to mood in the experimental literature occurs in the study of Koch (1913).

In this experiment the subject was a trained psychological investigator who participated in an experiment to determine the feeling elements induced by musical stimuli. Immediately prior to the experiment the subject described his mood as a 'strong depressive unpleasantness', which had been aroused by the receipt of an annoying letter. In addition, there was resistance to participating in the experiment and an anticipation of further unpleasantness, as the activity of verbally reporting on feeling reactions to musical chords was judged to be not consonant with the dominant mood. The subject reported:

As soon as I sounded the first chord, there was immediately the usual aesthetic judgement: this chord is beautiful. This judgement aroused a certain pleasantness. But at the same time there was unpleasantness like an undercurrent in the affective life. And now there began a struggle between the unpleasantness aroused by my resistance to this acoustic stimulus, and the pleasantness of the sound. The resistance eventually won out. It is not only the aesthetic judgement which aroused temporary pleasantness, but also the overwhelming impression of the sensory stimulus at the moment of sounding the chord; it arouses pleasantness, which at first seems to have displaced the unpleasant mood. But immediately afterwards I became aware that the unpleasant mood was there all the time as an undercurrent. When the chord died out, the tone itself displeased me and the two causes of unpleasantness combined to an intense depression.

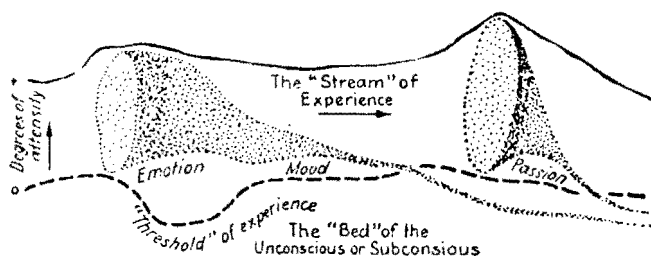
(Several repetitions of the chords). The mood gradually changed in so far as pleasantness and unpleasantness seemed to be present simultaneously while the chords sounded, but pleasantness gradually became the stronger feeling. There was a noticeable alternation of attention between the present content of pleasantness and unpleasantness, but not really an alternation of feeling: both feelings existed side by side and only alternatively increased or decreased in intensity (p.39).

This mood description implies that a process approach may be indispensable to understanding mood. It suggests that mood as a process is internally complex, and many involve competing or oscillating component processes. Thus a multidimensional process model which achieves a series of stabilization points over time, should receive critical attention.

2.2 The work of Ruckmick

Ruckmick (1936) considered the alternative of conceptualizing mood as a cross between a feeling and an emotion, or as something which followed "in the wake" of an emotion. He chose the latter alternative and offered the following diagram as a representation of some of the distinguishing features of emotion, mood, and passion:

Fig. 1 Ruckmick's representation of Emotion, Mood and Passion



His caption reads:

Symbolic representation of typical forms of emotion, mood, and passion. The figure should be visualized tridimensionally. It is meant to illustrate the sudden incidence and gradual submergence of these affective processes, even at times in the latter event, below the level of experience. The stippling (somewhat in perspective) indicates a diminishing degree of hedonic tone with passage of time (Ruckmick, 1936, p.70).

After pointing out that there existed neither a substantial body of research literature nor definitive experimental studies concerning mood, he suggested that until such experimental work was forthcoming, general uncontrolled observations would have to suffice. In his view:

A mood has only the general affective tone and some of the bodily symptoms in common with emotion. Otherwise it stands in direct contrast to the typical emotion as defined. It is not sudden but usually long drawn out, lasting sometimes for hours, occasionally for days. It has no particular cognitive element. We are often at a loss to say toward whom or what it is directed. By the same token it does not generally seize the whole of consciousness. It stands quietly in the corner, as it were, while the conscious parade goes on. That it has some effect on the rest of consciousness there can be no doubt. Its presence is noted; it is a silent junior partner to the mental life of the moment. But certainly there is no seizure, no tyrannical control, no obvious intrusion. There is also generally no conative impulse about it. It does not lead itself to any definite action. Biologically its function is hard to determine. Positively one might state that it is probably more allied to physiological conditions than to direct experience. But certainly many moods are occasioned through circumstances which have occurred in experience - a series of mishaps during the day, a stroke of bad luck in many enterprises, a gay evening with many pleasures; all such experiences are provocative of moods. But some moods are casually ascribed to indigestion, to a bad liver, or to getting out of the wrong side of the bed in the morning (pp.72-73).

Ruckmick cites Pillsbury as offering a partly contrasting portrayal:

Mood is a predisposition to an emotion of comparatively short duration. It may be due to physical causes. Lack of sleep, a fit of indigestion, and many other indispositions predispose to unpleasant emotions, while good health and rest conduce to pleasant emotions or sentiments. Moods, too, develop from earlier emotions. A disagreeable emotion...leaves a tendency to other unpleasant emotions, and this is a mood (p.72).

Thus the modern disposition view of mood which stresses the hierarchical organization of disposition terms and the dimensions of affectivity can be seen as a descendant of "direct observation"

techniques and Wundt's Tridimensional Theory of Feeling. Ruckmick's observations are of considerable utility, as they suggest both distinctions and criteria that are potentially amenable to experimental investigation.

The development of the experimental and observational study of mood, subsequent to Koch's introspective studies and the observationally based views of Ruckmick, has proliferated in multiple directions. Unmindful of Ruckmick's suggestions (I am aware of no systematic experimental follow-up to Ruckmick's observations and proposals) and hampered by the lack of a clear conceptual viewpoint on mood and specific demarcations for the phenomena they studied, experimental investigators generally equated mood with simple feeling or hedonic tone. This restricted view of mood, as simple feeling or the feeling tone pleasantness/unpleasantness, was mitigated to a certain extent by the influence of Psychoanalysis. Psychoanalysts provided in-depth studies of character structure, often touching on phenomena that can be considered as mood phenomena under certain conditions, e.g. querulousness, boredom, and loneliness.

In the review that follows, the type of research conducted under the heading of mood will be set out, as well as the techniques utilized, prior to Nowlis' seminal work on mood.

As indicated in the Introduction to this chapter, the procedure will be to set out the descriptive material for each time period followed by a summary and an appraisal given under the headings: major conceptualizations of mood, techniques employed for mood study, criteria for the identification of mood, and general considerations.

2.3 The years 1934-1945

2.31 The experimental work

The Nature of Mood

Johnson (1937), in a two part study, focused on a wide range of characteristics and correlates of euphoric and depressed moods. Using a sample of female university students, she sought to determine:

1. Intra-individual patterns of euphoria and depression. This involved obtaining estimates of daily feeling tone on an eleven point scale over periods of sixty-five to ninety consecutive days. The author reported:

For many of our subjects a period of about fifteen days between depressions appears to occur more often than chance alone would permit. Many subjects fail to show changes approximating rhythm in the time limits of this study....Our own data are insufficient to establish whether or not rhythm is the rule. A more constant feature of the temporal patterns is the longer persistence of the euphoric as compared with the depressed moods, resulting in a noticeable predominance of "m"-shaped graphs.... A third feature of the mood graphs is their lack of synchronization with one another. Whatever factors are responsible for the temporal location of rises and falls are largely particular to the individual (p.83).

2. The characteristic behaviours and subjective accompaniments of euphoric and depressed moods. This involved participation in two ninety minute experimental sessions, one when in a euphoric mood, and the other when in a depressed mood. The experimental work involved recording spontaneous vocalizations, association speed, the emotional tone of associations, regression in thought trends, decision speed, judgements of distance, psycho-motor performance, perceptual fluctuations with ambiguous figures, and sleep reports. The author reported:

The subjects certainly made more spontaneous and unnecessary conversation in euphoric than in depressed moods. Depression resulted in a very definite regression to childhood events, in thought and memory, compared to the amount of this type of

association in euphoria. Our subjects found it possible to make decisions much more readily when in pleasant moods. Apparently the sense of indecisiveness and mental futility which often accompanies depression is not entirely illusory (p.96).

Johnson (1938), in the second part of her two part study, analyzed the subjective aspects of euphoria and depression. In her view:

A purely behavioristic approach to the problem of mood seems to omit its essential nature, which is the subjective awareness of changing affect. In a highly socialized group, it seems doubtful if mood is always mirrored in objective behavior. Subjective assessment, therefore, seems indispensable for this problem (p.189).

In her experiment subjects completed rating scales once when in a euphoric mood and once when in a depressed mood, covering a number of aspects of feeling tone. The scales covered the variables of:

1. Physical Energy;
2. Mental Energy;
3. Self-confidence and Diffidence;
4. Social Attitudes towards Others;
5. Social Self-Feeling;
6. Vocalization;
7. Emotional Excitability; and
8. Decisiveness.

Johnson reported these results:

Emotional apathy is usually a component of depression... A number of clinical notations were recorded which are pertinent here. Subjects in discussing the nature of their depressions, usually said such things as "I feel jittery", or "I'm excited as though something bad were about to happen".

It seems a defensible hypothesis that there are here involved different types of depression. One is the more usual apathetic depression; the other analogous to the agitated depressions of psychotics (p.115).

Johnson believed that at the then present state of knowledge, it was premature to attempt to postulate a final theory concerning the nature of mood; however, in terms of her findings, she commented upon the then available theories of mood. Her data tended

to conflict with the two major theories, i.e. with Fisher and Morrow's inhibition theory and with Hersey's emotional resistance theory.

Young (1937) advanced a succinct formulation of mood as 'a relatively persistent affective consciousness, such as cheerfulness, depression, anxiety and excitement'. In his view moods could be distinguished from simple affective reactions in terms of duration and from emotions by the fact that emotions are disruptive while moods are not. Also emotion is more intense and of briefer duration than mood. Emotions can merge into moods over time when the initial intensity of the emotion decreases, although in many cases a sharp dividing line cannot be drawn between the two. Young also pointed out that the term "mood" is often applied to abnormal affective states such as mania and deep depression, but these are to be considered as exaggerations of normal human moods.

Young used the combination of a questionnaire and a rating scale to obtain information on laughing and weeping, cheerfulness and depression, and the stability and variability of moods. He contributed information on the frequency and causes of these feeling states.

He concluded:

1. College students rate their prevailing mood as cheerful 4.6 times as frequently as depressed.
2. Moods are reported as stable and cheerful, stable and indifferent, stable and depressed, as alternating wholly on the side of cheerfulness, or wholly on the side of depression or across the region of indifference from cheerfulness to depression. A cheerful mood may be punctured by a brief period of depression, or a depressed mood by a period of cheerfulness (p.332).

Mood and Hypnosis

Fisher (1934) employed hypnosis for the induction of post-hypnotic mood states in a non-pathological population. His technique had the potential advantage of facilitating observations of the effects of particular moods on a wide variety of activities. However, Fisher restricted his investigations to the differential effects of elation

and despondency on the activity of card sorting. A control condition was included and pulse rate across the various conditions was monitored. These results were obtained: (1) Speed in card sorting increases in an elated mood. (2) Speed in card sorting decreases in a despondent mood. (3) In card sorting more errors tend to be made in both an elated and in a despondent mood than in a normal mood. (4) Pulse rate changes with changes in mood.

Levine, Grassi and Gerson (1943) used hypnosis to study variations in Rorschach protocols produced under the induced moods of elation, depression, apprehension, sexual concern, and hypochondria. A normal control condition was also employed. Pronounced variations were noted in the protocols under the various induced moods. The investigators found that the peculiarities of the individual protocols were consistent with the peculiarities cited in the literature for the different affective states.

Leuba and Lucas (1945) employed hypnotic techniques to induce three different "attitudes", i.e. happiness, criticalness, and anxiety. When in each of the three moods subjects were asked to describe a series of six photographs in order to determine the influence of mood on perception and description. The descriptions were rated by a panel of three judges who concluded that the descriptions were significantly affected by the induced moods.

Mood Measurement and Affective Methodology

Kendrew (1935) experimentally aroused mood in young children in an attempt to measure the temporal duration or persistence of moods. The effect of the aroused mood, in this case "disappointment", was observed on the subsequent activity of the children.

In 9 out of twenty cases disappointment experimentally aroused (by preventing the child from playing with a toy which he had just been allowed to choose) appeared to produce persistent effects of a diminishing order of magnitude; and in 3 cases there was no noticeable effect. In several cases a persisting conative activity showed itself in general behavior, but the emotional disturbance had a greater effect on the natural rate of working. Two children delayed the effect of disturbance by a determined effort (p.18).

It should be pointed out that the labelling of the affective experience as disappointment is arbitrary. The experimental manipulation could just as easily produce a state of anger, guilt or boredom.

Gemelli (1945), although concerning himself with basic concepts used in research on emotional states, provided a useful methodological review of the techniques for analysis of emotional states. He outlined his own approach, the functional method, which stresses both behavioural observation and introspection within the framework of a model that links biological and instinctual components to their action expressions. Attention was also given to the developmental phases of emotional states.

Mood and Personality

Johnson (1934) investigated the effect of mood on personality traits as measured by the Bernreuter Personality Inventory. For the purposes of the experiment, mood was conceptualized as 'generalized affective tone' (Johnson, 1934, p.521). Two measurements of mood were employed, self-report of mood state coupled with a rating on a 5 point scale (from low spirits to high spirits) and a one-hundred item word association test to which the subject responded "pleasant" or "unpleasant". It was predicted that a depressed mood would increase the scores for neurotic tendency and introversion, and would decrease the scores for self-sufficiency and dominance. The results obtained by the author were only significant for the dimension dominance, and were in the direction predicted. With regard to the association test, the author predicted that the number of "unpleasant" responses would be greater when the subject was in a depressed mood than when the subject was in an elated mood. This was supported in eleven out of the fifteen subjects, but for the other 4 subjects the results were reversed.

Noting the absence of any objective tool for the measurement of affective tone, Johnson commented: 'If mood be thought of in terms of generalized affective tone the most desirable criterion would probably be an association test of rather wide scope and chosen on a basis of sensitivity to mood changes' (p.521). Johnson questioned

the validity of a single self-rating measure. She proposed a double criterion of a self-rating plus the direction of an association test score as the only alternative.

Mood and Visual Perception

Hevner (1935) sought to determine the affective values of colours and lines. Four basic designs involving different variations of line, e.g. circles, angles, squares, and waves were presented in either a blue or a red version to groups of undergraduate psychology students. The students were required to indicate from a list of affective words those words that they believed to be appropriate to the design. The conclusions reached were: (1) Red is happy and exciting. Blue is serene, sad and dignified. (2) Curves are serene, graceful and tender-sentimental. Angles are robust, vigorous, and somewhat more dignified.

Mood and Social Psychology

Johnson (1940) investigated the social effects of "moodiness", defined as changeability of mood, in a college sorority. Thirty students ranked each other on cheerfulness, changeability of mood, tenseness, and likeability. There were no significant correlations between moodiness and popularity. The author concluded that although moodiness might be a liability in intra-familial relationships, it was not necessarily detrimental to a wider sphere of social relationships.

Mood and Industrial Psychology

Weston (1944) outlined some relationships between industrial illumination, mood, and worker efficiency.

Psychoanalytical Studies

Sachs (1939) analyzed pessimism in Shakespeare's "Measure for Measure" relating it to the hypothesized pessimism of Shakespeare himself.

Kielholz (1938) investigated the phenomenon of querulousness based on an analysis of one of his patients, correlating his findings with the wider literature. He gave attention to querulousness as manifested in the psychopathological states of paranoia, senile dementia, alcoholism, traumatic states, and psychopathic behaviour.

Zilboorg (1938) argued for a relationship between loneliness and narcissism.

Miscellaneous Studies

Leibl (1935) suggested that a correlation exists between mood and handwriting. He used graphological rules for interpreting handwriting to support the distinction between transitory moods and constitutional affective dispositions.

Barmack (1939) and Berman (1939) waged a dispute on the nature of boredom. Berman interpreted Barmack's definition of boredom as equivalent to satiation, and maintained that physiological and motivational descriptions by themselves were inadequate to account for the phenomenon. Barmack maintained that the disagreement was not over the actual operational facts but concerned deductions drawn from those facts and the level of description preferred for the interpretation (Barmack, 1939, p.472). Barmack upheld a more psychological and a less physiological approach, maintaining that a criterion of satiation should involve a subjective report, non-resumption of activity, characteristic variability in performance and cognitive factors such as daydreaming (Barmack, 1939, p.298).

McCann (1940) investigated nostalgia considering its symptomatology, personality differences between susceptible and non-susceptible individuals, etiology, prevention, and methods for its modification. McCann concluded that nostalgia shows a wide variety of symptoms, which have the common feature of being 'emergency emotional reactions'. Significant personality patterns for "nostalgic" individuals were revealed by the Bernreuter Personality Inventory.

Petersen and Reese (1940) related moods in both normals and psychotics to the variables: change in weather, sexual cycle,

physical and mental activity, diet, infection, and general emotional situation. The authors concluded that the effects of weather were most significant, being relatively prolonged and inescapable in their effect. It was suggested that for the psychotic sample weather functions to bring into relief latent hereditary, dispositional, and constitutional tendencies.

The influence of weather on mood states is a factor that has received little attention in the mood literature, and deserves systematic study. Several subjects reported to the investigator that it was a major determinant of their moods, e.g. one subject reported that on grey, hazy days, she was much more likely to feel lethargic.

The Years 1934-1945

- 2.32 Discussion of major conceptualizations, techniques, criteria, and general considerations.

Major conceptualizations

The most frequent conceptualization of mood during this period was as the general feeling tone of the organism, either as a result of internal processes, e.g. Johnson (1938), or the impingement of the social environment, e.g. Young (1937). Other views were also current though less widespread.

Leuba and Lucas (1945) equated mood with "attitude", though presumably they were not suggesting that all attitudes are moods. Kendrew (1935) conceived of mood as the perseveration of emotional disturbance, and most generally as a persisting psychological reaction or process. Johnson (1940) equated "moodiness" with changeability of mood. In these years there was some awareness of the trait-state distinction with respect to mood, e.g. Young (1937), but this was not general currency. Psychoanalysts provided valuable information on the developmental and psychodynamic aspects of mood, but they were conceptually isolated from the more academic approaches. Attempts were made to reduce phenomena that could be considered as moods, e.g. boredom, to a reference network of objectively correlated concepts, e.g. Barmack's conceptualization of boredom in terms of 'satiation', but the results were polemical (Barmack, 1939; Berman, 1939).

Major techniques for the induction and study of mood

In this period a variety of techniques were used for the study and induction of mood. The most popular measure was the bi-polar rating scale. It was used alone, in combination with a questionnaire, e.g. Young (1937), in combination with experimental sessions utilizing tests, behavioural, and cognitive measures, e.g. Johnson (1937), and in combination with verbal reports, e.g. Johnson (1938).

Johnson (1937) used an eleven point rating scale for the mood

dimension euphoria-depression, applied daily for periods of from sixty to ninety days. The daily variations were graphed for individual subjects to reveal individual patterns. An "average mood" graph, i.e. the daily average ratings for a group of individuals was determined. It was hypothesized that individual physiological variation would cancel out to reveal the effect of generalized environmental factors, e.g. temperature, and humidity. Johnson (1938) employed a series of self-rating scales to tap the subjective aspects of mood, emphasizing the indispensibility of such probes for an understanding of mood. Young (1937) employed a questionnaire and a rating scale in a test-retest manner, and independently used a daily mood questionnaire for a 3½ week period.

Kendrew (1935) obtained a baseline time for children to thread sixty-six beads. Each child was tested three times on separate days. Before the third test the child was disturbed, i.e. prevented from playing with a toy he had previously selected for play. His subsequent performance on the bead threading task was observed and recorded.

Fisher (1934) used post-hypnotic suggestion for the induction of mood states, and Leuba and Lucas (1945) induced mood in subjects while under hypnosis. However, the use of hypnosis as a technique for the induction of mood has a number of theoretical and practical difficulties. One difficulty is the generalizability of the results, the percentage of the general population that can be hypnotized is small and this capacity may be the result of specific personality variables or configurations of personality variables. Also, it is not clear whether a hypnotically induced mood is equivalent to a mood produced by internal or external factors.

Johnson (1940), investigating the social consequents of moodiness and the degree of relationship between self and other ratings of moodiness, had sorority members rank each other for traits bearing on aspects of mood. Thirty subjects ranked each other on cheerfulness and gaiety, changeableness of mood, highstrungness and tension, and personal likeability.

Criteria

The majority of authors were operating with a conceptualization of mood as "general feeling tone", and adopted the position that an individual is always in one mood or another. Hence, they saw no need to apply criteria for the differentiation of mood from other affective phenomena. In their view, an individual might or might not be in a particular mood, e.g. depression, but if he were not depressed, then some other mood (general feeling tone) would be operating.

This can be expressed by saying that there was little distinction between general criteria for mood (that the person is in a mood), the identification of a particular mood (that he is in a mood of a particular type), and the measurement of correlates of a particular mood. Essentially verbal report and rating scales were used to identify, measure and validate the presence and description of a particular mood. The confounding of aspects in this approach is apparent. Whitely (1973) has distinguished between two senses of criteria: (1) the necessary and sufficient conditions for the correct application of a descriptive term, and (2) the evidence or clues which may be relied upon to assure us that the term is being correctly applied. This type of distinction was not made in the experimental literature.

If Johnson's view that subjective aspects of mood are basic and that mood states have cognitive and behavioural consequents which can be used as signs of a particular mood is accepted, then Whitely's distinction becomes in principle applicable. Given that general criteria for mood were met (as suggested in section 1.10), then for a particular mood the subject's verbal report and self-rating could serve as criteria of identification in Whitely's first sense (as a sufficient condition) and such things as patterns on an association test, reaction time, etc. could be considered as criteria or signs in Whitely's second sense. The mood strictly speaking is not measured, just the cognitive and behavioural correlates. As Johnson pointed out, there are no objective measures for mood itself.

Theoretically, Young (1937) suggested general criteria for mood, i.e. criteria that tell us someone is in a mood, though not what sort of a mood. He suggested:

Moods may be distinguished from simple affective reactions in terms of duration....Just what degree of persistence is necessary for an affective experience to be classified as a mood has not been determined by psychologists.

Moods can be distinguished from emotions in at least two respects. First, an emotion is a disruptive activity or perhaps the consciousness of a subject during behavioural disorganization, whereas a mood is relatively free from disruption. Second, the typical emotion is more intense than the mood and of briefer duration (p.311).

General Considerations

Johnson (1938) put forth the view that:

.....mood is largely dependent upon neuromuscular tonus, the degree of which is due to the volume of afferent excitation from the proprioceptors, which in turn is due to biochemical changes. These biochemical changes occur in somewhat rhythmic fashion with the gradual building up of chemical balances and subsequent change in qualitative effects (p.197).

Accordingly she put forth the view that the relationship between mood and environmental factors was not as direct as many authors had suggested. In her view emotional responses generated by the environment are superimposed upon mood, largely conditioned by mood, and of relatively little influence upon mood unless of sufficient intensity to have major physiological effects. Johnson suggested that there is a strong tendency to rationalise moods, to pin them on to environmental occurrences, i.e. incidents are selectively interpreted to form causes in tune with current mood.

A different view with a greater emphasis on environmental conditions was put forth by Young (1937):

In the study upon moods one of the outstanding results is that moods of cheerfulness and depression are dependent primarily upon meaningful events within the social environment. From this fact it may be inferred that the situations and events which change one's moods bring into function the complex processes of the cerebrum (p.318).

Thus early in the history of mood study a tendency to emphasize one type of variable to the relative exclusion of other types of obviously relevant variables, was established. This selective orientation, although not amounting to an either/or type of logic, became nevertheless an impediment to any general theory or holistic approach to mood phenomena.

In terms of specific findings, Johnson (1937) found periodicity in depression for some subjects but none for other subjects. It should be pointed out that if biochemical factors were the only variables involved in the production of mood, then a more constant pattern for individual subjects would be expected.

My own observations tend to confirm Johnson's findings on the issue of periodicity. Some subjects reported definite mood states but no regular sequence or recurrence. Other subjects reported a pattern of recurrence usually in phase with the menstrual cycle. Still other subjects reported mood systems, i.e. a pattern of both recurrence and sequence. For example, one subject reported a system of six basic moods which in her opinion recurred in a definite sequence:

1. a state of magical happiness
2. a state of lethargy and disorientation
3. an excitable, impulsive state characterized by strong sexual feelings
4. a state of tender and affectionate feelings
5. a state of calmness and confidence, and
6. a state of frustration and self-critical depression.

Another subject also reported a system of six basic moods that unfolded in a definite sequence:

1. a state of happiness
2. a state of feeling deflated and confused
3. a depressed state
4. a state of fragile and vulnerable feelings
5. a state of detachment and generally dull feeling, and
6. a nervous and tense state.

2.4 The Years 1945-1959

2.41 The experimental work

Mood and Verbal Associative Responses

Bousfield (1950), in his investigation of the relationship between mood and the production of verbal associative responses, defined mood in this way:

Mood is a generic term denoting general feeling tone which is a resultant of the specific feeling tones associated with the specific motivational systems operating at any one time. Mood is generally present in the living individual since some phase of motivation is never completely absent (p.67).

Bousfield's general hypothesis was: there is a facilitation of responses having affective values corresponding to the quality of the mood. Following from this general hypothesis, Bousfield hypothesized:

1. With pleasant mood there is a facilitation of verbal associative responses having pleasant affective value.
2. With unpleasant mood there is a facilitation of verbal associative responses having unpleasant affective value.

The procedure for testing these hypotheses involved obtaining self-ratings of mood on an eleven point rating scale whose extremes were: 'feel as badly as possible' and 'feel as good as possible'. After this rating, subjects were requested to list as many pleasant objects, activities and situations as they were able (pleasantly toned associates); as many unpleasant objects, activities, and situations as they were able (unpleasantly toned associates); and to make as many words as they were able from the letters ONDTERH (neutrally toned associates).

It was found that subjects' self-ratings of mood were predominantly positive (75.15% positive, 4.33% neutral, and 20.52% negative). The interpreted data tended to support both initial hypotheses, but the first hypothesis, viz. with pleasant mood there is a facilitation of verbal associative responses having pleasant affective value, was more conclusively established. Bousfield considered

three possibilities that could account for the greater support for the first hypothesis:

1. The operation of a mechanism of repression or isolation in connection with unpleasantly toned associates.
2. As high mood subjects were found to have higher energy levels, they could conceivably expend this energy more evenly over the three associative conditions.
3. Since the assumption was made that in Western culture the majority of basic needs are satisfied, it was suggested that when motivational frustration is strong enough to produce an unpleasant mood, it is likely that only a small number of motives are being frustrated, so that in an unpleasant mood more unpleasantly toned associates would be produced, but not an appreciably greater number than in a pleasant mood.

Although this latter piece of reasoning is not very conclusive, Bousfield tentatively chose both possibilities 2 and 3 above as adequate to account for his results.

Mood and Homeostasis

Machover and Schwartz (1952) set forth mood as the affective aspect of equilibrating mechanisms. They write:

From the point of view of homeostasis, mood may be regarded as the affective aspect of the psychic equilibrium which follows the overcoming of conflict or the management of a displacing excitation. A given affective state or mood, thus linked with the resolution of a preceding displacement or conflict, might then be expected to deal with ensuing stimulations in a manner consistent with its conservation. In other words, mood, signalling or itself constituting a state of dynamic equilibrium, should seek its own persistence. It should create a predisposition toward the selective modification of response as its own persistence and the nature of the stimulus, now confirmatory, now antithetical require (p.59).

It was the author's general hypothesis that mood functions as a defender of the psychological status quo after conflict resolution and that it controls the associative process in order to maintain itself. In particular contrast responses (considered more abstract) and adjective-noun responses (considered more concrete) would be

determined by both the hedonic tone of the stimulus word and the prevailing mood of the subject.

The author reasoned: If mood is essentially serving a homeostatic function, then the associative response of a depressed subject to a negatively toned stimulus word should be a concrete adjective-noun response as a negatively toned stimulus word would be consistent with and supportive of the depressed mood.

On the other hand, to a positively toned stimulus word, a depressed subject should give a more abstract contrast response, as the feeling tone would be contrary, i.e. threatening to the equilibrium established by the prevailing mood. It was also hypothesized that a depressed subject responding to a negatively toned stimulus word should have less incentive to respond as the stimulus word would not be disruptive to the mood equilibrium, and hence he would show a longer reaction time relative to a positively toned stimulus word.

The authors used the Depression Scale of the MMPI as their independent measure of depression and administered it along with a word list of thirty positively toned adjectives and thirty negatively toned adjectives to a sample of thirty-one normal subjects. From the data three presumptive indices of depression were determined: a reaction time depression index, a contrast response depression index, and an adjective-noun depression index. It was predicted that since both the MMPI Depression Scale scores and the association test indices were presumed to increase with affective depression, the correlation between them should be positive. Although the MMPI was admitted to be a highly fallible criterion for current depression and the hedonic variability for a given stimulus word was large, the authors appeared to be confident in reporting:

Correlations between MMPI depression and association test depression were: for contrast responses 0,40 ($p = 0,02$), for adjective-noun responses 0,33 ($p = 0,05$), for reaction time 0,45 ($p = 0,01$).

It is concluded that the prevailing mood of the respondent operates homeostatically, exercising a selective influence on associative abstraction and reaction time, depending on the mood implication of the stimulus. Abstract associations (contrast responses) are facilitated when the stimulus word

threatens the respondent's prevailing mood, while concrete associations (adjective-noun responses) are facilitated when the stimulus word corroborates the mood. Reaction time is decreased when the stimulus word threatens the prevailing mood, and lengthened when the stimulus corroborates mood. In general, the associative process is in some measure subordinated to the end of conserving the prevailing mood of the subject (p.66).

Wodin (1956), working in the vein of Machover and Schwartz, used a general concept of homeostasis to test hypotheses concerning the operation of homeostasis through perception, memory, memory trace, word associations, and associative reaction. In each case prevailing mood operating homeostatically was suggested as a major determinant of response.

Conceptual and Methodological Studies

Elmgren (1950) suggested that affective phenomena might profitably be classified and conceptualized through a modification and expansion of the Wundtian tridimensional theory. He maintained that it was possible by means of psychophysiological, constitutional, and factor analytic studies to determine the basic components of affective experience. No component, however, was to be accepted unless it was confirmed by experimental study. Elmgren set forth a list of components for which there was at least some experimental evidence. These included:

1. sensitivity or susceptibility and vividness
2. excitation or tension
3. lability-stability
4. intensity
5. integration, the greater or lesser closure of the structure of a sentiment (p.146).

Strunz (1954) reviewed the theoretical problems of disposition concepts within psychology. He drew attention to problems in distinguishing between formal and actualizing dispositions, i.e. higher-order and lower-order dispositions. He demonstrated the need for critical analyses of disposition concepts and indicated the hazards of their uncritical acceptance.

Psychoanalytical Studies

Rapaport (1953) reviewed and synthesized what might be called the developmental moments of Freud's thinking on the theory of affect. He stressed a regulatory and adaptational view of affect within the framework of ego psychology.

Jacobson (1954) surveyed the views of Freud and other psychoanalytical writers on the theory of affect. She suggested that the following factors were of primary importance for a psychoanalytic theory: the reality principle, instinctual maturation, and the maturation of the ego.

Psychiatric and Forensic Studies

Branfman (1954) investigated the dynamics of sentimentality. Utilizing the approach of Edmund Bergler, he demonstrated a 5 layer dynamic stratification.

Schulte (1954) indicated that severe depressive mood states accompanied by a severe loss of self-esteem were capable of provoking criminal or illegal actions, in those personalities that were predisposed. He suggested that the mood state of such individuals be taken into account in determining the responsibility of such persons for their criminal acts.

Mood and Visual Perception

Wexner (1954) investigated the degree to which colours (hues) and mood tones are associated. Her general hypothesis was: there is a positive relation between certain colours and certain mood tones. She pointed out two shortcomings in the previous literature. First, in word lists used to measure mood, groups of words that were hypothesized to measure a dimension of mood often lacked reasonable synonymity. Hence one subject might primarily be responding to one word of the group and another subject might be responding to a different word of the group. Second, the forced method of fitting mood words to a colour circle where there was a total reliance on the experimenter's view as to what colours

went with what words, was questioned.

Wexner chose twelve words as a measure of mood, i.e. the words - exciting, secure, distressed, tender, protective, despondent, calm, dignified, cheerful, defiant, powerful and sensuous. Then a list of 164 adjectives was culled from the literature, from synonyms of these words as well as the original twelve. Four judges were requested to choose words from the list of adjectives which they felt meant the same as the mood tone words. The mood tone words were listed together with their synonyms as unanimously chosen by the four judges. The final groups of mood tone words were: exciting, stimulating; secure, comfortable; distressed, disturbed, upset; tender, soothing; protective, defending; despondent, dejected, unhappy, melancholy; calm, peaceful, serene; dignified, stately; cheerful, jovial, joyful; defiant, contrary, hostile; and powerful, strong, masterful.

Wexner found that for each mood tone certain colours were chosen to go with that mood tone significantly more often than the remaining colours. In general the investigation tended to support the colour-mood studies as recorded in the literature. No significant differences were found in colour-mood association between male and female. Wexner considered the relevance of cultural, biological and learning factors to these findings.

Miscellaneous Studies

Delay (1946) considered mood to be a fundamental affective quality that gives to each state of mind an agreeable or disagreeable tone. Delay set forth the view that mood was a basic substratum in an individual's affective life. From clinical observation, the results of brain surgery, and animal experimentation, he concluded that the centre for the regulation of mood is in the base of the brain particularly the diencephalon. Delay stressed that mood was the basis of all affective life and served through a balance of inhibitions and facilitations to prevent either excess or deficiency of affective tone.

Mark (1947) used an idiographic approach to reveal the structure of

neurotically determined moods. Mark's main point was that an uncovering of the individual's unique motivations was necessary for a favourable change of mood and a successful modification of the mood system.

Moon (1954) studied the scope of mood responses in intermediate grade pupils.

Bloch (1954), in a contribution that might be considered a forerunner of the influential Schacter and Singer study of 1962, summarized the anatomical and physiological studies concerning the locus of emotional responses. His own conclusion was that physiological intensities of affective states could be distinguished but not unique feeling qualities.

The Years 1945-1959

- 2.42 Discussion of major conceptualizations, techniques, criteria, and general considerations

Major conceptualizations

New emphases began to emerge in the literature of 1945-1959, e.g.

1. For Bousfield (1950) mood was still equivalent to general feeling tone, but now it was the resultant (implying a vectorial approach) of a network of specific feeling tones grounded in operative aspects of the individual's motivational system.
2. For Machover and Schwartz (1952) operating with a broad teleological point of view, the concept of homeostasis was essential to an understanding of mood. In their view mood is the affective aspect of psychic equilibrium following the resolution of conflict or excitement. Mood then functions through the selective modification of responses to maintain equilibrium.

Thus there was a general emphasis on the relationship between mood and motivational factors, corresponding to the general interest in motivation, drive and reinforcement which was prevalent in psychology in the 1950's; and an emphasis on the adaptive and regulating function of mood. Closer scrutiny of Machover and Schwartz's view indicates that in fact they were very close to propounding a feedback model. Such a model later became manifest in Nowlis' conceptualization (see section 1.11).

Major techniques for the study of mood

Strictly speaking this period was dominated by a study of the effects and correlates of mood, the relationship between mood and associative response being the preferred area of study. The usual technique was to employ mood self-rating scales, a listing of associative responses and then to compare associative responses produced under different ratings of mood. The ratings most frequently chosen for study were high mood and low mood.

Machover and Schwartz (1952), in a more complex approach, took into account the feeling tone of the stimulus word, positive and negative toned stimulus words distributed randomly on a word list, affective state, depression scale of the MMPI, and the nature of the associative response in relation to the prevailing affective state.

Wexner (1954), pointing out methodological faults in the previous literature, stressed the need for synonymy between words comprising a given dimension of mood check lists for valid statistical results.

The idiographic, dynamic, and genetic approaches of psychiatry and psychoanalysis resulted in a number of clinical contributions during this period.

Criteria

Bousfield (1950) acknowledging that the status of mood as a topic in psychology was vague, suggested that mood should occupy a position intermediate between affection and emotion. Bousfield sought to map out some of the pertinent distinctions:

Emotion is a term best applied to relatively strong motivational states identified on the basis of their having pronounced physiological concomitants. The somewhat equivalent terms affection, feeling tone, and hedonic tone, denote a phenomenological attribute of motivation generally described in terms of pleasantness and unpleasantness. Some aspects of the relationship between motivation and feeling tone are obvious. In general, frustration is associated with unpleasantness and satiation with pleasantness (p.67).

These formulations were not systematized to the point where actual criteria for the presence or absence of a mood state in awareness were advanced and applied. Instead it was suggested: 'Mood is generally present in the living individual since some phase of motivation is never completely absent' (Bousfield, 1950, p.67). There was no attempt to stratify the concept of mood into higher-order theoretical terms and lower-order observation terms.

Machover and Schwartz (1952) directed attention to psychoanalytical

theorizing concerning mood. From their viewpoint, it might be suggested that mood criteria be linked to the experience of intra-psychic conflict or the conditions producing intra-psychic conflict, but this was not attempted. Hence it might be said that their theory was not adequately linked to their procedure, as no attempt was made to induce conflict or to ensure that the prevailing affective state was the result of a preceding conflict.

General Considerations

The experimental literature of this period demonstrated a movement away from the study of mood as a phenomenal state toward the study of the behavioural correlates of mood. However, there seemed to be a lack of awareness of the logical shifts that must accompany such a procedural shift, e.g. a correlational study should be able to independently define and measure those variables to be correlated. And as Bousfield pointed out, the status of mood as a concept was vague and lacking in specific criteria; he was also aware that the correlations between feeling tone and behaviour were tenuous at best. It is suggested that because the concept was so vague there could be no specific criteria and the correlations could only be tenuous.

An initial corrective step could be one which focused on the subjective aspects of mood, with a view to developing a theory and criteria that would be applicable to the individual's experience. This is not to affirm that the study of behaviour associated with a phenomenal state is an empty enterprise, far from it, for such behaviour may serve as partial criteria for the identification of the phenomenal state. The point to be stressed is that subjective aspects and behavioural aspects must be studied together before there can be an adequate formulation of mood.

2.5 The Decade 1960-1970

2.51 The experimental work

Mood in Normal and Pathological Subjects

Wessman, Ricks and Tyl (1960) investigated mood fluctuations in a sample of college women without discernible pathology, over a seven week period. The authors' guiding proposition was that the difference between normal and pathological moods is one of degree rather than type. For their sample the authors considered:

- (a) self and ideal-self representations reported by subjects in relatively elated and relatively depressed moods;
- (b) the direction of punitive responses and the persistence of effort revealed by a projective frustration test taken during elation and depression, and
- (c) the average level, the frequency, and the intensity of mood fluctuations reported daily over a period of six weeks.

From their results the authors concluded:

The significant intra-individual changes in depression (relative to elation) were: lower correlation of self and ideal, more unfavourable self concept, increased extrapunitive responses; and reduced need-persistent responses. Individual records of mood fluctuation were markedly irregular and showed no clear periodicity ...Relative interindividual standings on the parameters of mood fluctuations showed the following significant correlations: intensity of mood swings inversely related to relative stability of the self concept; and average mood (or general hedonic level) inversely related to correspondence of self and ideal. The last finding, which was contrary to prediction, led to an examination of the contents and discrepancies between self and ideal descriptions in elation and depression for the relatively more and the relatively less happy girls (pp.125-126).

Borgatta (1961) urged experimenters to undertake empirical studies of concepts and variables that were relevant to the study of personality, but which transcended a narrow trait approach. Borgatta considered 'mood' just such a variable. Traditionally, he believes, mood has been treated as a nuisance variable, a variable that is capricious in its effects and which tends to detract from the generalizing power of any particular study.

Borgatta suggested that attention be turned to this evasive entity in order to determine its influence and manner of operation.

Borgatta writes:

It [mood] raises many theoretical questions, however, that will influence future research. For example, should attention concentrate on the situations and sequences of situations that lead to particular moods, or should it concentrate on the moods themselves? The question is compounded since moods must be viewed as consequences of the interaction of the personality of the individual and the situation; any analysis that is undertaken is necessarily complex and at least partially circular. One important strategy, thus, may be to concentrate on the development of measures of any given type before dealing with the question of the interrelationship of different types of measures (pp.105-106).

Borgatta sought:

1. to replicate an early forty word adjective check list devised by Nowlis and his associates to determine salient mood factors and parameters;
2. to correlate mood scores on these factors with change in mood scores and
3. to correlate change in mood scores (the difference between pre- and post-mood adjective check list administrations) with personality data, e.g. scores on the Guilford-Zimmerman Temperament Survey, the Thurstone Temperament Schedule, the Edwards Personal Preference Survey, and the Cattell Sixteen Personality Factor Questionnaire.

Borgatta's procedure:

A short mood adjective check list was administered pre- and post-personality testing to one-hundred-and-eighty male university students. The mood adjective check list data was factor analyzed separately pre- and post-testing by the Complete Centroid Method with Quartimax rotation. Orthogonally rotated factors were determined. In addition, for a sample of ninety-eight males and thirty-five females, mood scores pre- and post-were interrelated.

Borgatta's results:

1. For the male data, six of the Nowlis factors were confirmed, i.e. those factors which Nowlis called Depression, Social Affection, Deactivation, Concentration, Aggression, and Anxiety. Nowlis factors not confirmed were those of Pleasantness, which was indistinguishable from Social Affection, and Egotism, the loadings on which were considered to be too small to warrant its inclusion as a major factor.
2. For the male data, the author tentatively accepted a significant correlation (for both pre- and post-tests) between the mood factor Lonely and the mood factors of Defiant and Startled. This was established at the .05 level of significance. The mood factor Tired was correlated positively with Thoughtful and negatively correlated with Lonely, Defiant and Startled. The mood factor Warmhearted was independent in the male matrix.
3. The female data relative to the male data, for the similarity between pre- and post-test factor structures, there seemed to be less of a parallel between the factor structure of the pre and post data. In the pre data (again relative to the male data) there was no relationship between the mood factor Tired and the mood factors Lonely, Defiant and Startled. This also held for the post data. The post data generally revealed smaller statistical relationships, though it was isomorphic to the male data.

Some specific variations were noted. The author stated:

In summary, examination of the pre- and post-test scores revealed some systematic dependencies. At the same time, it was seen that the scores tended to be consistent from pre- to post-testing. While the scores were built on the basis of experience with male data, the female data tended to show similar structure with several specific variations (p.112).

Borgatta summed the mood scores pre- and post-testing (T1 + T2) for each individual on each mood factor, for the largely disjunctive categories male/female. This score yielded an indication of the stable way the individual perceived his own feelings. A

second score, a change in mood score ($T_1 - T_2$), the algebraic difference between pre- and post-test scores was established to indicate the influence of two-and-a-half hours of strenuous personality testing on mood state.

1. For the male data, the interrelationship of mood and change in mood scores indicated that scoring high on Thoughtful was correlated with an increase in the Thoughtful score. The other salient relationships were between being high on the mood factor of Startled and an increase in the mood factor of Lonely; being high on the factor of Thoughtful and showing an increase in the factor of Tired, and being high on the factor of Tired and showing an increase on the factor Defiant.
2. For the male data, the interrelationship of the change in mood scores revealed that the highest correlation was between changes in the mood factors of Defiant and Startled. Also significant were changes between Warmhearted and Tired, and between Thoughtful and Defiant.
3. For the female data, the interrelationship of mood and change in mood scores parallel that of the male data, but at a lower level. For the females being high in the mood factor Startled was correlated with an increase in the mood factor of Startled.
4. For the female data, the interrelationship of the change in mood scores again paralleled the male data.

Mood scores and change in mood scores were correlated with the different measures provided by the personality tests. The author also presented data which consisted of self-ratings on behavioural characteristics and peer rankings obtained after a discussion session. It is not possible to present all the correlations for all the mood factors. However, the correlations for the mood factor Tired are set out:

1. For the male data, there were no significant correlations between the mood factor Tired and the personality subtests.
2. For the female data, there were several substantial negative correlations, e.g. between the mood factor Tired and the traits of Extroversion and Emotional Stability on the 16PF. Positive correlations were noted between the mood factor of Tired and the personality dimensions of Succourance (Edwards) and

Bohemian (Cattell).

Borgatta's results have been presented in detail to indicate (a) the Nowlis Mood Factors that were replicated (Depression, Social Affection, Deactivation, Concentration, Aggression and Anxiety), (b) the relative stability of the mood scores over time, and (c) the potential correspondence between mood scores and personality variables.

McNair and Lorr (1964), guided by the intent to develop a method for the identification and assessment of mood states in a male psychiatric outpatient population, sought to determine:

- (a) the presence of a set of hypothesized mood factors;
- (b) a replication of these factors, and
- (c) the sensitivity of these factors to various treatments, e.g. chemotherapy, short-term psychotherapy, and a placebo treatment.

The hypothesized mood factors based on clinical observation and a review of previous studies were: Anxiety, Tension, Anger, Depression, Vigour, and Fatigue. The authors' theoretical framework was based on Nowlis' view of mood as an intervening variable. The authors state:

Mood is regarded as a concept with the status of an intervening variable. It is conceptualized as an organismic state definable in terms of the antecedent inducing operations and the correlated behavioral consequences. Physiological distinctions between moods are not assumed. Among the antecedent conditions inducing mood or mood change are withholding reinforcement, environmental deprivation, emotional stimulation, and intraorganic events such as illness. Among the behavioral correlates of mood shifts are changes in frequency and intensity of many acts and verbal responses. It is these differences among the antecedent conditions, together with differences among consequent behaviors, that define different mood states. Mood states and emotional states are viewed as overlapping categories. Mood states are likely to be more persistent and to involve less intense physiological arousal (p.621).

The authors further subscribe to the view that:

What subjects report when they describe mood changes is probably a joint function of knowledge of the inducing conditions, cues from the physiological activation level,

and feedback from the behavioral consequents....

Verbal responses are behavioral consequents of mood change which offer readily available indices of mood variation. Adjectives, in particular, are among the most frequent verbal responses to mood. Our approach to identifying mood states and assessing their intensity is to present adjectives to subjects and elicit their reports of the extent to which the adjectives describe their typical mood (p.621).

The authors reported positive results for their three areas of endeavour. In addition the relationship of their study to other factor analytic studies of mood dimensions, e.g. the work of Nowlis and Green, Borgatta, and the Clyde Mood Scale, was established.

Laxer (1964) investigated the correlations between self-rating, mood level, and intropunitive aggression and extrapunitive aggression in normals and neurotic depressives. Interaction effects between mood level and blame assignment were established for the abnormal subjects, e.g. the psychiatric patients with very low mood levels were found to show very low self-rating only if they blamed themselves for their failures; those who tended to blame others when they were unhappy did not show a devalued self concept.

The author concluded that in the case of normals there were correlations between mood level, blame, depression, and self-rating. In the case of abnormals there is an interaction effect between mood level and blame. Two sets of criteria for neurotic depression were established: low self-rating and a combination of low mood with high self-blame.

Hoffman and Peterson (1960) sought to assess the emotional structure of personality disorders on the basis of observer ratings and to compare observer ratings with self-descriptions of mood.

The subjects were 80 male and 15 female psychiatric inpatients that had received the diagnosis of personality disorder by a psychiatrist and a psychologist. The subjects were rated on a 52 item check list of mood related adjectives by ward personnel who were in daily contact with the subjects. The personnel were instructed to rate each subject

as perceived at the time of rating. All subjects received three independent ratings from different individuals. In addition self-ratings were obtained from all but 11 of the subjects.

Factor analysis of the observer ratings yielded 10 factors: Friendliness-Hostility, Guilt, Fatigue, Depression, Confusion, Tension-Anxiety, Activity, Efficiency and two other unlabelled factors. Mean self-ratings were compared with mean observer ratings, eight items showing a significant mean difference. The majority of differences between observer and self-ratings occurred for items of the factor Friendliness-Hostility. The authors' findings supported the idea that patients classified as personality disorder are perceived as highly efficient and lacking in guilt, confusion, and fatigue. It was found that these subjects have moderate amounts of anxiety and depression. Contrary to expectation, they are also seen as being friendly and lacking in hostility.

Behavioural Correlates of Mood

Dittman (1962) investigated the relationship between mood and body movements in the interview situation. Body movements in three prescribed areas were studied across five different moods of one patient. It was found that frequency of movements reliably differentiated the different moods and that the patterns of movement differed across body areas for each mood. Dittman writes:

During this patient's angry mood, for example, there are many head and leg movements, but few hand movements, while during the depressed mood, there are few movements of the hands and head, but many leg movements (p.480).

Although Dittman only used one subject, his study is important in that he established behavioural correlates of different mood states.

Mood and Cognitive Processes

Hoffer (1962) studied the relationship between mood and time perception in depressed and schizophrenic patients. The author recommended a more general use of simple tests of time perception for diagnosis, screening and categorizing the mentally ill. It was

suggested that changes in the perception of time could be used as indicators of progress during and after treatment, as well as predictors of relapse.

Affective States, Physiological Arousal and Cognition

Schachter and Singer (1962) sought to determine whether unique and reliable differences in physiological arousal could be established for different affective states. After a review of the pertinent literature the authors came to the conclusion: 'Recent work might be taken to indicate that such differences are at best rather subtle and that the variety of emotion, mood, and feeling states are by no means matched by an equal variety of visceral patterns' (p.380). Following up suggestions by Ruckmick (1936), Hunt, Cole and Reis (1958), and Schachter himself (1959) that cognitive factors may be crucial determinants for the labelling of affective states, Schachter reasoned:

Granted a general pattern of sympathetic excitation as characteristic of emotional states, granted that there may be some differences in pattern from state to state, it is suggested that one labels, interprets, and identifies this stirred-up state in terms of the characteristics of the precipitating situation and one's apperceptive mass. This suggests, then, that an emotional state may be considered a function of a state of physiological arousal and of a cognition appropriate to this state of arousal. The cognition, in a sense, exerts a steering function. Cognitions arising from the immediate situation as interpreted by past experience provide the framework within which one understands and labels his feelings. It is the cognition which determines whether the state of physiological arousal will be labelled as "anger", "joy", "fear", or whatever (p.380).

Following from these considerations, Schachter and Singer put forth three basic propositions:

1. Given a state of physiological arousal for which the individual has no immediate explanation, he will label this state and describe his feelings in terms of the cognitions available to him. To the extent that cognitive factors are potent determiners of emotional states, it could be anticipated that precisely the same state of physiological arousal could be labelled "joy" or "fury" or "jealousy" or any of a great diversity of

emotional labels depending on the cognitive aspects of the situation.

2. Given a state of physiological arousal for which an individual has a completely appropriate explanation (e.g. "I feel this way because I have just received an injection of adrenalin") no evaluative needs will arise and the individual is unlikely to label his feelings in terms of the alternative cognitions available.
3. Given the same cognitive circumstances, the individual will react emotionally or describe his feelings as emotions only to the extent that he experiences a state of physiological arousal (pp.381-382).

The authors then attempted to manipulate by means of the subject's cognitions, the labelling and interpretation of the subject's own feeling state. This was done under the conditions of receiving an injection of either epinephrine or a placebo saline solution and then either being informed of the physiological effects, being uninformed, or being misinformed. Under each of these conditions subjects were submitted to social stimulation designed to induce euphoria, or to induce anger. Subjects were observed through a two-way mirror and were required to give a self report of mood and physical condition for their treatment. The authors found:

1. Following an injection of epinephrine, those subjects who were not given an explanation for the physical symptoms produced by the drug, labelled their feeling state in terms of the cognitions produced in response to the experimenters' manipulation (social stimulation designed to induce either euphoria or anger).

Hence the role of cognitive factors and the act of interpretation of physiological arousal were suggested as fundamental components in the labelling of affective states.

2. Following an injection of epinephrine, those subjects who were given an adequate explanation for the physical symptoms produced by the drug, generally did not label their feeling state in terms of the experimenters' manipulation.

Hence adequate reasons established an anticipatory set which was completed when the physiological effects of the drug corresponded

to the subjects' expectations. In this case the cognitive factors produced by environmental manipulation had relatively little effect.

3. The evidence for the proposition that under constant cognitive circumstances an individual will react emotionally only to the extent that he experiences physiological arousal was consistent but considered to be tentative due to experimental artifacts.

The authors were able to provide substantial evidence that the labelling of affective states is a joint function of physiological arousal and cognitive factors. Their study is important not only because it established the importance of cognitive factors. Its importance also lies in the demonstration of the interrelationship of cognitive and physiological factors.

Mood and Human Factors

Heimstra, Ellingstad and De Koch (1967) investigated mood as a determining variable on driver performance under simulated conditions. The authors' purpose was to establish relationships between operator mood and performance, and to investigate sex differences for the effect of mood on performance. Special attention was given to the mood factors of Aggression, Anxiety, Concentration, and Fatigue, as these were considered to have a direct connection with driver performance. Mood was measured by the Nowlis Mood Adjective Check List and performance was measured in terms of vigilance, reaction time, tracking performance and speed maintenance.

Pearson product-moment correlation coefficients were computed between the performance and mood measures for 350 subjects (175 male and 175 female). No single performance measure was significantly related to the mood factors, either collectively or by a male/female division of the data. Correlations among performance measures were low for both males and females. The patterning of the mood factors was different for females as compared with males, the females exhibiting a "positive set" not present for the males.

Subjects scoring high (the top quartile) on Anxiety, Aggression, and

Concentration were compared with subjects scoring low (the bottom quartile) on those factors. It was found that subjects in the high mood quartiles were inferior in performance to those scoring low in the low mood quartiles. Considering only performance measures the authors found:

....that the performance of the males was generally superior to that of the females on the various tasks. On the meter vigilance task females missed significantly more signals than males; women's reaction time was significantly lower than men's and they showed significantly more tracking error than the men. On the speed maintenance tasks, females tended to rarely exceed the maximum speed prescribed but would frequently drop below the minimum. Males, on the other hand, were likely to show speed maintenance errors in either direction (p.734).

The authors concluded:

It appears that the findings of the present investigation support the hypothesis that the mood of an operator is, at least to a limited degree, related to his performance on several types of psychomotor tasks. The relationships between the mood factors and performance measures, however, are far from clear. Correlations among these variables were low and on the basis of this analysis one could say that S's mood apparently does not relate to any large extent to his performance on the tasks required in the present study. On the other hand, when Ss were selected on the basis of high or low mood factor scores and their performances on the various tasks involved in the operation of the device were compared, either high or low scores on certain mood factors might determine performance (p.734).

The authors considered the lack of clear cut relationships in terms of the validity of the mood measure, the sensitivity of the performance measures and the possible distortion introduced by the simulated conditions. The exclusion of measures of risk taking and decision variables and their possible relationship to driver mood, were considered as further limitations.

Mood, Self-Image and Self-Report

Mosher (1968) constructed forced-choice and true-false measures applicable to females which provided scores for three aspects of guilt. The aspects measured were: Sex-Guilt, Hostility-Guilt and

Morality-Conscience. A multitrait-multimethod matrix (Campbell and Fiske, 1959) and a factor analysis were applied to the responses of 63 females to the three aspects of guilt. The measures were found to be relatively free of social desirability response bias. Evidence for convergent and discriminant validity was presented.

Guilt was conceptualized as a personality disposition, which is manifested in situations where temptation to violate moral standards is present. Mosher writes:

Guilt, conceptualized as a disposition, becomes relevant in situations where temptation to violate moral standards is present. Females who score higher on these guilt measures are expected to inhibit the expression of aggressive or sexual behaviors when faced with temptations. If transgressions occur nevertheless, then females who score higher on these measures of the personality disposition of guilt are expected to experience the feeling of guilt, or to confess, or to punish themselves, or to make restitution. The present inventories do not directly measure guilt as a feeling or state of the person at the moment, rather they are offered as measures of the disposition to respond under certain circumstances with a class of behaviors which may be described as guilt (p.695).

Kornreich, Straka and Kane (1968) in a study of self-image disparity as measured by the Q sort, supported Levy's (1956) finding that self-image disparity scores are in part a function of a general tendency to perceive differences between the real and the ideal self. Citing Laxer's 1964 study, the authors concluded that the self-image disparity score should perhaps be abandoned in favour of measures of mood and classification of types of defence mechanism.

Mood Induction and Alteration

Velten (1968) sought to induce the moods of elation and depression in volunteer university enrolled females by means of having them read, both silently and aloud, series of specially designed mood related statements. Velten employed five treatment groups. One group read and concentrated upon 60 self-referring statements designed to induce elation; the second group read 60 statements designed to induce depression; the third group read 60 statements which were neither self-referring nor mood relevant. There were two control groups designed to produce simulated states of elation

and depression.

Pre-treatment mood level was determined by measures of decision time and perceptual ambiguity. The effects of the treatments upon mood were identified by seven "critical measures" which were: writing speed, distance approximation, decision time, perceptual ambiguity, word association, the multiple affect adjective check list and spontaneous verbalizations.

The results of the experiment indicated that the elation and depression treatments differed significantly from each other on five of the seven criterial measures. On all measures, except distance approximation, the neutral treatment group yielded means that fell between those of the elation and depression treatment groups. On two of the seven measures, the elation and elation simulation groups differed significantly, the same held for the depression and depression simulation groups. For the simulated mood groups, means were closer to the means of the opposite mood treatment than for the treatments for which they were designed to provide controls.

The author concluded that his approach had consequences for both research and therapy. In his words:

The present method appears to have potential for the experimental induction and study of elation, depression, and perhaps for other moods such as fear or sexual arousal. If appropriate lists of statements could be developed for the induction of these and other moods, the controlled laboratory investigation of mood might be greatly facilitated. The generally positive results of this experiment suggest the possible value of lists of mood or other statements in psychotherapy. The T and the patient would develop appropriate statement lists after exploration of the patient's problems. This procedure would be somewhat analogous to the development of anxiety hierarchies in systematic desensitization. The patient would be instructed to practice appropriate lists at or near to the times he becomes aware of undesirable moods and behavior (p.481).

Shatin (1968) sought to effect mood change through the step-wise vectoring of musical selections. Musical selections chosen on the basis of clinical and aesthetic judgement were put together to represent change along the following affective poles: Sad to Gay,

Restless to Serene, Bored to Active, and Active to Majestic. The author's hypothesis was:

That the mood response of normal subjects to music can be altered or vectored along an affective continuum between two contrasting antipodes of emotion (mood). Beginning at one polar mood or musical experience we can, through properly selected music, move (or vector) the affective state "up" (or "down") by step-wise stages into its antipolar or contrasted mood reaction (p.82).

Ratings were made by 74 male college students, who rated their mood response to each of the four sets of musical stimuli. The author reported the following:

Chi square tests were conducted for each of the four continua and in every instance they demonstrated a significant association between the stimulus music continuum and the cognate mood response of the subjects ($p = .001$) in each and every case). The mood vectoring of the music selections did cause the subjective mood response of normal college men ($N=76$) to vary pari passu with the mood changes which that music purposefully sought to induce (p.83).

Mood and the Menstrual Cycle

Reynolds (1969) studied variations of mood and recall in the menstrual cycle. The author monitored mood in 87 women suffering from difficult or painful menstruation. Their moods were monitored over an 8 week period. It was found that mood was significantly lower both immediately before and during menstruation. In addition recent events were evaluated more favourably by these women, at this time, when compared with ratings of recent events made at other times.

In terms of the present study, subjects frequently reported alterations in mood prior to the onset of menstruation. Depression and/or tension were reported by some subjects but not by all subjects. Those subjects who did report depression or tension did not necessarily report the continuation of these feelings during menstruation.

Mood and ESP

Carpenter (1969) used the Nowlis MACL to measure mood in subjects undergoing precognition runs with ESP symbols. Earlier findings that there was a significant difference between the predicted large variance for a combined group of sessions and the small run score variance which was predicted for a group of moderate negative or extreme positive sessions, was reconfirmed.

Psychiatric Studies

Delgado (1960) investigated the psychopathology of depressive states. He found the general characteristic of depressive states to be the experience of grief combined with a negative disposition to the world, the self, and the body. Certain depressive states were believed to be autonomous and immune from mitigation or aggravation by circumstances and were distinguished by slowness of onset and evolution. No evidence was found for so-called "existential depressions".

Stolorow (1969) investigated the mood of anxiety and postulated three levels of the experience that were fundamental. These levels, arranged from the more basic to the less basic were: the impingement of a dreaded intrapsychic impulse, the presence of a disharmonious interpersonal relationship, and basic faults and contingencies inherent in the life situation itself. The role of the individual's sense of self and various defensive processes were stressed. The author suggested that psychotherapy should aim at the clarification and working through of intrapsychic conflicts, developing interpersonal security, and strengthening the individual in his endeavour to perceive meanings and values in his life situation.

Psychoanalytic Studies

Zetzel (1960) suggested that depression is the result of the ego's response to a basic threat or a disaster deemed to be imminent. A predisposition to depression is established when early ego identifications are inadequate or faulty.

Jacobson (1961) studied the mood states of adolescents. The mood swings of early adolescence were seen to be a function of ties to oedipal love objects and the incomplete development of several ego processes.

The decade 1960-1970

2.52 Discussion of major conceptualizations, techniques and criteria

Major Conceptualizations

During this period the equation of mood with either 'general feeling tone' (e.g. Wessman, Ricks and Tyl, 1960) or 'current degree of happiness or unhappiness' (e.g. Laxer, 1964) was still prominent. Other studies equated mood with emotion, e.g. Shatin (1970), but an increased conceptual sophistication was beginning to emerge, e.g. Borgatta (1961); McNair and Lorr (1964).

As Borgatta pointed out, there are two broad approaches to the refinement of the concept of mood within an empirical framework, i.e. attention can be directed to the situations and sequences of situations that produce mood states and attention can be directed to the moods themselves, to the experience of mood. The situation or sequence of situations approach must face the difficulty that there may be no necessary one-to-one correspondence between situation and mood, particularly if mood is a cumulative effect, the result of a sequence of situations. Some authors would maintain that contemporary situational factors are relatively unimportant in the production of mood. Psychoanalysts, for example, tend to stress the operation of various intraphysic factors as the major determinants. If mood is conceptualized as the resultant of general organismic functioning, then the search for a direct connexion between mood and situation would seem to be futile.

In terms of the present study with mood subjects, it was found that situational factors do play a major role in the production labelling and interpretation of many moods. However, the notion of a direct connection between mood and environmental factors has not been particularly helpful in understanding mood phenomena. Nowlis' approach which classifies situational and environmental factors in terms of predisposing variables, variables that precipitate mood, and variables that help to maintain mood, is useful.

The second approach, directing attention to the experience of mood to its phenomenal aspects, requires a description of the salient aspects of mood from the first person viewpoint. This is an essential part of the study of mood. However, for this approach to be legitimate, it must be correlated with other approaches, e.g. the situational and behavioural approaches. As mood is a human phenomena, something the individual undergoes and is frequently aware of, I would like to suggest that any conceptual formulation of mood must be linked in a demonstrable way to just this type of data. There are, however, difficulties associated with this, one of which is the problem of language. It must be shown that the subject uses language in a reliable way in his reports and that there are connections between the way he uses language and the way others use similar and related concepts.

Borgatta is aware that a hard and fast distinction based on the two approaches cannot be maintained. He writes:

The question is compounded since moods must be viewed as consequences of the interaction of the personality of the individual and the situation; any analysis that is undertaken is necessarily complex and at least partially circular (p.105).

Borgatta suggested that an important strategy might be to concentrate on the development of mood measures of a particular type, rather than developing and trying to co-ordinate several methods, or attempting to isolate and resolve the theoretical issues. One difficulty here is the assumption that there is something empirical which corresponds to the concept of mood. The measurement approach has the liability of tending to assume that mood is something empirical and whatever it is that the measurement technique quantifies is by definition the assumed existent "mood". It is for this reason that the measurement approach must be coupled with criteria that can reliably identify whatever a particular theory or approach takes to be "mood".

McNair and Lorr (1964) do more than merely acknowledge the possibility that mood is a theoretical construct, they postulate it. The authors suggest that mood has the status of an intervening

variable and should be defined in terms of 'antecedent inducing operations and correlated behavioral consequents'. Verbal responses are seen as an aspect of the mood itself, rather than a consequent of the mood state.

Techniques

During this decade factor analysis became a major statistical technique for the study of mood. Its employment can be roughly divided into two related approaches:

1. The factor analysis of subjects' avowals of mood, i.e. the determination and replication of significant dimensions of mood adjective check lists. This is represented by the work of McNair and Lorr (1964) and the work of Borgatta (1961).
2. The determination of significant dimensions of observer descriptions of mood. This is represented by the work of Hofmann and Peterson (1960).

The McNair and Lorr study was particularly useful as it established factors common and unique to the reports of Nowlis and Green (1957), Borgatta (1961), and Clyde (1960).

It should be stressed that the value of a particular factor analysis depends ultimately on the measures that are being analyzed. Hundleby et al (1965) have discussed a number of the technical problems involved, and Brody (1972) has set forth general criticisms of the factor analytic approach.

Wessman, Ricks and Tyl (1960) further refined the rating scale approach to the study of mood. They developed a scale for the mood dimension Elation-Depression which was composed of ten phrases ranging from extreme depression, through neutral feelings, to extreme elation. The scale was:

1. Complete elation, rapturous joy, and soaring ecstasy.
2. Very elated and in very high spirits; tremendous delight and buoyancy.
3. Elated and in high spirits.

4. Feeling very good and cheerful.
5. Feeling pretty good, "OK".
6. Feeling a little bit low, just so-so.
7. Spirits low and somewhat "blue".
8. Depressed and feeling low. Definitely "blue".
9. Tremendously depressed. Feeling terrible, really miserable, "just awful".
10. Utter depression and gloom. Completely down. All is black and leaden. Wish it were all over.

Their scale was significant in that it attempted to have:

(1) approximately equal subjective gradations between phrases, and (2) the ends of the scale so extreme that very few subjects would experience them, but the full range of possible feeling would be covered.

A number of other significant techniques and approaches were adopted for the study of mood during this decade. A selective list would include:

1. The correlation of mood scores obtained from a mood adjective check list with personality variables (Borgatta, 1961).
2. The correlation of mood scores with change in mood scores (Borgatta, 1961).
3. The correlation of observer ratings of mood with self-descriptions of mood (Hoffman and Peterson, 1960).
4. The measurement of mood, e.g. guilt, by self-report inventories (Mosher, 1968).
5. The induction of mood by musical stimuli (Shatin, 1968).
6. The induction of mood by specially designed word lists (Velten, 1968).
7. The correlation of mood scores with task performance (Heimstra, Ellingstad and De Koch, 1967).

Criteria

During this period the majority of studies assumed that the individual is always in one mood or another and hence little attention was paid to establishing general criteria of mood. McNair and Lorr (1964) with their concept of mood as an inter-

vening variable rooted in antecedent conditions and subsequent behaviours, were in a position to set forth criteria for specific moods, but this was not attempted. The authors did tentatively distinguish between mood and emotion on the basis that moods tend to be more persistent and involve less intense physiological arousal than emotions.

Physiological criteria for specific moods were ruled out. The authors assumed that verbal responses, if not criteria, were at least indices of mood variation.

Laxer (1964) utilized individual self-ratings as mood criteria. He adopted the view that mood is the feeling response to general organismic functioning. For Laxer objective criteria are possible in terms of events that enhance or interfere with organismic functioning. However, no criteria were set out. It would be in line with Laxer's point of view to suggest an ideal programme where objective criteria, events that enhance or interfere with organismic functioning, and subjective criteria including individual self-rating, are taken together.

Hoffman and Peterson (1960) compared observer ratings of in-patient mood on a series of mood scales (more objective criteria) with the in-patient's own self-rating on the same scales (more subjective criteria). The authors found a number of significant differences between self-ratings and observer ratings of the same individual. This indicates the insufficiency of any single approach when several approaches are equally relevant and the difficulty of co-ordinating several independent criteria.

Mosher (1968) gave behavioural referents that could be interpreted as a series of partial criteria for an hypothesized mood of guilt. They included: resistance to temptation and the inhibition and suppression of hostile and sexual behaviours; or following the commission of a prohibited act, self-punishment, reports of painful feelings of self-remorse, self-criticism, self-blame, confession, expiatory and restititional behaviour. Using Whiteley's model of criteria, it is not clear which would be criteria in the sense of necessary and sufficient conditions and

which would be criteria in the sense of evidence or clues that the term 'guilt' was being correctly applied.

Velten (1968) employed decision time and perceptual ambiguity as pre-treatment measures of mood level. Seven criterial measures were taken as measures of mood in order to assess the effects of the experimental treatments. These seven criterial measures included the two pre-treatment measures. As only two measures were comparable pre- and post-testing, the measure of change in mood level was less adequate than it could have been.

2.6 Current Research (1971-1977)

2.61 The experimental work

Mood in normal and pathological subjects

Constantini, Davis, Braun and Iervolino (1973) investigated the personality and mood correlates of major life style changes, e.g. personal, family, social, occupational, and residential changes, in male and female university students. The measures employed were: The Schedule of Recent Experience, The Psychological Screening Inventory, and The Profile of Mood States. Results obtained from The Profile of Mood States indicated:

....an association between reports of having experienced high levels of life change and reports of having recently experienced high levels of tension, depression, anger, fatigue, confusion and total mood disturbance. The format of The Profile of Mood States asks S to indicate how he has been feeling "within the past week, including today". Thus, the correlations are specifically between magnitudes of life changes reported to have taken place in different periods of the past, and the moods reported to have been experienced within the week prior to the data collection (p.1146).

Lauterbach (1975) sought to establish whether or not a relationship exists between the quality of mood and the amount of conflict (measured as cognitive imbalance) present in the area of personal problems. In question form this becomes: Are there one or more mood factors, e.g. Depression, Confusion, Anxiety, which correlate with conflict present in personal problems?

A single case research approach was adopted, focusing for each subject on a neutral set of attitudes and beliefs and a conflict set of attitudes and beliefs. It was acknowledged that the assessment process could itself decrease conflict and this was the rationale for including a neutral set of attitudes and beliefs. The measurement device for mood was the McNair and Lorr mood scale. The five subjects were in-patients in a mental hospital. They demonstrated three common characteristics: high intelligence, feelings of depression, and the ability to speak about their problems. Two of the five subjects were discharged after only three or four testings and the results were determined from the remaining three subjects.

It was found that degree of conflict correlated positively with mood. Several mood factors correlated positively with conflict, but the correlated factors tended to be different for different subjects. The overall portion of conflict was most consistently correlated with the mood factors of fatigue, tension and depression. The author suggested:

Conflicts caused by what a person identifies with and sees as part of himself may be more disturbing (i.e. depressing, confusing, etc.) than conflicts caused by his likings and dislikings (p.58).

Mood Measurement and Methodology

Meddis (1972) argued on the basis of statistical evidence that the commonly reported existence of several monopolar mood factors was the result of peculiarities in the structure of the mood scales themselves. The author constructed an "improved" scale and the application of this scale resulted in a small number of bipolar mood factors.

While not criticizing the use of rating scales based on factor analytic studies, the author did criticize the Nowlis MACL on two counts:

1. The Nowlis scoring categories are (a) definitely feel x; (b) feel slightly x; (c) cannot decide whether or not I feel x; and (d) definitely do not feel x. These responses are assigned numerical values of 3, 2, 1 and 0 respectively. Meddis asks if it can be said with confidence that "cannot decide whether or not I feel x" is midway between "feel slightly x" and "definitely do not feel x"? Meddis believes that "cannot decide whether or not I feel x" should be counted as missing data rather than as a mid-point reply, hence the status of the scale as an ordinal scale is questioned.
2. The author points out that the scale is not symmetrical, i.e. there are two opportunities for acceptance (a and b) and only one opportunity for rejection (d). For this reason increases on a mood factor score, e.g. moving from (b) to (a)

on the mood factor Happy cannot be paralleled by a decrease in the mood factor Sad, because there is no second measure for decrease. This suggests that negative correlations between such factors as Happy and Sad will be absent.

Meddis devised a mood rating scale that provided an equal number of acceptance and rejection possibilities and it revealed bipolar factors. He concluded that the asymmetrical scales suppressed negative correlations, and hence masked the presence of bipolar factors.

Meddis writes:

The results strongly suggest that the rating scales may have influenced the results obtained by the pioneers of MACL research. They do not, of course, undermine the general approach. By bringing the early results more in line with commonsense, they increase our confidence that the tests are measuring what we think they are measuring. It is easier to accept a small number of largely bipolar mood factors and easier to make clinical sense of a patient's factor scores along such mood dimensions.

Larger sample sizes will be needed to identify the factors with more precision. It is possible that some factors such as aggressiveness could be either monopolar (aggressive v. not aggressive) or bipolar (aggressive v. friendly). Decisions on such issues are required before MACLs can take their place as powerful research and clinical rating procedures (p.184).

A discussion of Meddis' criticisms is given in Chapter 3, section 3.24.

Ryman, Biersner, and La Rocco (1974) presented the factor analytic derivation, reliability, and validity of a 40 item mood check list called The Mood Questionnaire.

The Mood Questionnaire was administered to 1,140 U.S. Navy recruits at the start, at the middle of the first week, at the middle of the fifth week, and at the middle of the seventh week, of a 7 week basic training course. The dropout rate from beginning to end was 26%. An important aspect of the study was the determination of predictive and construct validities. At the

present time, the majority of mood measures have indices of concurrent validity only.

Factor analysis of the data indicated the presence of six significant factors: a Happiness factor, an Activity factor, a Depression factor, an Anger factor, a Fear factor, and a Fatigue factor. Test-retest correlations for the different scales were low. The authors suggested that these low correlations might be due to the transitory nature of the phenomena under study.

Construct validity was provided by a comparison of mood variation for those recruits who underwent group counselling sessions designed to ease tensions and solve problems, against those recruits who did not have such counselling. Anger was significantly decreased and happiness was significantly increased for the recruits who received counselling. The authors also reported additional construct validity for the Activity Scale of their measure which correlated with thyroid blood measures.

Concurrent validity was provided for several scales of The Mood Questionnaire when compared with the State-Trait Anxiety Index scales administered to sailors experiencing repeated noise of high level. State-anxiety was significantly related to The Mood Questionnaire Fear Scale during five of six periods of high level noise. This significant correlation was confirmed on a sample of one-hundred women who completed both the State-Trait Anxiety Scale and The Mood Questionnaire.

Predictive validity was obtained for the Happiness and Activity Scales, they correlated significantly with success in passing a 6 week strenuous physical training course. The scales were more highly related to success in training than several other measures, including attitudes, perceived health, a life-crisis questionnaire, and demographic information. It was also shown that the pre-flight administered Fear Scale was negatively correlated with pilots' landing performance after combat missions. The authors concluded:

These results demonstrate that these scales have moderate to high validities in a number of situations

and moderately high Spearman-Brown inter-item reliabilities. The questionnaire is simple to administer, easily scored, and has been well received because of its brevity. Moderate inter-correlations between the scales indicate that the constructs represented by these scales are probably not independent....The item content of The Mood Questionnaire is similar to that of other forms, and it also has comparable reliabilities. The Mood Questionnaire has substantial predictive and construct validities and is not limited solely to the concurrent validities found for so many other mood questionnaires (pp.483-484).

Mood and Behavioural Psychology

Wright and McDonald (1974) reviewed the several behavioural approaches to the treatment of depression. They set out the major theoretical and pragmatic issues in the behavioural approach which generally conceptualizes depression in terms of an extinction paradigm. These issues are:

1. The nature and patterning of reinforcers in depression.
2. Reasons for the reduction in potency of reinforcers.
3. Factors contributing to the maintenance of depression.
4. The role of social skills in depression.

The authors classified the different behavioural therapeutic techniques used in the treatment of reactive depressions under these headings:

1. The exaggeration and prolongation of normal reaction to loss. Here the different therapeutic techniques most often employed are systematic positive reinforcement for simple tasks, de-conditioning or counter-conditioning, behavioural deprivation, imagery techniques, and time projection.
2. Reactive depression associated with severe anxiety. The major techniques in this type of situation most often employed are systematic desensitization and assertive training.
3. Failure to control interpersonal situations. Behavioural studies have shown that one of the primary causes of depression is the individual's failure to control or be effective in interpersonal situations. Several techniques have been used effectively in this type of situation. They are positive reinforcement, punishment, and counter-conditioning

techniques.

The authors suggest that behavioural rating scales can be correlated with self-reports and therapists' clinical impressions. These behavioural rating scales can be used as a longitudinal record to assess behavioural changes during depression and can serve as measures for the achievement of target behaviours. They suggested that several variables were worthy of consideration, e.g. therapist characteristics and the length, number, and frequency of therapeutic sessions. In the authors' assessment:

More replication and cross-study comparisons are needed, but this cannot take place at an adequate level of sophistication until depressive behaviors are objectively defined and identified and the variables mentioned above are explicated. The use of statistical tests of significance have yet to emerge in the behavioral studies of depression, although such procedures are possible given pre- and post-assessment data from individuals or groups. When the number of Ss is too small to permit statistical analysis, results must be regarded as highly tentative and in need of more rigorous demonstration (p.1340).

Strongman, Wookey and Remington (1971) sought to understand elation as an aspect of emotional behaviour following the laws of classical conditioning, but leading to immediate respondent changes in behaviour. In their view elation is emotional behaviour intimately connected with instrumental behaviours. Thus patterns of both instrumental and Pavlovian responding are involved in the phenomenon of elation. The authors defined elation in this way:

The concept of elation is defined as a non-instrumental change in the vigour of responding brought about by an upward shift in conditions of reward. It is seen that this reward change could be contingent or non-contingent on behaviour; it could be signalled or unsignalled; and the changed reward could be the same or different in quantity and/or quality from that which went before (p.481).

The authors reviewed the behaviourally oriented research on elation under these categories:

1. Reward that is response contingent, signalled, and the same

in quantity and/or quality.

2. Reward that is response contingent, signalled, and different.
3. Reward that is response contingent, unsignalled, and the same.
4. Reward that is response contingent, unsignalled and different.
5. Reward that is non-contingent, signalled, and the same.
6. Reward that is non-contingent, signalled, and different.
7. Reward that is non-contingent, unsignalled, and the same.
8. Reward that is non-contingent, unsignalled, and different.

The authors concluded:

As regards the effects of the various experimental procedures that we have gathered together under the heading of elation, all the sources of evidence add up to equivocation. An upward shift in reward does have immediate emotional effects on ongoing instrumental behaviour and some paradigms have been developed for studying its conditioned effects. However, there does not seem to be any consistency in these behaviour changes; sometimes there is an enhancement or facilitation of responding, sometimes there is an impairment or suppression. So, although the procedures under discussion have a common root in reward increase, their effects are dissimilar...The term elation could be restricted to procedures and not effects. It would be clearly inappropriate to tie it to effects and not procedures...it may be preferable not to use the term to cover a large number of procedures, but rather to concentrate on clarifying the effects of the individual procedures themselves (p.490).

Lewinsohn and Graf (1973), in a behaviourally oriented research programme that investigated several aspects of depression, attempted to establish an association between mood and engaging in pleasant activities as a function of age, sex, and diagnostic group. Lewinsohn had determined:

Specifically, a fairly substantial, and statistically significant, association between mood level and the number of pleasant activities engaged in was demonstrated: and a significantly larger number of activities were found to be associated with mood for depressed and for non-depressed psychiatric patients than for normal control subjects. In addition 24 specific activities and events were identified which were associated with mood for more than 10% of the sample (p.261).

The authors sought to replicate these findings with a more heterogeneous sample. They were concerned to answer the following questions:

Does the relationship between mood and the level of pleasant activity vary as a function of age?

What specific activities are associated with mood?

What is the nature of these activities?

The authors hypothesized that it was those activities which brought social reinforcement that were most closely associated with mood. With respect to this issue, in terms of the evidence provided by their study, the authors concluded:

Activities which were found to be associated with mood for a substantial proportion of the subjects fell into three categories: activities involving positive social interactions, incompatible affects and ego-supportive activities (p.267).

Mood and Social Psychology

Reimanis (1974) explored the relationships between mood, conflict resolution (in terms of Erikson's stages of psychosocial development), and social disorganization or anomie. It was the author's hypothesis that anomie and negative mood states are positively correlated with the unsuccessful resolution of psychosocial conflicts. The corollary of this hypothesis maintains that opposite relationships obtain for the successful resolution of psychosocial conflicts.

The author randomly selected 100 domiciled members of the U.S. Veterans Administration. These subjects were male veterans who because of old age or chronic disability were unable to maintain themselves in the outside community. In the second stage of the study, 86 female and 55 male college students culled from introductory psychology classes were used. Scales for measuring anomie and success in resolving stage specific psychosocial problems were constructed. Mood was measured by an adapted form of the Nowlis Mood Adjective Check List. Correlations were computed between the anomie scale and factors representing psychosocial development,

and between psychosocial development and the specific mood factors of elation and depression. The author concluded:

The present study, which was based on three tests involving verbal reports of attitude, behavior, feelings and mood, thus supported the hypothesis that success in resolving psychosocial developmental crises is related to anomie or social disorganization. The study offered further support to the findings by Constantinople (1969) that elation or happiness in college students is related to psychosocial development. A very consistent and predictable mood-psychosocial-development relationship was also present for the relatively aged VA domiciliary males (pp.356-357).

Mood and Cognitive Psychology

Gorman and Wessman (1974) investigated the interrelationships between individual cognitive styles and mood states. They found that field dependence and/or impulsivity, field independence, temporal orientation, sensation-seeking, conceptual differentiation and category width, language facility, locus of control, defensiveness, and rigidity were interrelated with mood level, mood variability, and mood differentiation. These mood measures were obtained from The Wessman and Ricks Personal Feeling Scales.

The authors employed a number of statistical techniques to:

(1) factor analyse the cognitive style measures and (2) to analyse the relationships between the cognitive styles and mood characteristics. The authors concluded:

This study found a large number of relationships between cognitive style measures and mood characteristics. The two strongest sets of findings were: (1) the association of sensation-seeking with higher "peak" and "average" mood levels; and (2) the inverse relationship of field independence with day-to-day variability in "average" moods...In the authors' opinion, cognition and affect are intimately intertwined and merged in most behavior. Many recent theorists have emphasized their conjoint operation and interdependence. The enormous complexity and variability of human subjective experience develops in an organism gifted and burdened with open and highly differentiated conceptual and emotional capacities. Investigation of the nature and characteristics of mood is one way to study these features (pp.24-25).

Mood and the Menstrual Cycle

May (1976) employing a sample of 30 women of good health, with a mean age of 22 years, examined the relation between mood changes and the menstrual cycle. It was found overall that mood change was not significantly related to either the physical symptoms of menstruation, nor to the degree of physiological stress experienced. When the menstrual cycle was divided into three phases--premenstrual, menstrual, and midcycle, 50% of all subjects reported their most depressed moods during the premenstrual phase, 40% reported their most depressed moods during the menstrual phase, and 10% had their lowest moods during the midcycle phase.

Baron (1976) as a subsidiary part of a study concerning the effects produced by the menstrual cycle on manifest content and affect in dream reports, hypothesized that daily mood ratings would be less pleasant in the premenstrual phase than in the pre-ovulatory phase. This hypothesis was confirmed at a level of statistical significance. She was also able to show a carry over effect from dream affect to waking affective state; co-ordinately dreams with unpleasant affect were most likely to follow days on which moods were rated as predominantly unpleasant.

Schilling (1977) used a sample of 25 female college students and 23 male students, to investigate the relationships between mood, mood determinants and the perception of affective stimuli. No differences were found in women's mood levels across the different phases of the menstrual cycle. Schilling discussed the inconsistency of her finding with other studies on the menstruum; she suggested that subjects' expectancies with regard to their menstrual cycle were often determined by the researcher's expressed interest in menstrually related mood changes and/or symptoms of menstrual discomfort.

Mood and Sleep Research

Roth, Kramer, and Lutz (1976a; 1976b) conducted a series of experiments to determine the effects of sleep deprivation on mood, and the differences in pre-sleep and waking mood. In the first study 11 male subjects with an age range of 20-22 years completed

the Clyde Mood Scale each morning after three different sleep conditions: normal sleep, deprivation, and recovery. The statistical analysis of variance showed no main effect due to sleep condition; however, the analysis indicated that the mood subscales were measuring different aspects of mood. When the interaction of the mood subscales was taken into account, there was a significant effect for the sleep deprivation condition. Sleep deprivation significantly influenced the mood components "friendly", "aggressive", and "sleepy". The subjects consistently showed higher aggression scores following sleep deprivation than following baseline or recovery sleep. The authors concluded that even a single night of sleep deprivation has major effects on morning mood.

In the second series of studies, analyses were performed on a sample of four 20 year old, two 50 year old and two 70 year old males who slept for 15-20 nights in a monitored sleep laboratory. Mood was measured by the Clyde Mood Scale before retiring and on arising each morning. Statistical attention focused on comparing the differences between night moods and morning moods; consistent changes in terms of average intensity level and variability of mood were found between night and morning; however, this effect was not shown equally by all the mood dimensions. The study was replicated on a second sample of eleven 20-25 year old male subjects, the primary results being similar. The authors speculated that the differences in mood were more likely due to night time sleep activity as the consistent change in mood was always between night and morning.

Miscellaneous Studies

Weingartner, Miller and Murphy (1977) considered the effect of mood state on the retrieval of self-generated free associations, in a sample of eight psychiatric patients with affective disorders. The authors established that the recall of associations was most complete and efficient in stable moods, or periods of mania, as opposed to other moods. The possibility of mood specific acts of encoding, storage, and retrieval was considered by the authors.

Harris (1977) conducted three studies to determine whether altruism (acts of helping others) was commonly perceived as leading to a "good" mood, and if in fact it does so. In the first study subjects were asked which of a series of altruistic behaviours would affect their mood. Five out of six commonly considered altruistic behaviours were judged as effective for raising individual mood, the sixth--giving money to a panhandler was judged as being instrumental in lowering mood. Two field experiments established that giving directions to a stranger had no effect on mood, and helping an individual search for an important "lost" paper, significantly elevated mood. The author concluded that some, but not all altruistic behaviours were capable of producing positive moods.

Current Research 1971-1977

- 2.62 Discussion of major conceptualizations, techniques, criteria, and general considerations.

Major Conceptualizations

Examination of the literature of this period leads to the identification of both conservative and progressive trends in the conceptualization of mood. Constantini et al (1973) and Gorman and Wessman (1974) assumed that the individual is always in some mood or another. Other authors, e.g. Lewinsohn and Graf (1973) suggested that particular moods were dependent on certain types of activity involving social reinforcement. A number of issues relevant to the conceptualization of mood emerged in the different studies and these will now be considered.

Constantini et al (1973) used the McNair, Lorr, and Droppleman Profile of Mood States which provides scores on the monopolar dimensions of Tension-Anxiety, Depression-Dejection, Anger-Hostility, Vigour-Activity, Fatigue-Inertia, Confusion-Bewilderment, and a score for total mood disturbance. It is not clear whether Constantini assumed that his mood measure was identifying dimensions of the overall mood state at the time of testing, or whether he was identifying particular moods at the time of testing. There are differences between these two assumptions and the differences affect the validity of the measure, e.g. fatigue or inertia could be a component or accompaniment of many different mood states or it could be a monolithic state of fatigue.

Meddis (1972) performed the useful service of demonstrating what can be the result of concentrating on mood measures without providing a critical conceptual explication of the background concepts. In particular, the concept of mood and its co-ordination with experience were affected by assumptions embedded in the structure of the measuring instrument itself.

Lauterbach (1975) implicitly adopted a higher-order disposition view of mood. He writes:

Correlations were not limited to 'tension'; it seems possible that the aspect of mood that correlates highest with conflict (or the mood factors that do not correlate at all) are characteristic of the subject's personality (p.52).

On the other hand, mood can only be a phenomenal state if one is to speak of the quality of mood. Lauterbach writes: 'This paper does not attempt to investigate the causal relationships between the quality of mood on the one hand and the nature of one's problems on the other,....' (p.49). Lauterbach either fails to co-ordinate mood as a higher-order disposition and mood as a phenomenal state, or is inconsistent in his usage of the term "mood".

Lauterbach seems to assume that "mood" and "attitude" are independent. He sought to determine mood factors that correlate with conflict, where conflict was conceptualized in terms of a cognitive imbalance of beliefs and attitudes. The lack of independence of the concept of mood from the concept of attitude is discussed below (section 5.9).

Ryman et al (1974) used a questionnaire that purported to measure mood and emotion. It is not clear whether the authors had the intention of conceptually and empirically distinguishing the two, or whether they were positing that their questionnaire measured both mood and emotion.

Wright and McDonald (1974) illustrated the diversity of viewpoints over conceptualizing specific moods generally and specific moods within a particular paradigm. They write:

The phenomenon of "depression" has been described in categories from subjective feelings to overt behaviors and yet has been grossly neglected in definition and experimentation. Part of the confusion stems from the ambiguity of the term "depression" which has been used to refer to a vast array of conditions, symptoms, diseases, and underlying "elements" (p.1335).

The authors offered an extinction hypothesis as paradigmatic for the behavioural view of depression and noted the different

emphases of several researchers. They indicated that conceptual clarification would be aided by a multifaceted behavioural approach. Such an approach would provide verification for self-reports and clinical impressions plus a longitudinal record to assess behavioural changes during depression.

Techniques

In the period 1971-1977 the selection of studies has revealed a continuing interest in the employment of factor analysis and rating scales often applied over extended periods of time, for the study of mood. The work of Ryman et al (1974) represented a commendable emphasis on the establishment of multiple validity indices for mood questionnaires. Meddis' statistical scrutiny of one type of mood adjective check list (the Nowlis MACL) was a positive step in the direction of correcting and refining specific measurement techniques.

A variety of correlational studies have suggested significant connections between mood and a series of complex variables. The work of Reimanis (1974) and Lewinsohn and Graf (1973) is of particular interest as it establishes the importance of a psychosocial approach to the study of mood. This psychosocial emphasis has been largely neglected since the early studies of Johnston (1937; 1938).

A selective list of the approaches and techniques of this period would have to include:

1. The factor analytic development of a symmetrical bipolar mood scale (Meddis, 1972).
2. The development of a reliable mood questionnaire with reported predictive, construct, and concurrent validity (Ryman et al, 1974).
3. The correlation of mood factors with personality variables and the magnitude of experienced life changes (Constantini et al, 1973).
4. The correlation of mood factors and cognitive variables (Gorman and Wessman, 1974).
5. The correlation of mood with stages of psychosocial development

and social disorganization (Reimanis, 1974).

6. The correlation of mood with conflict in beliefs and attitudes concerning the self (Lauterbach, 1975).
7. The correlation of mood with pleasant activities (Lewinsohn and Graf, 1973).

Criteria

None of the studies reviewed adequately distinguished between the affective sub-categories of mood, feeling, and emotion. Little explicit distinction was made between mood as a disposition and mood as a phenomenal state. Generally, it was assumed that mood is the affective accompaniment of the individual's activities, cognitive and/or behavioural. It is easy to see that this is a tempting experimental assumption, it guarantees that there will always be an affect present to measure, and the affect will always be what is sought, mood.

Meddis (1972) drew attention to the fact that assumptions built into the structure of our measuring instrument influence our conceptualization of the phenomenon that is measured, and by implication the criteria also. It should be added that our assumptions and requirements concerning the employment of a measuring device also have influence on the conceptualization of the phenomenon under study.

It may be that the identification of affective factors by adjective check lists, which investigators have termed mood factors (but this is precisely the contentious issue) can be interpreted as dimensions of affect which can be correlated with individual reports of mood meeting general and specific criteria. The presence or absence of various combinations of affective dimensions could then function as evidence for specific moods. At the present state of research, however, this has not been achieved due to the lack of an adequate concept of mood.

In other words, I am suggesting that first there must be an adequate conceptualization of mood; secondly there must be a consensus on what the criteria for specific moods will be, i.e. what behavioural

Interesting questions are raised by considering what force the word "in" carries with respect to the expression "One is always in a mood of some sort". It is not a preposition of location but rather one of condition. This would seem to imply that one is "in" a mood in the same logical way that one can be "in" difficulty, "in" the Navy, or "in" motion. I will endeavour to show that this is incorrect. For mood discourse "in" functions as a preposition of special condition and as a preposition of retrospective comment.

Subjects tend to say 'I feel depressed', 'I am depressed', or 'I was depressed', less often 'I am in a depression', but more often 'I was in a depression'. I would suggest that one reason subjects relatively infrequently say 'I am in a depression' is because it has a connotation of separation between the speaker and the experience of depression. Such a separation is foreign to the way in which many subjects claim they experience mood. Their claim is closer to one that means for the time the mood is operating they are their experience. This may require the understanding that for the phrase "to be in a mood", "in" is a special kind of conditional preposition. One is not "in" a mood in quite the same way that one is "in" difficulty, for under normal circumstances one is not the difficulty one is having, i.e. one has difficulties; however, one not only "has" or experiences moods--but perhaps momentarily is the experience. The reason one tends to say 'I was in a depression', with approximately the same frequency as 'I felt depressed' or 'I was depressed' is because the time separation of the past tense reinforces the grammatical separation that the preposition "in" usually implies, i.e. the expression becomes a suitable form for retrospective comment.

The overall conclusion that I am working towards is that the expression "One is always in a mood of some sort" as a theory-free expression is a very general summary statement, like saying "One is always aware of something of some sort", or "One is always in a bodily state of some sort", which is to say that the expression ranges rather freely over a nearly limitless set of data. Also, as a theory-free expression it tends to equate mood with any type of affective experience. As a theory-bound expression it carries the assumptions and biases of its theoretical underpinnings.

2.7 A Modern Application of Phenomenological Principles to Mood Study
(Mood as a Feeling Structure and a Meaning Vector)

In this section I propose to synthesize the essentials of one contemporary phenomenological approach to mood study. In line with Gendlin (1967) the emphasis for a phenomenological approach should be on the structure of the individual's experience and the facilitating conditions inducing change within this experience. This is to say a procedure is sought that will make evident, illuminate, and clarify mood in its essential meanings for a subject; make evident in the sense of differentiating as a concrete moment of experiencing and establishing the parameters of that experience as it exists for the subject; illuminate in the sense of making apparent the details, the general structure, and the implications of a given mood experience for the subject; and clarify in the sense of rendering the mood experience relatively transparent to the subject and to those others who seek to understand it.

This approach should be sufficiently general to encompass the diversity of mood experience, yet should be specific enough to permit its implementation through sequential stages. Only these features will make it pertinent, in a systematic way, to the mood data it seeks to explicate. This approach should also preserve the integrity of the individual's experience while at the same time put sufficient "stress" on the experience so that it points to the limit of its possibilities, or undergoes an "unfolding" into a series of different but related experiences.

To achieve this purpose I have extracted a number of principles from the literature of both classical and contemporary phenomenology. They are the principles that guided the collection of the descriptive data this study offers. Hence their enumeration sets the stage for the descriptive data offered in Chapter 4. These principles will now be set out followed by some expository and critical remarks relevant to each principle. Some descriptive data from the mood study will be used as illustrations.

1. The suspension of the "natural attitude"

At most times, an individual is engaged in a range of activities. He is perhaps most frequently engaged in and busied with specifics, e.g. drawing up and signing a business contract, arranging meetings, discussing the organisational aspects of a new and developing project, collecting information on different investment prospects. The fact that these activities are taking place and constitute a solid nucleus of meaning for the individual never becomes radically problematic. To be sure, in times of stress or when much hangs in the balance there may be times of doubt, not a vertiginous doubt, but a doubt of acumen, efficacy, and perhaps -- propriety. It is not usually a doubt that leads to a search for the basic meaning or essential aspects of a phenomenon as it appears to the experiencing individual. It is not a doubt that seeks to lay bare the value matrix that underwrites such activities or makes them desirable.

It is also unlikely that inquiries would be made as to how such mundane activities would affect the sensory modalities, or how individually or conjointly cognitive, emotive, and volitional states and processes would shape the overall situation. It is possible that the effects of signing that contract might be envisioned, e.g. an increase in material wealth, but most likely it would be conceived of as a by-product of the general "busiedness" with that contract.

It is this straightforward involvement in and uncritical acceptance of a substantive reality, the commitment to a fixed utility and meaning structure, and the unidirectional impetus of mental activity toward a static independent reality, that Husserl (1931) terms the "natural attitude".

Husserl does not attempt to deny the natural attitude and its correlate the "fact-world", nor to dissolve it in a Cartesian programme of systematic doubt, but rather he exhorts us to adopt a standpoint whereby we stand back from our customary non-reflective involvement with the fact-world

and transform our attitude towards it. The possibility of such a basic change in attitude is given in those experiences where I am not synchronized with the fact-world, e.g. in moments of delusion, hallucination, and phantasy.

In summary, it can be said that the preliminary step in a method based on phenomenological principles is the acknowledgement of the fact-world as standing over against the conscious activity of the individual. This fact-world should be acknowledged as the independent limit of the individual's system of attitudes and beliefs. The individual non-reflectively considers his attitude and belief system consonant with the fact-world. The possibility of a fundamental change in the individual's relation to the fact-world is given in those experiences where he is not synchronized with the fact-world, e.g. in delusion, hallucination, and phantasy.

2. The actualisation of the possibilities inherent in the suspension of the natural attitude by means of phenomenological reflection

There is a difference between phenomenological reflection and "merely thinking about oneself". The differences are brought out by R. Schmitt (1959). He writes:

Take a child who has been punished for disobedience. He will retreat to his room in anger, turning over and over in his mind how he has been wronged, and how unjustly he has been dealt with. This child thinks, and he thinks about "his own mind" and "the ideas therein", about his loneliness and unhappiness, and how no one loves him. But, so far, he does not reflect. He does not ask himself whether his punishment may not, perhaps, be partly justified, whether it is really true that he is being punished merely out of sheer malice and ill will on his parent's part. Caught up in his own anger and misery the child has not been able to "stand back" and survey the situation calmly and with some detachment. In his anger he loses his "sense of proportion" and his "proper perspective". Reflection, on the other hand, involves just this critical detachment. Once the child begins to reflect, after the first violent emotion is spent, he will, to be sure, still think about himself, his own suffering, and the sins of others against him. He will instead, think about

himself in relation to the other people involved. He will review the events, try to see them from his parents' point of view, how his behaviour may have embarrassed or hurt them. Thus taking "the other's point of view" will, at the same time, lead the child to think about himself in a different light (pp.62-63).

In general I might add, the failure to understand the significance of situations or individuals is most often due to insufficient information, insufficient thought, an excess of passion and egoism, an inability to empathically enter a person's field of reference, a degree of inherent obtuseness in language and communication processes, or combinations of all these elements.

From Schmitt's model the properties that distinguish the reflective attitude from "merely thinking about oneself" may be said to be:

- (a) The establishment of a critical distance and detachment.
- (b) The suspension of the welter of emotion and rigid belief surrounding a given phenomenon.
- (c) The "taking the other's point of view" and establishing a wider context.
- (d) Making a trial thematization of factors or aspects that were initially unnoticed or considered irrelevant.
- (e) The thematization of one's sensitivity in a situation and contribution to that situation.

The first and second properties make it possible to adopt a receptive and reasonably objective standpoint with respect to what actually occurred in a given situation. The third through fifth properties permit a preliminary display of the meaning of a phenomenon for a subject, through their inter-correlation. As an empirical supplement to Schmitt's views, consider the following introspective mood (so designated by the subject) explored in the context of the mood study, the subject reported:

I frequently have this mood, it's the same feeling but it takes many forms. I question everything, I think about my feelings and thoughts -- sometimes

about a specific problem. If something is worrying me I try to pull it to pieces, try to work it out, it's usually when I feel dissatisfied, tired, depressed, or bored. It is an intense feeling, it can last minutes, days, even weeks. When I'm in this mood I have the same thoughts over and over again -- because I can't get any further, it seems to be all there is, it's like a record player that gets stuck. I describe to myself -- look at her doing this and that, in a nasty critical way. I ask myself -- are you a machine? I become bitter and sarcastic about everything I do. But I don't think I'm useless or no good, but rather I criticize what I'm doing and thinking in an ironic sort of way.

At first inspection this mood would not seem to qualify as a mood that adopts the standpoint of phenomenological reflection, i.e. it doesn't exhibit all the properties of the reflective attitude. For example, instead of establishing a distance of neutrality and detachment, the subject seems to have precipitated a portion of her awareness as a self-critical ironic attitude; instead of a suspension of the welter of emotion and belief surrounding the phenomenon, the subject is besieged by a collection of arresting affective and cognitive elements -- e.g. depression, boredom, bitterness, dissatisfaction, and sarcasm.

There also seems to be an absence of properties (d) and (e), i.e. trial thematizations of factors or aspects that were initially unnoticed and thematization of one's sensitivity in the situation and contribution to the situation. However, I would like to suggest that this mood represents an important advance over previous moods of the same type and represents a developmental stage on the way to a fully reflective attitude. The subject was asked when this mood first began, she replied:

It began at about twelve or thirteen and it used to be worse then. It occurred when I became depressed, upset, or angry. I used to introspect about my relations with people -- it was about just everything. I used to be in it more, to wallow in it. It was too egocentric to sit and think about yourself for hours, you lose perspective and don't get as far as you think you are going to get. I think I used it as a way of shutting out other people.

It is suggested that at this prior stage the mood was paradigmatic of a non-reflective thinking about oneself. At present, however, the mood is quite different. Its essential feature is an overall awareness that includes but is not dominated by self-awareness. It was suggested to the subject that if the mood were expressed and made "substantial" through a metaphor, the mood would be like a crystal globe of awareness and self-awareness -- but not flawless. There would be milky streaks of self-compassion and self-criticism. The subject responded: "Yes, I like the metaphor and it [the mood] is the way you would talk to someone to say -- how futile, how silly, but talking to help not to bring down".

The following points are made to support the contention that the subject's present mood represents an intermediate stage with the potential for becoming a mood of full reflection:

- (a) The personification of the critical distance as a self-critical agency in response to frustrating situations has developed into a more impartial agency, and is evoked by a wider variety of situations than previously. This agency is now capable of providing a helpful monitoring and directing function for the subject. It is hoped that the increased generality of the mood and the helpful control it provides will lead to a further development, i.e. a translucent objectivity that is "on call" whenever needed.
- (b) Although the suspension of the welter of emotion is not complete, there is an increased emphasis on the cognitive aspects of the mood. The subject sees herself (when in this mood) as someone who desires self-understanding and an understanding of her environment, a person who asks "why" questions.
- (c) The adoption of alternate points of view and taking a wider context is still deficient. This is at least partially a function of the subject's own independence, need for self-sufficiency, and preferred isolation. Recently the subject has become more aware of her need for other people (as indicated, in the past this mood

was used to shut out other people). It is suggested that this realization will promote an increase in adopting alternative points of view.

- (d) The subject has begun to make trial thematizations of the aspects of a situation that were initially unnoticed or considered irrelevant. For example, in a receptive and non-compulsive way when performing an action, she may ask herself -- why am I doing it in this particular way? She will also thematize such ordinarily irrelevant occurrences as the sound of running water, asking herself -- what does water sound like when it is running?
- (e) The thematization of one's special sensitivity in a situation and contribution to that situation is a higher order reflective attitude that has not been fully achieved by the subject. This is a goal for the future.

Phenomenological Reflection as Method

Dorian Cairns (1940) in his classical statement of phenomenological method and in his recent formulation (1972) sets forth phenomenological reflection:

The Husserlian phenomenologist, imitating Husserl's terminology, applies the name "reflection" to any awareness of something as one's own mental process or as a determination thereof.....As I look about, I see physical things; their shapes, colors, etc., and usually occupy myself - cognitively, aesthetically, practically - with physical things only as having certain thing determinations, not as things believed in, seen, liked, etc. Sometimes, however, one does pay attention to things as believed, as things given, as liked - in brief, as intended to in one's awareness of them. And this paying of attention to the usually ignored status of things as intended to is contrasted terminologically as "reflection" with one's usual "straightforward" paying attention only to things (p.36).

Does phenomenological reflection in the above mentioned sense have application to a study of mood phenomena? Has it been provided for in the five properties of the reflective attitude (see above p. 179) The answers suggested are yes it does have an application as one constituent of a broader dynamic phenomen-

ological approach. Its existence has been intimated and must now be made explicit. Phenomenological reflection can be seen as a development of property (e) of the reflective attitude, i.e. the subject's contribution to the appearance of a given phenomenon.

Phenomenological reflection makes explicit the mode of awareness that intends a given phenomenon, e.g. a person may report that they are looking at a tree. We would then seek to determine: Is it a tree desired as a provider of shade? A specific tree, the old oak in front of the family house, that is nostalgically being recalled? A tree that is disliked for its unaesthetic form? A tree valued as necessary for ecological balance? A tree cherished as a home for nesting birds? A tree assessed as increasing property value through its fruit-bearing capacity? A tree revered as symbolic of the strength and vitality of nature? A tree detested as the hangman's tree? A tree that I plan to plant for posterity and imagine as giving pleasure to future generations?

Indeed, the mode of awareness may not be unitary, but rather, complex -- involving a number of interrelated modes of awareness. The untangling of such a skein is one of the major functions of phenomenological reflection. Theoretically it is an endeavour without a terminus, because in addition to the phenomenon apprehended at t_1 , there is a history of previous apprehensions each with its own motivational and attitudinal context, which may or may not enter into the apprehension at t_1 . In addition the apprehension at t_1 is an actualised element in a field of possibilities both present and future. Furthermore, taking the most general perspective, for any finite system (S), observed or apprehended by a subject (A): S changes, A changes, and the relationship (R) between S and A changes; hence any fact or value (P) established for the composite system at t_1 , may be unstable for further values of t .

This need not lead to despondency however, for the initial focus of interest is always: What is there for the subject right now? What is his contribution to the phenomenon as experienced right now? What possibilities for meaning are being presented and

which possibilities are being left out and why? The data itself then dictates the direction of further probing.

In summary, we have decided to consider phenomenological reflection as a way of developing property (e) of the reflective attitude. Thus expanded, the application of the reflective attitude to a person who was looking at a tree, would proceed as follows:

1. In order to examine phenomenologically the experience of an individual perceiving a tree, we would first take up a critical distance, poised as it were with him, to determine in a critical way the essential structure and meaning of his field of perceptions, as they establish meaning for him.
2. There would be a suspension of emotions and beliefs concerning trees as a general class, as well as the particular tree; bearing in mind that a complete suspension is an ideal that can only be approximated.
3. There would be an attempt to "take the other's point of view", in this case it would involve the empathetic adoption of a range of positions or stances toward the particular tree being perceived.
4. There would be trial thematizations of factors or aspects of the individual's perception that were initially unnoticed or considered irrelevant, as well as the thematization of more central factors.
5. The individual's special sensitivity in and to the particular situation is considered. Phenomenological reflection is used to determine the subject's contribution to the tree as object of various cognitive acts and processes. Steps 3, 4 and 5 are co-ordinated and interrelated. Finally, the original experience as recorded is brought in for a "match" with the determinations of each stage.

3. Phenomenological Abstraction and Thematization

Phenomenological abstraction is a "digging" and a "lifting out", or to use another metaphor: when a young plant or tree is transplanted, it is lifted out of the earth -- separated from its place of origin, but not carelessly wrenched out. The roots must

be protected, it is good if some of the native soil adheres, so that a portion of the original nurturing environment is preserved. So too does the phenomenologist show care in abstracting from his own experience or when assisting another person to do the same. He takes care in maintaining the context of any abstracted portion of experience, realizing its importance as a source of "nourishment" to the abstracted portion.

At this point the phenomenologist has two choices. He may consider the abstracted portion of experience as functionally related to its context and explore the interrelations, or he may take note of the context and then carefully set it aside, choosing to explore the abstracted portion of experience independent of its original context. To illustrate, consider the following statement of mood from a subject in the mood study:

I feel in a state of suspended or pent-up emotion of some kind which does not however make me feel tense, rather, relaxed -- receptive and very aware. I feel rather amused generally, as if something funny could easily happen. I feel as if it's important that I notice everything going on around me, as if it's significant.

This report of a feeling state (an abstracted portion of experience) can be attended to in light of its immediate intrasubjective penumbra (what is on the edge of the subject's awareness) without considering the greater environmental context, e.g. a general bodily lethargy with tension in the chest and thorax, feelings of being unwanted and unloved, feelings of being an object of affection for specific people, a general lack of motivation and striving, a desire for solitude and gentle physical contact with loved ones, and a growing realization of a need for other people. The experience can also be attended to in light of its environmental context, e.g. a lack of attention from an individual the subject is interested in, the receipt of letters from her family, looking forward to the purchase of a special book in the near future.

The historical precedent for phenomenological abstraction has been pointed out by Zaner and Ihde (1972). They write:

In many places, Kant mentions that he is "abstractively isolating" or "dissecting out" distinguishable but inseparable components of human experience and knowledge. So doing, he believes he has detected or made explicit what is all along implicit in human life. This "making explicit" (formal explication) becomes, in Husserl's hands, a major component of what he designates as "phenomenological description". The basic aim of the latter is precisely to ferret out the taken for granted, the hidden, the latent, the obscure, the recondite -- as regards every region of human engagement (p.18).

Phenomenological thematization has two senses and applications. In the first sense thematization is the direction of attention onto some unit of experiencing, so that an abstraction can be made from the manifold of experience, i.e. it "carves out" a content for the reflective attitude. Thematization in the second sense is the inference of a general statement from the concrete detail of a given phenomenon. This general statement suggests an activity that is related to the subject, i.e. something which she would like to do, or something which she would not like to do, something which she feels attracted to or perhaps repelled by, an activity that is a reflection of some aspect of her self-identity. The application of "thematization" takes place within the reflective attitude and the act of phenomenological reflection.

Consider thematization at work with the following image produced by a subject in the mood study. The subject was in a mood that she described as unresponsive and tired. She added that she was feeling drowsy and tired, yet to a certain degree she also felt quiet and kindly. In the process of expressing and exploring this mood, she produced this image:

There's a peach on the ground, an old one, squashed and open under a peach tree. No grass -- a rocky ground, the skin is all pushed to one side and crumpled, the stones are sticking to it. There are a couple of others, but this one is more squashed, as if trodden upon -- there's a bee buzzing around it. Nobody will look at it or touch it again,

actually there are a number of peach pips lying around from previous years. There is a certain similarity to everything, the peach seems to dissolve into its surroundings. The ground is very dry and flecks of dust are sticking to the peach, it's fairly dark, not a bright day. There are dark red bits of colour on the peach, the rest is an anaemic white. Its texture seems to stand out, I am gazing at the texture in an observing sort of attitude.

What general statements can be made as to the activities implicit in this image and their relevance to the subject? What self-identities or self-evaluations can be inferred from this image? Inertia and passivity seem to be a part of the subject's mood as well as of this image. If we turn our attention to the peach (the first sense of thematization) and search for an activity (the second sense), we could infer a languishing that reaches a fulness and a ripeness in time. The peach lies amongst other peaches, and the pips of previous years -- discarded and indistinguishable from its surroundings; the buzzing bee attests to its ripeness, and reflects its exposure in a squashed and open state. Dust and stones adhere to the peach, they seem to add to its weight and inertia -- a patina of dry inertia. It appears stuck in time, incapable of any resurgence of life or energy. Yet its colour and texture are still worthy of interest.

Considering the image from the second aspect of thematization, we ask: How is the subject related to this image that she has produced? Do the activities and processes of this image, e.g. the languishing in time, have relevance to her? Are the feeling states expressed in the image, e.g. isolation and vulnerability reflections of her own feeling state? Does she evaluate herself as we have evaluated the peach -- something squashed and given over to its destiny but still worthy of interest? These are the types of questions that a thematization of the above image would suggest.

Meaning and Phenomenological Method

The meaning of a phenomenon, e.g. of a mood phenomenon for a subject, can be approached from a number of different levels:

1. At the most immediate and concrete level, the meaning of a mood is the psychological situation it presents to the subject, i.e. the subject's awareness of affective, cognitive, and behavioural tendencies elicited in response to environmental and/or intrapsychic situations. Under this heading consider the following description of a depressed mood obtained from a subject in the mood study:

This mood makes me feel like hibernating. I want to be alone in surroundings I know and just sit and think, and listen to music. The only part of my body I am aware of in this mood is my stomach and the area of my rib cage because I feel hollow there and sort of hurting.

In this mood I feel all alone and completely cut off from other people. The feeling is a horrible one and yet funnily enough I could not bear to go among people. So, quite paradoxically, I want to heighten the feeling of being alone and yet want to end the alone feeling. Most intensely I feel this cut-off feeling, divorced entirely from people whom I love and whom I know love me. I can feel this self-pity in me. I know I wallow when depressed and I don't seem able to make a strong enough effort to lift myself out of it. If this mood transformed me into a material object, I'd be a weeping willow - bent and bowed over, not strong and upright like, say a pine. A body that would suit my mood would be that of a sad clown, with a big red nose, but sorrowful deep eyes with painted tears on his face - all alone. I think an important question to ask about my mood, is what the person's reaction is to other people. I know when I'm feeling depressed, I'm very aware of other people nearby and they seem either to be happy and so totally insensitive to your mood or you can recognise other isolate, solitary people and imagine that they are depressed.

At the immediate and concrete level, the meaning of this mood is the subject's aloneness, her hurt and hollow feeling and her desire to withdraw and be nourished with affection. These concrete meanings are given within the mood description itself.

2. At the next level, the level of the reflective attitude, the meaning of the mood is found in the description of those structures and their interrelationships that are revealed by the reflective attitude, e.g. the subject's self-pity structure and its interrelationship with feelings of inadequacy engendered by the insensitivities of university competition.

3. At the most general and comprehensive level, the meaning of a mood phenomenon is a constructed meaning framed out of the synthesis of felt, willed and noetic (cognitive) meanings. Here felt meaning refers to a special way of being aware through feeling -- feeling becomes the locus for meaning and points to a future while retaining a past; willed meaning refers to the meaning resulting from the anticipation and striving toward a future that has been imaginatively postulated; and noetic meaning refers to the identification of goals, inner constraints, plans, strategies, and general features.

CHAPTER 3 : METHOD

Summary

Subjects were all volunteer female university students between the ages of 16 and 32. Mean age was 19,12 years, with a standard deviation of 2,67 years. Sample size was 105.

Three personality measures, the Cattell Sixteen Personality Factor Questionnaire, the Edwards Personal Preference Schedule, and the Gough Adjective Check List, were used as part of an experimental treatment and to determine personality variables that significantly distinguish "moody" from "non-moody" individuals.

A Mood Analysis Questionnaire was developed and its overall effect on mood as well as moods classified as positive, neutral, and negative, was determined. The Mood Analysis Questionnaire was also designed to elicit basic information on mood.

The Nowlis Mood Adjective Check List was used to assess mood change across four different treatments. Treatment 1 (N=105) measured mood change resulting from the completion of personality tests; Treatment 2 (N=105) measured mood change resulting from an experimenter administration of the Mood Analysis Questionnaire; Treatment 3 (N=105) measured mood change resulting from engaging in quiet activities; Treatment 4 (N=105) measured mood change resulting from a self-administration of the Mood Analysis Questionnaire; subjects also defined mood in terms of their own experience, and used the word "mood" in four grammatical sentences.

An additional session was given to 43 subjects in order to discuss their mood states. Fifteen of these subjects volunteered for further intensive study of their moods. Descriptions were obtained of basic recurring mood states.

The statistical procedure involved both univariate and multivariate techniques of analysis.

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3.1 Subjects

The subjects were 105 volunteer female university students enrolled at the University of Cape Town. They were all English-speaking and between the ages of 16 and 32. Mean age was 19,12 with a standard deviation of 2,67 years. (See Appendix A, Table A₂ for the age distribution).

They were in the main living in university residence and many were living away from home for the first time. A variety of university faculties were represented including Arts, Science, Social Science and Fine Arts - Drama, Music and Ballet.

3.11 Sampling

The experimenter obtained permission from the Lady Warden of the female residence to address the students and ask for volunteers. The majority of subjects were obtained in this manner. Some were referred by their friends. The subjects received no remuneration for their participation. (A summary of the petition addressed to the students is found in Appendix A, Tabulation A₁).

3.2 Techniques of Assessment

3.21 The Sixteen Personality Factor Questionnaire

Description:

The Cattell Sixteen Personality Factor Questionnaire is a non-projective personality test which was developed for both research purposes and practical applications. It yields a measurement of the total personality in terms of 16 personality factor scales*. Form A 1961-62 edition was used. It consists of 187 items concerning the subject's interests and preferences.

The Sixteen Primary Factors are presented in this way:

Low Score Direction		High Score Direction
<u>Reserved</u> , Detached, Critical, Cool	Factor A vs	<u>Outgoing</u> , Warmhearted, Easy-going, Participating
<u>Less Intelligent</u> , Concrete-thinking	Factor B	<u>More Intelligent</u> , Abstract-thinking, Bright

* Note: See Appendix C, Tabulation C₁ for a description of the 16PF scales.

<u>Affected by Feelings</u> , Emotionally less Stable	Factor C vs <u>Emotionally stable</u> , Faces Reality, Calm
<u>Humble</u> , Mild, Accommodating, Conforming	Factor E vs <u>Assertive</u> , Independent, Aggressive, Stubborn
<u>Sober</u> , Prudent, Serious, Taciturn	Factor F vs <u>Happy-go-lucky</u> , Impulsively Lively, Gay, Enthusiastic
<u>Expedient</u> , Evades Rules, Feels Few Obligations	Factor G vs <u>Conscientious</u> , Persevering, Staid, Rule-bound
<u>Shy</u> , Restrained, Diffident, Timid	Factor H vs <u>Venturesome</u> , Socially-bold, Uninhibited, Spontaneous
<u>Tough-minded</u> , Self-reliant, Realistic, No-nonsense	Factor I vs <u>Tender-minded</u> , Dependent, Over- protected, Sensitive
<u>Trusting</u> , Adaptable, Free of jealousy	Factor L vs <u>Suspicious</u> , Self-opinionated, Hard to fool
<u>Practical</u> , Careful, Conventional Regulated by External Realities, Proper	Factor M vs <u>Imaginative</u> , Wrapped up in Inner Urgencies, Careless of Practical Matters, Bohemian
<u>Forthright</u> , Natural, Artless, Sentimental	Factor N vs <u>Shrewd</u> , Calculating, Worldly, Penetrating
<u>Placid</u> , Self-assured, Confident Serene	Factor O vs <u>Apprehensive</u> , Worrying, Depressive, Troubled
<u>Conservative</u> , Respecting Established Ideas, Tolerant of Traditional Difficulties	Factor Q ₁ vs <u>Experimenting</u> , Critical, Liberal, Analytical, Free-thinking
<u>Group-dependent</u> , A "Joiner" and Sound Follower	Factor Q ₂ vs <u>Self-sufficient</u> , Prefers Own Decisions, Resourceful
<u>Undisciplined Self-conflict</u> , Careless of Protocol, Follows own Urges	Factor Q ₃ vs <u>Controlled</u> , Socially-precise, Following Self-image
<u>Relaxed</u> , Tranquil, Torpid, Unfrustrated	Factor Q ₄ vs <u>Tense</u> , Frustrated, Driven, Over- wrought

Reliability and Validity:

Cattell expresses the reliability of the sixteen personality factors as "dependability coefficients" for each scale. For Form A the test-retest coefficients range from 0,61 for Factor N (Forthright vs Shrewd) to 0,83 for Factor H (Shy vs Venturesome). The homogeneity of individual scales, the correlations among scale items, are kept at moderate values to give breadth to the factors.

Construct Validity, the extent to which the test items are good measures of the personality factors, is approximately +0,85 (Cattell, 1961, p.8).

Concrete Validity, the correlation with criteria external to the test, is not computed. This is because, in Cattell's view, a multi-purpose test like the 16PF can be related to a large number of different criteria and therefore the concrete validity cannot be meaningfully calculated (Cattell, 1961, p.9). However, concrete relations to a variety of situations and variables are presented.

Criticisms:

Norms for the 16PF are given for the general population and for college students, according to sex. Lorr (1964) suggests more specific norms are needed, social class and occupation being the two important factors that have been neglected. Levonian (1961) found a low internal correlation on factor items suggesting substantial within-factor heterogeneity. Becker (1960) has questioned the independence of the 16 factor scales. His study found clear evidence for only eight independent factors. Lorr (1964) maintains that the 16PF is the best factor based personality inventory available, but is primarily a research and not a clinical instrument. In his view, more specific facts concerning the construct validity of individual factors are needed.

In conclusion, the 16PF was a suitable test for the descriptive

purposes of this study from two perspectives: it provides a comprehensive representation of basic personality traits, and Form A is recommended by Cattell for use with young adults (Cattell, 1961). The reliability of individual factors is adequate for exploratory research purposes. (No clinical judgements were made on the basis of the 16PF scores.) The construct validity of +0,85 is also acceptable for research purposes; however the criticisms of Levonian (1961), Becker (1960) and Lorr (1964) militate against an uncritical acceptance of the test. The general validity of the 16PF is reflected in its progressive development and the elimination of factors not confirmed on three successive factor analyses.

3.22 The Edwards Personal Preference Schedule

Description:

The Edwards Personal Preference Schedule (EPPS) is a personality measure designed for both research and counselling purposes. It yields scores for 15 personality variables based on Murray's 1938 manifest need system. The EPPS is a convenient measure of normal personality variables. The 15 needs measured are: Achievement, Deference, Order, Exhibition, Autonomy, Affiliation, Intraception, Succourance, Dominance, Abasement, Nurturance, Change, Endurance, Heterosexuality, and Aggression.* It is the most comprehensive inventory designed to assess such needs (Anastasi, 1968, p.452).

The schedule contains 210 pairs of statements in which items from each of the 15 scales are paired with items from the other 14. For each pair of statements the individual must choose the statement most characteristic of himself. This is an ipsative forced-choice design. It means that the score for each need represents not an absolute value, but a value in relation to the other 14 needs. Hence two individuals

* Note: See Appendix C, Tabulation D₁ for a description of the EPPS scales.

may have the same ipsative score for a particular need, but the absolute strength of the need may differ.

Reliability and Validity:

Split-half reliability coefficients, or internal consistency coefficients, for the 15 scales range from 0,60 (Deference) to 0,87 (Heterosexuality). Test-retest reliability coefficients, or stability coefficients, range from 0,74 (Achievement) to 0,88 (Abasement).

Edwards sets out two approaches to determining the validity of his personality measure. The first approach assumes a "pure criterion measure" with which test scales can be correlated. Edwards suggests that pragmatically such pure measures are an idealization of the standard measures that are available. Evidence for the validity of the EPPS is obtained by comparing ratings and scores on the EPPS with other self-ratings and peer ratings. A degree of correlation has been found but the evidence is not conclusive.

The second approach involves comparisons between EPPS scores and scores on other personality inventories. Correlations have been measured between the EPPS, the Guilford-Martin Personnel Inventory, and the Taylor Manifest Anxiety Scale. A number of correlations were established at the ,05 level (Edwards, 1959, p.22). In addition, "social desirability", as a factor influencing EPPS scores, has been eliminated.

Criticisms:

Anastasi (1968, pp.453-454) criticizes the EPPS on the procedure of converting ipsative scores to normative scores. This conversion produces an element of uncertainty in the interpretation of EPPS scores. A consistently ipsative or normative procedure would have been preferable. The validity studies become inconclusive because the majority failed to take the ipsative nature of the scores into account.

Statistically, ipsative scores tend to yield negative mean intercorrelations for individual scales and the mean correlation of all scales with independent variables approaches zero. She suggests that:

Although the EPPS has many promising features, it is in need of: (a) revision to eliminate certain technical weaknesses, particularly with regard to item form and score interpretations; and (b) properly conducted validation studies utilizing techniques of score pattern analysis appropriate to ipsative scores (p.454).

In conclusion, the EPPS was a suitable test for the purposes of this study in that it portrays the relative strength of intra-individual needs. It will provide a hierarchical ordering of need components in the individual's internal constellation of tendencies, constraints and impulses toward behaviour. The reliability coefficients, particularly test-retest or stability coefficients are adequate for research purposes (No clinical judgements were made on the basis of the EPPS scores). The presence of statistically significant correlations between the EPPS and other personality measures, and the elimination of "social desirability", provide some encouragement for confidence in the test's overall validity.

Nevertheless this confidence must be tempered by considerable caution, owing to the idiosyncratic conversion of ipsative scores to normative scores in the test construction. The particular employment of the EPPS in this study, to indicate personality variables that may distinguish "moody" from "non-moody" subjects, is perhaps less influenced by this anomaly than would other uses, as it seeks to compare the relative strength of scale scores for two different groups.

3.23 The Gough Adjective Check List

Description:

The Gough Adjective Check List (ACL) is a non-projective personality measure consisting of 300 adjectives commonly used to describe attributes of a person. The individual is

required to mark all adjectives he considers to be self-descriptive. It is primarily used as a research measure of the individual's self-perceptions and self-concept.

The ACL is composed of 24 scales which may be divided into 3 categories:

1. response set scales - the total number of words marked, number of favourable adjectives marked and number of unfavourable adjectives marked;
2. observation and clinical evaluation scales - Defensive-ness, Self-confidence, Self-control, Liability, Personal adjustment and Counselling readiness;
3. need scales - Achievement, Dominance, Endurance, Order, Intraception, Nurturance, Affiliation, Heterosexuality, Exhibition, Autonomy, Aggression, Change, Succourance, Abasement and Deference.

(Anastasi, 1968, p.533)

The need scales of the ACL correspond to the need scales of the Edwards Personal Preference Schedule and were not included in this study. The scales used were: Defensive-ness, Ratio of favourable to unfavourable adjectives, Self-confidence, Self-control, Liability, Personal adjustment and Counselling readiness. (See Appendix C, Tabulation E₁ for a description of the ACL scales utilized).

Reliability and Validity:

The ACL reliability can be considered from two perspectives: the test-retest reliability of the individual words; and the reliability of the individual scales. The mean test-retest reliability for individual words is +0,54 with a standard deviation of 0,19 (Gough and Heilbrun, 1965, p.12). Gough suggests that the reason this reliability is not high is because the self-image derived from ACL responses may be less stable than that derived from self-report inventories using items and questions. Furthermore, overall test reliability may be a function of the individual response

reliabilities of individuals taking the test. Reliability of response may itself be a unique psychological variable and not just a statistical property. Gough concludes:

With subjects of cheerful, informal and energetic character the ACL tends to be quite reliable in a test-retest situation; with subjects who are awkward, prejudiced, etc., in disposition, the ACL self-reports will show more variations.

(Gough and Heilbrun, 1965, p.13)

Gough reports that most of the scales possess adequate reliability. The range of phi coefficients was 0,54 (Succourance) to 0,85 (Nurturance) taken over a 10 week period. The scale Self-confidence has especially high stability over a 10 week, a 6 month and a 5½ year testing, while Succourance and Lability are rather low when taken over the same time periods. Thus Succourance and Lability require particular caution in their interpretation.

Gough points out (op.cit., p.14) that determining the validity for the set of scales of a multivariate personality instrument such as the ACL is a cumulative task. It requires the co-ordination of a wide variety of data. In addition validity is dependent upon not only the test's correlations with independent measures, but also by the insight of the test administrator - his sensitivity to patterns and configurations of data. This is particularly important with respect to the clinical scales.

Heilbrun (1958) demonstrated correlations between ACL need scales and their counterparts on the Edwards Personal Preference Schedule. Ten of the 15 coefficients computed were significant at the ,01 level. MacKinnon (1963) found correlations between indices of "creativity" and the ACL. High scorers on creativity also scored high on the scales Lability, Exhibitionism, Autonomy and Aggression. Low scorers on creativity also scored low on the scales Defensiveness, Self-control, Endurance, Orderliness, Intraception, Nurturance, Abasement and Deference.

In general the correlation of the ACL with measures of intellectual ability and cognitive functioning has not been high, e.g. coefficients of correlation with the Terman Concept Mastery Test ranged from -0,26 to +0,29. However, correlations with other personality tests, e.g. the California Psychological Inventory are relatively higher, coefficients of correlation ranging from -0,45 to +0,60.

Criticisms:

The Manual regards the ACL scales as being primarily experimental. Therefore, considerable further information is required to establish the reliability and validity of its clinical applications. Although the ACL has been widely used and has an application to an extensive range of situations (Anastasi, 1968, pp.533, 542) its stability as a measure remains low and ACL results must be interpreted with caution.

In conclusion, the evidence points to an overall low reliability and uncertain validity for the ACL scales (again, no clinical judgements were made on the basis of the ACL scores). However, it should be recalled that the ACL is a measure of the components of self-concept, a subjective variable that under any circumstances is difficult to gauge. For this reason we are prepared to accept lower levels of reliability and validity than would be required for more objectively defined variables. The study sought to determine dimensions of personality and self-concept that might statistically distinguish "moody" from "non-moody" subjects; with this goal in mind the ACL was employed cautiously and with circumspection. The best way (combining predictive caution with tentative descriptive optimism) to view the ACL variables that distinguished "moody" from "non-moody" subjects will be from a perspective that discounts the possibility of precision measurement but does suggest parameters for future investigation and validation.

3.24 The Nowlis Mood Adjective Check List (MACL)

Description:

The Nowlis MACL is a 33 item check list of adjectives designed to measure mood change*. Subjects are instructed to indicate for each adjective to what extent it applies to their present feelings. For example, the subjects must decide for the word "fearful" whether at the moment of testing they definitely feel fearful, feel slightly fearful, cannot decide whether or not they feel fearful, or definitely do not feel fearful.

Nowlis and his associates have grouped the adjectives together by factor analytic techniques into twelve dimensions of mood. These dimensions are: Aggression, Anxiety, Surgency, Elation, Concentration, Fatigue, Social Affection, Sadness, Scepticism, Egotism, Vigour, and Deactivation. The difference between pre-treatment and post-treatment scores on the 12 mood dimensions measures mood change due to the particular treatment.

Nowlis (1965) acknowledges that a tendency to judge mood words as applicable to one's own psychological state is only one index of mood. However, it has been found to be a stable and straightforwardly obtained measure, and one that is based upon an overt theoretical conception of mood.

Development:

Theoretical background:

Nowlis (op.cit.) has advanced a general definition of mood based on the psychological literature and applications of the term "moody" in everyday speech. He writes:

"Mood is the effect on a person of his own configurations of activity (Nowlis, 1961). These

* Note: See Appendix B, Tabulation B₂ for the Nowlis MACL.

configurations may be conceptualized as fundamental patterns of general functioning and orientation such as level of activation, level of control, level of concentration, direction of social orientation, and positive (pleasant) or negative (unpleasant) general appraisal. The effect of these general patterns on the person may be mediated by cues associated with them in the life history and involves affective, cognitive, motivational, and motor responses to the cues; such responses may in turn become functionally related to the general patterns and may modify, maintain, or even instigate them" (p.353).

Empirical background:

Nowlis and Green (1964) found 130 potential mood words in everyday speech that provided broad definitions for their mood dimensions, or these configurations of general functioning and orientation: level of activation, level of control, positive vs. negative social orientation, and pleasantness vs. unpleasantness. A check list consisting of the 130 words was administered to approximately 450 university men before and after six experimental sessions designed to induce different moods. The experimental findings were grouped into five sets of data and factor analysed. Thirty-four of the 130 words were eliminated after an examination of response distributions, reliabilities, order effects, and patterns of correlation with other variables. Ten factors were then obtained by the Thurstone centroid method. Most of the apparent common variance was accounted for by 9 factors and each factor was rotated to an oblique solution by the Pinzka-Saunders method.

Nowlis then sought to find whether similar mood factors emerged from data obtained when subjects were in different moods. From the original five sets of data he compared each set of 9 rotated factors with the other four sets of data. He found:

An axis in all five sets for four factors: Aggression, Anxiety, Surgency, and Concentration.

An axis in four sets for four other factors: Fatigue, Social Affection, Sadness, and Scepticism.

An axis in three sets for one factor: Egotism.

An axis in two sets for two factors: Elation and Deactivation.

One unique axis was tentatively identified as a twelfth factor: Vigour.

After examination of the 12 groups of matched axes the following items were selected as representative of the 12 mood factors. The first three items after the descriptive name became the items on the short form of the MACL.

A, Aggression (5 axes):	<u>defiant, rebellious, angry,</u> grouchy, annoyed, fed-up.
B, Anxiety (5 axes):	<u>clutched up, fearful, jittery.</u>
C, Surgency (5 axes):	<u>carefree, playful, witty,</u> lively, talkative.
D, Elation (2 axes):	<u>elated, overjoyed, pleased,</u> refreshed.
E, Concentration (5 axes):	<u>engaged in thought, intent,</u> <u>concentrating,</u> attentive, earnest, serious, contemplative, introspective.
F, Fatigue (4 axes):	<u>tired, sluggish, drowsy,</u> dull.
G, Social Affection (4 axes):	<u>affectionate, kindly, warm-</u> <u>hearted, forgiving.</u>
H, Sadness (4 axes):	<u>regretful, sad, sorry.</u>
I, Scepticism (4 axes):	<u>dubious, sceptical, suspicious.</u>
J, Egotism (3 axes):	<u>egotistic, self-centered,</u> <u>boastful, aloof.</u>
K, Vigour (1 axis):	<u>active, energetic, vigorous.</u>
N, Nonchalance (2 axes):	<u>leisurely, nonchalant.</u> The short form of the MACL substitutes Deactivation for Factor N. It comprises the words: at <u>rest,</u> <u>quiet, calm.</u>

Scoring the Nowlis MACL:

The scoring of the Nowlis MACL can yield three types of score: a magnitude of change score for each of the 12 mood dimensions; a set of component change scores, i.e. the number of components increased, decreased, new, disappeared, and total change in components for each of the 12 mood dimensions; and an absolute magnitude of change score, i.e. the sum of the change scores on each of the 12 mood dimensions irrespective of sign.

Thus the magnitude of change scores measure discrete change on each of the 12 mood dimensions for a particular treatment; the set of component change scores for each of the 12 mood dimensions measures internal change on the 12 mood dimensions for a particular treatment; and the absolute magnitude of change score measures global or overall change across the 12 mood dimensions for a particular treatment.

This can be illustrated by examining an hypothetical score sheet. For reference purposes it is recalled that the Nowlis response categories and their numerical values are:

1. definitely feel "x" = 3
2. feel slightly "x" = 2
3. cannot decide whether I feel "x" = 1
4. definitely do not feel "x" = 0.

The hypothetical score sheet:

		Pre- testing	Post- testing	Magnitude of change	Components
Factor 1	Aggression				
	1) defiant	0	0		number of C increased = 0
	2) rebellious	0	2	+2	number of C decreased = 0
	3) angry	2	2		number of C disappeared = 0
					number of C new = 1
					Total = 1
Factor 2	Anxiety				
	1) clutched up	1	1		number of C increased = 1
	2) fearful	1	2	0	number of C decreased = 0
	3) jittery	1	0		number of C disappeared = 1
					number of C new = 0
					Total = 2
Factor 3	Surgency				
	1) carefree	0	1		number of C increased = 0
	2) playful	2	2	-1	number of C decreased = 0
	3) witty	2	0		number of C disappeared = 1
					number of C new = 1
					Total = 2
Factor 3	Elation				
	1) elated	1	2		number of C increased = 1
	2) overjoyed	2	1	0	number of C decreased = 1
	3) pleased	3	3		number of C disappeared = 0
					number of C new = 0
					Total = 2

It might be argued that the categories of component change are not independent, e.g. components increased and new components are not categorically different both being a type of magnitude increase, and therefore there are only grounds for 3 categories - components increased, components decreased, and total change. However the 4 categories of component change were used because it was desirable to have the distinction between a component merely increasing and a component appearing for the first time as the result of a particular treatment. Statistically, the lack of categorical independence was accepted, and appropriate univariate techniques were used to analyse the component categories.

Examining the hypothetical score sheet:

In the case of Factor 1 Aggression, the magnitude of change score, the difference between pre- and post-testing, is +2. Looking at the components responsible for this change, it can be seen that there is a new component - "rebellious" appeared.

In the case of Factor 2 Anxiety, although the magnitude of change score is 0, there is internal change in the factor components, i.e. the component "fearful" increased in intensity and the component "jittery" disappeared.

In the case of Factor 3 Surgency, the magnitude of change score, the difference between pre- and post-testing, is -1. Looking at the components responsible for this change, it can be seen that there is one new component "carefree" and the component "witty" has disappeared.

In the case of Factor 4 Elation, although the magnitude of change score is 0, there is internal change in the factor components, i.e. the component "elated" increased in intensity and the component "overjoyed" decreased in intensity.

The absolute magnitude of change would be the sum of the

magnitude of change on each factor irrespective of sign.

Current status:

(studies supporting the MACL derivation; corroborating the MACL as a measure of mood change; and providing international equivalents)

Five other factor analytic studies, Borgatta (1961), Thayer (1963), McNair and Lorr (1964), Clyde (1960) and Reimanis (1964) were made of lists of words derived wholly or in part from the Nowlis MACL. Six mood factors tended to recur in all these studies. They were: Aggression, Anxiety, Concentration, Fatigue, Social Affection, and Surgency. There was sufficient evidence to postulate another 6 factors analogous to the MACL factors.

The Nowlis MACL has been used as an effective measure of mood change in a number of contemporary studies. These include: Schilling, 1977; Blatt, Quinlan and D'Aflitti, 1972; Sommer, 1972; Sato, Murai and Kinebuchi, 1970; Mosher and Greenberg, 1969; and Heimstra, Ellingstad and De Koch, 1967.

The Nowlis MACL has also stimulated the development of several international equivalents, e.g. Hecheltjen and Merlesdorf, 1973 (German); and Malolinova and Hampejsova, 1973 (Czech).

Reliability and Validity:

It should be emphasized that the Nowlis MACL was designed, and refined over an eight year period, as a measure of mood change. Its reliability as a measure of mood change is dependent on the reliability of its scores as a measure of mood at any particular time. An important limiting factor on this reliability is that mood, by one definition, may fluctuate over short intervals of time. Accordingly, it is conceivable that mood change may occur during the time interval required to complete the Nowlis MACL. This

could be a result of factors independent of the MACL or the act of completing the MACL itself. In other words, the reliability of the MACL is limited by the very phenomenon it purports to investigate and may itself induce mood change.

Estimates of reliability have nevertheless been obtained. Borgatta (1961) found test-retest reliabilities of from 0,40 (Fatigue) to 0,71 (Social Affection). Nowlis and Green (1964) found within test reliabilities for individual words to range from 0,52 to 0,80. Green (1964) found test-retest reliabilities to range from 0,50 to 0,75. McNair and Lorr (1964) found that mood words taken from the Nowlis MACL to have estimates of internal consistency ranging from 0,80 to 0,91.

The validity of the Nowlis MACL has been strengthened by the elimination of "social desirability" as a contributing variable (Green, 1964). Correlations with the known effects of several drugs has been established by Wendt and Cameron (1961), and Wendt, Cameron and Specht (1964). Speisman, Lazarus, Mordkoff and Davison (1964) have shown statistically significant correlations between the Nowlis MACL and the California Personality Inventory and 4 scales based on the Minnesota Multiphasic Personality Inventory.

Criticisms:

Meddis (1972) has argued on the basis of statistical evidence that the commonly reported existence of several monopolar mood factors is the result of peculiarities in the structure of the mood scales themselves. While not criticizing the use of mood rating scales based on factor analytic studies, i.e. the general approach, he did criticize the Nowlis MACL on two counts:

1. The Nowlis scoring categories are: (a) "definitely feel 'x' "; (b) "feel slightly 'x' "; (c) "cannot decide whether or not I feel 'x' "; and (d) "definitely

do not feel 'x' ". These responses are assigned numerical values of 3, 2, 1 and 0 respectively. Meddis asks if it can be said with confidence that "cannot decide whether or not I feel x" is midway between "feel slightly x" and "definitely do not feel x"? Meddis believes that "cannot decide whether or not I feel x" should be counted as missing data rather than as a mid-point reply, hence the status of the scale as an ordinal scale is questioned.

2. Meddis points out that the scale is not symmetrical, i.e. there are two opportunities for acceptance (a and b) and only one opportunity for rejection (d). For this reason increases on a mood factor score, e.g. moving from (b) to (a) on the factor component "happy" cannot be paralleled by a decrease on the factor component "sad", because there is no second category for decrease. This suggests that negative correlations between the mood factors containing the components happy and sad will be absent.

Meddis (1972) writes:

The results strongly suggest that the rating scales may have influenced the results obtained by the pioneers of MACL research. They do not, of course, undermine the general approach. By bringing the early results more in line with commonsense, they increase our confidence that the tests are measuring what we think they are measuring. It is easier to accept a small number of largely bipolar mood factors and easier to make clinical sense of a patient's factor scores along such mood dimensions.

Larger sample sizes will be needed to identify the factors with more precision. It is possible that some factors such as aggressiveness could be either monopolar (aggressive v. not aggressive) or bipolar (aggressive v. friendly). Decisions on such issues are required before MACLs can take their place as powerful research and clinical rating procedures (p.184).

Certainly the development of reliable and valid mood rating scales with equal opportunities for acceptance and rejection of items, is desirable. Meddis' two statistical criticisms

are cogent and his study should be replicated. However, the qualitative analysis of over 200 mood analyses has suggested a greater congruence of monopolar mood dimensions with subjects' reported experience. Subjects' mood state is often a complex state of affairs, several contradictory feelings may predominate, or fluctuate in their ascendancy. To expect largely bipolar mood factors and to argue that they are more in line with commonsense, is merely to introduce a counter bias.

In conclusion, the MACL is a factor analytically derived measure of mood change with known (estimated) reliability and validity. The assessment of the adequacy of this reliability and validity for research purposes must take several facts into account. Firstly, as a factor analytic measure it has the deficiencies inherent in many factor analytic approaches, i.e. oblique rotation (lack of full independence of factors), a degree of circularity in the definition of dimensions, and an exclusively nomothetic theoretical base (Brody, 1972).

Secondly, mood by one definition is that which fluctuates over short periods of time. This introduces an important limiting factor, what might be termed an analogue of the Heisenberg principle of uncertainty, into the domain of mood. This is to say that the measuring instrument itself may interact significantly with the phenomenon under study.

Two options seem to follow--either the empirical study of mood requires a serious curtailment, perhaps even abandonment, or an acknowledgement is made that (1) our measuring instrument may necessarily influence the object of study (by one definition of mood) and (2) the intrinsic nature of mood may militate against any precise measurement. An abandonment of the empirical study of mood is not recommended at this exploratory stage of the construct. The measurement or even the description of any affective state will influence that state to a certain degree. Prudence lies in acknow-

ledging the presence of a limitation and assessing its extent.

The limitation may not be as great as it first seemed. If one of the things an individual is disposed to do when in a particular mood, is to avow, admit, declare, or generally manifest the particular mood through verbal declarations, then the MACL can serve as a prompt for such responses (Nowlis, 1965). Hence the MACL will also influence mood in that it elicits response tendencies already present in the mood. It manifests, or permits a manifestation of the latent constituent elements and parameters of individual moods.

If the Nowlis scale is not an ordinal scale as Meddis (1972) implies, then quite simply the Nowlis scores are not amenable to parametric statistics. However, equal and continuous gradations of subjective estimates are always difficult to achieve--until Meddis' refinements can be established to be both empirically useful and valid, the MACL will undoubtedly continue to be used as an approximation of a valid ordinal rating scale for indicating mood change. Meddis is correct in saying that there is an asymmetry to the scales, but it is a defect not an abrogation. In terms of the present study it could theoretically result in a greater number of increase scores. However, even if present, this would be a constant across all the treatments and hence its effect would be minimized or as a constant may possibly be factored out. Bearing these deficiencies in mind, and the unpalatable alternative of making mood an experimental pariah in advance of experimental investigation, the MACL was deemed not to be perfect, but developmentally adequate in terms of the available measures for mood change.

3.25 The Mood Analysis Questionnaire

Description:

The Mood Analysis Questionnaire* is an inventory of questions

* Note: See Appendix B, Tabulation B₁ for the Mood Analysis Questionnaire.

and probes designed: (1) to obtain basic information concerning mood and (2) to induce mood change. This dynamic process orientated research tool can be employed to explore, unfold, and make apparent the different aspects and levels of mood. Its structure and deployment requires the individual to describe, analyse, and express their mood state. The Mood Analysis Questionnaire is based on the experimental work of Gendlin and Olsen (1967), and the theoretical orientation of Schrag (1969), Ellenberger (1958) and Spiegelberg (1971). It should be stressed that the Mood Analysis Questionnaire is an exploratory research instrument and technique which may, or may not, have clinical utility. This study investigates the effect of the Mood Analysis Questionnaire on mood dimensions, and different types of mood, but does not seek to establish clinical validity.

Format:

After an initial categorization of their mood and an unstructured description, subjects proceed to answer a series of questions that are grouped determinately under ten headings:

1. Environmental correlates
(major and minor life events that may be contributing to the mood; subjects are asked to indicate the connection they perceive between these events and their mood)
2. Cognitive mode analysis
(a determination of the major cognitive processes operating in the mood)
3. Categorical analysis
(the subjects' experience of the dimensions of Space, Time, Materiality, and Causality in the mood)
4. The psychological phenomenological reduction
(the subject's suspension or bracketing of beliefs about and value judgements concerning the mood; followed by an assessment of their attitude toward the mood)
5. The psychological eidetic reduction
(subject's own determination of the essential aspects of the mood and background determinants)

6. The psychological intentional analysis
(the subject's general orientation, directedness, and striving towards various objects)
7. The psychological constitutional analysis
(the subject's view as to what the pragmatic, logical or ideal completion of the mood would be; what psychological structures, e.g. attitudes, beliefs, convictions, the mood produces; the stability and expected development of the mood)
8. The ego analysis
(the subject's perception of their degree of integration in the mood; their expression of an embodiment of the mood; whether or not the mood has a "message" for the subject)
9. The psychological body analysis
(the subject's bodily activity, bodily intentionality, and the action tendencies of the body in the mood)
10. Final description of the mood
(subjects are asked to describe the mood as they experience it at the moment)

Subjects are then asked to give comments on the mood analysis session. It is emphasized that negative comments are especially helpful.

Additional information:

1. Subjects are asked to record in terms of their own experience, a definition of mood.
2. Subjects are asked to use the word "mood" in four different grammatical sentences. They are asked to record sentences they could imagine themselves saying to a friend.
3. Subjects are asked if they have had feelings like those described in the mood analysis in the past. If so, under what sort of circumstances.
4. Subjects are asked if they think they are a "moody person". If so, to please explain.

3.3 Procedure

3.31 Experimental procedure

All subjects were tested at the Rosebank Child Guidance Clinic. Testing conditions at the clinic were good. Illumination and ventilation were adequate, and the noise level was satisfactory. Subjects were tested in small groups ranging from 5 to 12 individuals. The fluctuation in group size was due to subjects' practical and tutorial commitments. Meetings were arranged weekly following the same progression: Session 1, Session 2, Session 3, Session 4, and Session 5.

Volunteers were contacted telephonically prior to Session 1 and a brief outline of the 4 experimental sessions was given.

On Session 1 the Nowlis MACL was provided and the instructions read aloud to the subjects. Subjects were then given the 16PF and the instructions were also read aloud. Upon completion of the 16PF, the Gough ACL was provided and the instructions again read aloud. When the Gough ACL was completed, the Nowlis MACL was re-administered. Subjects were given the Edwards EPPS to complete in their free time. They were instructed not to confer with each other on it and to return all the test materials the following week.

Session 1 was designed to obtain personality data for the subjects and to measure the amount and type of mood change resulting from completing personality tests. This was measured by the change on the 12 mood dimensions of the Nowlis MACL.

On Session 2 subjects were told that in this session they would complete the Mood Analysis Questionnaire. The Nowlis MACL was distributed and completed. The instructions on the Mood Analysis Questionnaire were read aloud to the subjects. Subjects were asked to categorize their mood in one or two words and to give it an intensity rating on a

7-point scale. The questions of the Mood Analysis Questionnaire were then read aloud to the subjects. At the end of the Mood Analysis Questionnaire another categorization of mood was taken and an intensity rating. The Nowlis MACL was then re-administered.

Session 2 was designed to measure the amount and type of mood change resulting from the experimenter's administration of the Mood Analysis Questionnaire. In addition the effect of the Mood Analysis Questionnaire on different categories of mood can be determined. This was measured by the change on the 12 mood dimensions of the Nowlis MACL.

On Session 3 subjects engaged in quiet activities. They either brought university work or read magazines. The Nowlis MACL was administered at the beginning and at the end of the session.

Session 3 was designed to measure the amount and type of mood change resulting from engaging in quiet activities. This was measured by the change on the 12 mood dimensions of the Nowlis MACL.

On Session 4 subjects were told that they would complete the Mood Analysis Questionnaire but this time the questions would not be read to them and interaction between subjects and experimenter would be kept to a minimum. The Nowlis MACL was administered and the subjects worked on the Mood Analysis Questionnaire. The Nowlis MACL was then re-administered.

Session 4 was designed to determine the experimenter effect on Session 2, i.e. the fact that the questions were read aloud by the experimenter on Session 2.

On Session 5 subjects came in individually for feedback and discussion. They discussed their mood analyses, and were asked to categorize the 4 grammatical sentences using the word "mood" according to categories based on the work of Strawson (1966) and Perkins (1966). Subjects were randomly

chosen to be asked to participate in a sixth session for more detailed discussion of their moods. Forty-three subjects participated in this undertaking.

Further intensive sessions were given to 15 subjects who were found to have definite recurring mood states. Basic descriptions of these moods were recorded by the subjects while undergoing these moods. Major qualitative dimensions of mood were determined through formal questions and discussion.

3.32 Design

One hundred and five subjects underwent four experimental sessions designed to determine the effect of the Mood Analysis Questionnaire, under an experimenter administered condition and a self-administered condition, on mood. A fifth session was arranged for feedback and discussion. Forty-three subjects participated in further discussions of their mood states. Additional sessions were arranged with 15 subjects for more detailed study of basic recurring moods.

SCHEMATIC PRESENTATION OF THE BASIC RESEARCH DESIGN

Session	1	2	3	4	5
Treatment	Nowlis MACL pre and post personality testing	Nowlis MACL pre and post experimenter administered Mood Analysis Questionnaire	Nowlis MACL pre and post quiet activities	Nowlis MACL pre and post self-administration of Mood Analysis Questionnaire	Feedback and discussion
N	105	105	105	105	105

3.33 Rationale for Statistical Procedure

The data obtained from the experimental sessions was suitable for analysis by statistical techniques based on a comparison of group means.

3.331 Identifying personality variables or patterns of personality variables that distinguish "moody"

from "non-moody" subjects.

The Hotelling T^2 test was performed on the 16PF, the EPPS, and the Gough ACL. Since each personality test was a set of scores, not a single or global score, a multivariate statistical technique was required. As two group means were to be compared (moody vs. non-moody), the Hotelling T^2 was indicated (Morrison, 1967). Simultaneous confidence intervals were used to interpret the results, Student t-tests were also required.

3.332 To show that the Mood Analysis Questionnaire is effective in changing dimensions of mood, the evidence is built up in a stepwise fashion.

A. Comparing the effectiveness of the Mood Analysis Questionnaire in changing dimensions of mood with the other experimental sessions.

1. A one-way analysis of variance with repeated measures was applied to the absolute magnitude of change, i.e. the sum of the change scores on the 12 Nowlis mood factors irrespective of sign, in order to compare overall mean change on the four experimental sessions. A one-way analysis of variance was used as there were four groups to be compared on a single measure. It was a repeated measures design as the subjects were the same across the four treatments.

2. A one-way multivariate analysis of variance with repeated measures (U-statistic, Morrison, 1967, p.179) was applied to the mean magnitude of change scores on the 12 Nowlis mood factors across the four sessions. A multivariate technique was needed to compare the group means because the Nowlis MACL is made up of 12 factors and not a single score. Hence the MANOVA was used. This is also a repeated measures design.

A multivariate analysis of variance was chosen over a 2-way analysis of variance because it was desirable to compare the four sessions on the 12 Nowlis mood factors simultaneously.

3. A one-way analysis of variance with repeated measures was applied to the component change scores for each of the 12 Nowlis mood factors across the four experimental sessions. The component change scores for each factor consist of components increased, components decreased, new components, components disappeared, and total change in components. Since the component scores are not independent a multivariate technique was not used. A univariate technique was used on each category separately. As there were four groups to be compared the one-way analysis of variance was used.

B. Investigating the effect of the Mood Analysis Questionnaire on the different mood groups, i.e. positive, neutral and negative moods, of Session 2.

1. A one-way analysis of variance was applied to the mean absolute magnitude of change scores on the 12 Nowlis mood factors across the three mood groups. A one-way analysis of variance was used as there were three different mood groups to be compared on a single measure. However, in this case it was not a repeated measures design.

3.333 Establishing whether the four experimental sessions were effecting moody and non-moody subjects differently.

The Hotelling T^2 test was applied to the mean magnitude of change on the 12 Nowlis mood factors for each of the four sessions in order to compare moody and non-moody subjects. A multivariate statistical technique to compare group means was indicated. Since there were

two groups to be compared, the Hotelling T^2 test was used.

- 3.334 Investigating the frequency of different elements in student definitions of mood.

The definitions were categorized and frequency counts determined. This form of data is suitable for a χ^2 Test of Homogeneity. This tests whether the different definitions have the same frequency, i.e. are homogeneous or not.

- 3.335 Investigating the frequency of different categories of use of the word mood in grammatical sentences.

This form of data was also suitable for the χ^2 Test of Homogeneity.

3.34 Statistical techniques

Hotelling's T^2 Statistic

Suppose two independent random samples of observations on some multidimensional variable have been obtained under different experimental conditions. We assume that the variables have a multivariate normal distribution with the same, though unknown, covariance matrix Σ of full rank p , and desire to test the null hypothesis

$$H_0: \mu_1 = \mu_2$$

that the population means are identical, as opposed to the alternate hypothesis

$$H_1: \mu_1 \neq \mu_2$$

of different means.

By application of the likelihood-ratio principles the statistic for testing the hypothesis is

$$T^2 = \frac{N_1 N_2}{N_1 + N_2} (\bar{x}_1 - \bar{x}_2)' S^{-1} (\bar{x}_1 - \bar{x}_2)$$

where N_1 and N_2 are respective sample sizes, \bar{x}_1 and \bar{x}_2 are respective sample means and S is the pooled sample estimate of the common covariance matrix. This T^2 statistic can be converted to an F statistic which is approximately F -distributed with p and $N_1 + N_2 - p - 1$ degrees of freedom. The simultaneous confidence intervals may then be defined for linear combinations of the mean differences.

Student t-test between two sample means

To test the hypothesis that the means from 2 populations are the same against the alternative hypothesis that they are different the sample test statistic

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{1}{n_1} + \frac{1}{n_2}} \sqrt{\frac{(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2 - 2}}}$$

is employed. Here n_1 and n_2 are respective sample sizes, \bar{x}_1 and \bar{x}_2 are respective univariate sample means and s_1 and s_2 are respective sample variances. This statistic has a Student t -distribution with $n_1 + n_2 - 2$ degrees of freedom provided the underlying distribution is normal.

One-way analysis of variance with repeated measures

To test the hypothesis that treatment effects on a univariate score are the same against an alternative hypothesis that they are different, the model $y_{ij} = \mu + \alpha_i + b_j + e_{ij}$ is assumed. Here the e_{ij} are normally and independently distributed.

We calculate the total sums of squares

$$SS_{TOT} = \sum (y_{ij} - \bar{y}_{..})^2$$

and the treatment sums of squares

$$SS_{TREAT} = \sum (\bar{y}_{.j} - \bar{y}_{..})^2$$

geneous against the hypothesis that they are different the sample test statistic

$$\chi^2 = \sum_i \frac{(O_i - E_i)^2}{E_i}$$

is used. Here the O_i are the observed frequencies of each category and the E_i are the expected frequencies under the hypothesis of homogeneity. This statistic is approximately χ^2 -distributed with $k-1$ degrees of freedom, where k is the number of categories.

CHAPTER 4 - PRESENTATION OF RESULTS

Summary

"Moody" subjects are distinguished from "non-moody" subjects in terms of personality variables revealed by standard tests. Different criteria of "moodiness" are significantly correlated with different sets of personality variables.

Session 2, the experimenter administered Mood Analysis Technique (MAT), is shown to have a determinate and specifiable effect on moods: it influences mood in a global fashion, influences mood in ways different from the other experimental sessions, may influence mood irrespective of whether or not the individual is a "moody" person, and in particular influences negative moods in predominantly positive ways.

Subjects' comments indicate that the MAT operates to change mood and increase awareness.

The concept "mood" is outlined and limited with respect to its basic parameters; a substantial empirical base for the concept is provided. Primary elements for the concept are "mood" as: "a state of mind or feeling", "pervasive", "having a causal effect", "the result of both internal and external factors", and "an attitude".

A functional analysis of language acts shows that the word "mood" is employed in sentences to perform social-judgemental actions and to report feeling qualities and systematic influences.

Qualitative data is presented showing: the range of mood experience, major qualitative dimensions, causal factors, alterations in self and environment perception, and the types of social relationships facilitated by different categories of mood.

Content Summary

Introduction

- 4.1 Personality variables that significantly distinguish "moody" from "non-moody" subjects
- 4.2 Absolute magnitude of mood change (global mood change) across the four experimental sessions
- 4.3 Analysis of mood change on the 12 Nowlis Mood Factors across the four experimental sessions
 - 4.31 Magnitude of change scores across the four experimental sessions
 - 4.32 Component change scores across the four experimental sessions
- 4.4 The effect of the four experimental sessions on "moody" vs. "non-moody" subjects
- 4.5 The effect of Session 2, the experimenter administered Mood Analysis Technique (MAT), on moods classified as positive, neutral and negative
- 4.6 Analysis of subjects' comments upon completion of Session 2
- 4.7 Significant elements of subjects' definition of "mood"
- 4.8 Significant language acts of sentences using the word "mood"
- 4.9 Qualitative data

INTRODUCTION

Chapter 4 presents the collection of experimental and qualitative data, and represents a preliminary attempt at resolving a number of general and specific questions concerning "mood" and mood experience. The experimental questions considered can be grouped under four headings: Personality Variables that distinguish "Moody" from "Non-Moody" individuals, The Influence of the Mood Analysis Technique (MAT) on Mood, Psycho-linguistic Data Pertinent to the Concept Mood, and Qualitative Data Presenting the Basic Features and Attributes of Mood.

1. Personality Variables that distinguish "Moody" from "Non-Moody" individuals

Can standard personality tests provide a set of variables that distinguish "moody" from "non-moody" subjects? Do different criteria of "moodiness" corresponding to different conceptions of "moody" establish identical or dissimilar patterns of variables? Are some variables constant regardless of the criterion of "moody"?

2. The Influence of the Mood Analysis Technique (MAT) on Mood

Does the Mood Analysis Technique have a greater global effect on mood than the other experimental sessions? Is the Mood Analysis Technique influencing particular dimensions of mood differently from the other experimental sessions, i.e. is its influence selective? Is the Mood Analysis Technique influencing "moody" individuals differently from "non-moody" individuals? What is the effect of the Mood Analysis Technique on different categories of mood, i.e. positive, neutral, and negative moods? What are the subjects' own appraisals of the Mood Analysis Technique?

3. Psycho-linguistic Data Pertinent to the Concept "Mood"

Can subjects' definition of "mood" in terms of their own experience contribute to our understanding of what mood is and how it functions? What is the range of psycho-linguistic actions that mood sentences perform? What significance does this have for an adequate conceptualization of "mood"? Is "mood" primarily a state or process concept? Can it be assimilated to an organizational concept for patterns of behaviour? Does it operate exclusively to make social-evaluative attributions?

4. Qualitative Data Presenting the Basic Features and Attributes of Mood

What is the range of mood experience? What kinds of mood do subjects typically have? How do subjects formulate the qualitative structure, the causes and reasons for their experience? Is there a wider matrix of contributing factors? When moods are grouped into positive, neutral, and negative categories, are there common features across these categories? How do subjects perceive themselves and their environment when in specific moods? What aspects of self-concept may be said to be operating?

Section 4.1 presents personality variables from the 16PF, EPPS, and ACL that distinguish "moody" from "non-moody" subjects at a level of statistical significance. Two criteria were used to identify "moody" subjects: a self-opinion criterion (corresponding to "moody" in the sense of having protracted feeling states of moderate intensity and/or having a susceptibility to spells of irritability and bad temper) and a statistical criterion of high and low mean variability (corresponding to "moody" in the sense of relative changeability of feeling). Each criterion yielded statistically significant results. Furthermore, there were variables unique to each criterion and a core set of ten personality variables common to both criteria.

This data leads us to conclude that:

- (a) "moody" subjects can be distinguished from "non-moody" subjects in terms of personality variables on standard tests; the implication here is that there may be a significant personality pattern associated with the different types of "moody" individual, and the needs, values, actions, and modes of responding for "moody" subjects may be different from their "non-moody" counterparts. (See section 5.1 for personality sketches of the two types of "moody" individual);
- (b) the fact that there are personality variables unique to the two different criteria of moodiness implies conceptually--that the associated concepts of "moodiness" have a degree of independence, and empirically--that the unique variables enclose different segments of personality dispositions; thus this finding supports to some degree the conceptual and empirical separation of different types of moodiness;
- (c) nevertheless, the existence of a core set of variables common to

both criteria implies conceptually--that the two associated concepts of moodiness may span a more fundamental conception, and empirically--there may be a more basic entity, pattern, or factor, "beneath" the revealed variables, though from the data available we are not able to make the integration which would identify this underlying factor.

Overview of Sections 4.2 - 4.5

Section 4.2 establishes the first link in the chain of argumentation for the case that the Mood Analysis Technique (MAT) has a determinate and specifiable effect on moods. The evidence is not absolutely conclusive, but it is believed to be sufficiently persuasive to suggest that the MAT does have a major global influence (section 4.2), influences mood in ways different from the other experimental sessions (section 4.3), may influence mood irrespective of whether or not the individual is a "moody" person (section 4.4), and in particular has a positive effect on moods classified as "negative" (section 4.5).

Section 4.2 investigates the absolute magnitude of mood change (global change on the 12 Nowlis Mood Factors) across the four experimental sessions. We might expect that Session 2, the experimenter administered Mood Analysis Technique (MAT), would have a relatively high absolute magnitude of change score owing to its design as a probe and facilitator of mood change. This expectation is fulfilled experimentally, at a level of statistical significance. However, we cannot say that the absolute magnitude of change for Session 2 is greater than the absolute magnitude of change for Session 1, the personality testing session. (See section 5.2 for: a discussion of this finding in terms of the similarity of cognitive processes instituted by the two sessions, and an explanation for the relatively low score of Session 4, the self-administered MAT, in terms of experimental procedure).

Thus the first link in the chain of argumentation is firm but not entirely invulnerable. The absolute magnitude of change scores are summary scores, implying no reference per se to modulations in specific mood factors. The detailed signification of these scores can emerge only with an examination of the magnitude and component change scores.

Section 4.3 presents the analysis of mood change on the 12 Nowlis Mood Factors across the four experimental sessions. Mood change is indicated by magnitude of change scores and component change scores on the Nowlis Mood Factors. The magnitude of change scores will establish the effect of Session 2, the experimenter administered Mood Analysis Technique (MAT), in terms of discrete change, i.e. mean increase or mean decrease on particular mood dimensions (across all moods), in comparison with the three other experimental sessions. The component change scores will indicate the internal change on the Nowlis Mood Factors, i.e. factor components that increase, decrease, disappear, are new, and total change, not detected by the magnitude of change scores.

The analysis of section 4.31 (magnitude of change scores) shows that there is an overall difference in group means across the four experimental sessions, at the 0,01 level of significance. Examining the individual Nowlis Mood Factors, those factors statistically distinguishing the four experimental sessions were: Aggression, Surgency, Social Affection, Sadness, Egotism and Scepticism. Focusing on Session 2, the experimenter administered Mood Analysis Technique (MAT), it was found: Session 2 increased the mood dimensions Aggression, Social Affection, Sadness and Egotism; and showed a lesser decrease in Surgency and Scepticism.

These results can be explained in terms of the design and format of the MAT (see section 3.25 for the design), its ability to locate present feeling in terms of past feeling, the latent and shadow aspects of present feeling, and the projection of future feeling--all aspects being made immanent through the search for expressive metaphors.

(See section 5.3 for a discussion of these issues, and an explication in terms of the salient effects of each experimental session, a comparison of effects across sessions, and a consideration of the experimental effects in terms of "energy" mood factors, "emotion" and "cognitive" mood factors).

Section 4.32 provides an analysis of the component change scores (factor elements that increase, decrease, disappear, newly appear, and total change in components) on the Nowlis Mood Factors. The analysis is attuned to both significant component changes for factors that showed

significant magnitude of change scores, and significant component changes for factors that did not show significant magnitude of change scores. A component change analysis is essential because a lack of magnitude change may be the result of an internal condition where different factor components balance or cancel out one another, i.e. a lack of magnitude change for a mood factor does not exclude internal factor change.

The Nowlis Mood Factors Aggression, Anxiety, Surgency, Fatigue, Vigour, Social Affection, Sadness, Egotism, Deactivation and Scepticism (see Tables 41 and 42) each showed statistically significant component change scores. Focusing on Session 2, the experimenter administered Mood Analysis Technique (MAT), the most salient component change scores relative to the other experimental sessions occurred on these factors: Aggression (Session 2 had the ability to generate new components), Anxiety (Session 2 had the ability both to generate new components and make components disappear-- it was the most active experimental session in terms of this dimension), Social Affection (Session 2 had the ability to generate more new components than any of the other experimental sessions), and Sadness (Session 2 showed more total change and more new components).

In general the patterns of effect for Session 2 were parallel to Session 4, the self-administered MAT, and both sessions tended to be dissimilar to Session 1, the personality testing session, and Session 3, the quiet activities session.

The results suggest that Session 2, the experimenter administered Mood Analysis Technique (MAT), has the ability to generate more new components over several mood dimensions (with the exception of the mood factor Deactivation), and provide substantial support for the argument that Session 2 is functioning to bring new feeling elements into awareness and to reveal potentials for feeling. (See section 5.3 for the relevant comparisons, the areas of qualification, and a detailed discussion of the analysis).

Thus the analyses of section 4.3 forge the second link in the chain of argumentation. The Mood Analysis Technique has been shown: to influence mood (as measured by magnitude of change scores and component change scores) in ways different from the other experimental sessions, and to function to bring new elements of affect into awareness.

Section 4.4 examines the effect of the four experimental sessions on "moody" vs. "non-moody" subjects. It had been expected that Session 2, the experimenter administered Mood Analysis Technique (MAT), might influence "moody" individuals (so designated by the self-opinion criterion and the statistical criterion) to a greater extent than "non-moody" individuals. The experimental results indicate that this was not the case. An alternate possibility is that the Mood Analysis Technique is influencing mood irrespective of whether or not the subject can be classified as "moody"; since the Mood Analysis Technique has been shown to influence mood, and from examining subjects' comments upon completion of Session 2 (see section 4.6) this appears a reasonable explanation. However in moderation to any extreme elevation in confidence this conclusion suggests, it should be noted that there were no statistical differences between "moody" and "non-moody" subjects on any of the other experimental sessions. If we wish to include this finding as a fast link in our argumentation, we must also aver that its nature may be somewhat tenuous and speculative.

Section 4.5 carries out a new more detailed examination of the effects of Session 2, the experimenter administered Mood Analysis Technique (MAT), on different qualitative categories of mood. It has been shown that Session 2 has a major global effect across all moods, that it influences mood in ways divergent from the other experimental sessions, and that it may influence mood independently of whether or not the subject is a "moody" person. Now we wish to know whether Session 2, the experimenter administered Mood Analysis Technique (MAT), has a differential effect on moods classified as positive, neutral and negative. Confidence in the clinical utility of the MAT will be enhanced if it can be shown to influence negative moods in predominantly positive ways.

Subjects' descriptive classification of their mood state enabled each mood to be assigned to either a positive, neutral, or negative mood category (see section 4.5 for the rationale for this procedure). A one-way analysis of variance comparing the absolute magnitude of change scores for the three qualitative categories was significant at the 0,01 level. It was found that Group 3 (negative moods) had a greater mean absolute magnitude of change than Group 2 (neutral moods); this suggests that Session 2 was globally influencing negative moods to a greater

extent than more neutral moods. It appears that the negative moods are amenable to change and less resistant to change than the neutral moods. (The mean absolute magnitude of change scores for positive moods was intermediately high but not significantly high with respect to the neutral moods, nor was it significantly low with respect to the negative moods.) The next step is to establish that the greater global effect represents an improvement in the negative moods. This can be achieved by examining the individual Nowlis Mood Factors, and subjects' indication of qualitative or intensity changes upon completion of Session 2.

Statistical analysis of the individual Nowlis Mood Factors shows that the factors Anxiety, Surgency, and Elation are all significant across the three mood groups (positive, neutral and negative moods). Scrutinizing the inter-group comparisons (section 4.5, Table 54), it can be seen that Group 3 (negative moods) show a decrease in Anxiety; and increases for the mood dimensions Surgency and Elation. In each case these results can be interpreted as an improvement in the negative moods.

The qualitative data for the three mood groups establishes that overall Session 2, the experimenter administered Mood Analysis Technique (MAT), either improves their quality of negative moods (N=34) or reduces their intensity. Apparent contradictions are Frustrated moods (N=3), and Sceptical moods (N=1).

(See section 4.5 for the analysis of neutral and positive moods, and section 5.7 for a thorough analysis of mood improvements, stabilizations and deteriorations--here it is established that the three Frustrated moods and one Sceptical mood which appeared to deteriorate nevertheless resulted in increased insight for the subjects.)

Thus the final link in the sequentially articulated argument that Session 2, the experimenter administered Mood Analysis Technique (MAT), has a determinate and specifiable effect on mood is set in place.

Section 4.6 presents the analysis of subjects' comments given upon the completion of Session 2. Subjects were asked to give their considered opinion as to whether the MAT changed or did not change their mood, whether they liked or did not like the imagination questions, whether

they had suggestions for improvement in the MAT's format. They were told that negative comments would be especially helpful for revising the Mood Analysis Technique. This encouragement to give negative comments and criticisms was emphasized in order to overcome any natural reluctance on the subjects' part to criticize, and to avoid acquiescence responses.

The statistical analysis of responses revealed that the response categories "Changed Moods" and "Increased Awareness" had particularly high frequencies, and the response categories "Didn't like Imagination Questions" and "Frustrating-Irritating" had particularly low frequencies.

These results suggest that the MAT had the ability to influence mood, and did so in such a way that subjects' self-awareness, and understanding of the generative conditions, the source and trend of the mood, was enhanced. Some subjects felt that the MAT was too long and repetitious, but this was a minority opinion. It is interesting to note that a small number of subjects felt that mood was basically subjective and undefinable, beyond verbal formulation or expression.

Section 4.7 presents an analysis of subjects' definition of mood in terms of their own experience. Chapters 1 and 2 have criticized theoretical viewpoints on mood that do not specify their data base, or provide inadequate correspondence rules for linking higher-order propositions with lower-order empirical data. Section 4.7 is a partial corrective measure for this disconcerting and insupportable state of affairs. The concept "mood" has a wide range of reference, and the specification of those situations in which it is legitimate to employ the term are far from clear. The data of this section may be useful in outlining and limiting the concept of "mood" by establishing basic mood parameters in terms of subjects' own concretely felt experience.

Response categories with particularly high frequencies were:

Mood as a state of mind or feeling

Mood characterized as pervasive

Mood as having a causal effect

Mood as the result of both internal and external factors

Mood as an attitude.

It is suggested that the data and analysis of this section provides an empirical base that any theoretical view should be able to accommodate.

(See section 5.9 for an explication of the meaning of these definition elements, considerations apposite to their value for understanding mood, and some assessments of how they would be accounted for by the viewpoints outlined in section 1.10).

Section 4.8 examines the language acts (psycho-linguistic actions) performed by sentences using the word "mood". This approach is primarily a functional analysis that locates the import of "mood" in terms of contextualized psycho-linguistic actions. For example, the analysis of subjects' sentences using the word mood shows that mood sentences can be used to: report feeling qualities, characterize systematic aspects of mood experience, provide a vehicle for the natural expression of mood, evaluate other people in a social way, recognize discomfiture about one's own experience, request information, and many other actions (see section 4.8 Table 60).

It is emphasized that language acts or psycho-linguistic actions never comprise isolated functions, but occur as an integral part of different ways of feeling, thinking, and acting. The analysis is not so much a matter of content interpretation, as it is seeing how in particular circumstances a particular mood sentence could come to be employed-- a cognisance of relevant circumstances, intentions and behaviours. It is to consider both what is being affirmed in providing a particular mood sentence, and an extrapolation to what is being said by a particular mood sentence. To understand these extended language acts is to determine function, action, context, and personal intentions.

The subjects were asked to use the word "mood" in four different grammatical sentences. They were asked to generate sentences they could imagine themselves saying to a friend. The subjects were acquainted with categories of language acts adapted from the work of Wittgenstein (1972), Strawson (1970), and Austin (1963), and asked to make determinations for their sentences. The data obtained is used as part of the continuing effort to determine the parameters of what can meaningfully be said about "mood" both as a concept and an experience. Specifically the data is used to confirm or disconfirm two theses:

1. that mood is not any sort of experience or process, and
2. that linguistic expressions referring to moods are not necessarily functioning to inform of psychological facts and that these expressions presuppose various social and institutional concepts.

In addition we wish to consider how this data in its interpreted form might contribute to the configuration of a comprehensive concept or model for mood.

(See section 5.10 for the interpretation and discussion.)

Section 4.9 presents qualitative data obtained from the intensive study volunteers who recorded descriptions of their basic recurring mood states. Having determined which were the basic moods for a particular subject, the subject was then asked to write down a description of the mood the next time it occurred. Each subject was encouraged to describe the mood in any way she saw fit, as long as it was a portrayal of the affective state that was meaningful to her. Subjects met with the experimenter on a weekly basis to discuss their mood descriptions. During these sessions they were asked a series of questions designed to determine the causal factors and reasons for the mood, the aspects of personal identity operating in the mood, the role of personal goals and self-concept, the type and quality of interpersonal relations fostered by the mood, the modulations in self and environment perception intrinsic to the mood, and the degree to which the subject herself played an active and decisive role in producing the mood.

For the purposes of presentation the moods are divided into three categories: positive, neutral and negative moods, and subjects' descriptions are arranged together, sequentially, under different content areas corresponding to the questions asked.

(See section 5.11 for a structural analysis and a composite representation of the positive, neutral and negative moods.)

4.1 Personality Variables that significantly distinguish "Moody" from "Non-Moody" subjects

Description

The study used two different criteria of moodiness, a self-opinion criterion and a statistical criterion. The self-opinion criterion was provided by the subject's response to the question 'Do you think you are a moody person?' on the Mood Analysis Questionnaire. This question was qualified by instructions to the subjects that "moody" was to be understood in either or both of two senses, i.e. having a susceptibility to spells of irritability and bad temper and/or having protracted feeling states of moderate intensity.

It could be argued that this criterion, involving as it does a process of self-reflection concerning one's affective states and behavioural tendencies, is not independent of the process whereby personality dimensions are determined, i.e. checking answers on the personality tests. In this view the criterion is not pure, it is not a sign independent of that which it purports to indicate.

In reply, it is suggested that the processes are similar but not identical. With the personality tests subjects are told to indicate their immediate response, to choose without deep reflection which of the choices offered by the test is most typical of themselves. On the Mood Analysis Questionnaire subjects are encouraged to give thought to the question and their responses. Nevertheless from a purist point of view this criterion is partially defective.

The score of mean variability was used as the second criterion of moodiness. It was computed by taking the mean absolute magnitude of change across the four experimental sessions for each subject. The absolute magnitude of change is the sum of the change scores for each of the twelve Nowlis Mood Factors irrespective of sign. Those subjects with a high mean variability, i.e. one standard deviation above the mean were designated "moody". Those subjects with a low mean variability, i.e. one standard deviation below the mean were designated as "non-moody". (This cut-off point was

established after an inspection of the data).* The statistical criterion of high and low mean variability may be said to be an indicator of the general degree of fluctuation in feeling.

- * Mean = 15,48; S.D. = 5,07
- One S.D. above = 20,55
- One S.D. below = 10,42

Statistical Note

The Hotelling T² test was used in order to compare two group means on a set of scores. When the Hotelling T² statistic is significant, the two groups "moody" and "non-moody" differ on the personality factors simultaneously. To find out which particular factors are contributing to this significance, simultaneous confidence intervals are calculated.

A test of significance for any factor can be achieved by comparing the Student t-test value squared (t²) with the critical Hotelling T² value, or the t-value with T_{crit}.

Where:

$$T_{crit} = \frac{(N_1 + N_2 - 2)p}{N_1 + N_2 - p - 1} F_{crit} *$$

When this was done for the personality factors none were found to differ significantly at the ,05 level of significance. However, since the calculated Hotelling T² statistic was significant, there exists at least one contrast of factors which would be significant. As this would be difficult to interpret, Student t-tests were calculated on each factor separately to give an indication as to which factors differ.

* Note:

p = number of factors

N₁ = sample size for "non-moody"

N₂ = sample size for "moody"

F_{crit} is a table value for a critical F with relevant degrees of freedom.

Summary of Findings

1. The self-opinion criterion

At the ,01 level of significance "moody" subjects were distinguished from "non-moody" subjects in the following ways:

On the 16 PF -
scored higher on the dimension Trusting vs. Suspicious

On the EPPS -
scored lower on the dimension Deference

On the ACL -
scored lower on the Ratio of favourable to unfavourable adjectives checked (saw themselves in a less favourable light)

At the ,05 level of significance "moody" subjects were distinguished from "non-moody" subjects in the following ways:

On the 16 PF -
scored higher on the dimensions Placid vs. Apprehensive, and Relaxed vs. Tense; scored lower on the dimension Affected by Feelings vs. Emotionally Stable

On the EPPS -
scored higher on the dimensions Exhibition, Autonomy and Heterosexuality; scored lower on the dimensions Affiliation and Nurturance

On the ACL -
scored higher on the dimension Counselling Readiness; scored lower on the dimensions Defensiveness and Personal Adjustment

2. The criterion of high and low mean variability

At the ,01 level of significance "moody" subjects were distinguished from "non-moody" subjects in the following ways:

On the 16 PF -
scored higher on the dimensions Humble vs. Assertive, and Trusting vs. Suspicious

On the EPPS -
scored higher on the dimension Exhibition; scored lower on the dimension Deference

On the ACL -
scored higher on the dimension Counselling Readiness;
scored lower on the dimensions Defensiveness, Ratio of favourable to unfavourable adjectives (saw themselves in a less favourable light), Self-Control and Personal Adjustment.

At the ,05 level of significance "moody" subjects were distinguished from "non-moody" subjects in the following ways:

On the 16 PF -
scored higher on the dimensions Sober vs. Happy-go-lucky, Relaxed vs. Tense; scored lower on the dimension Undisciplined Self Conflict vs. Controlled

On the EPPS -
scored higher on the dimension Heterosexuality; scored lower on the dimension Nurturance

On the ACL -
showed no difference at the ,05 level of significance.

Hypotheses

4.1.1.1 Null Hypothesis H_0 :

It is hypothesized that the two different criteria of moodiness (the self-opinion criterion and the criterion of high and low variability) will not yield different patterns of significant personality variables.

4.1.1.2 Alternative Hypothesis H_1 :

It is hypothesized that the two different criteria of moodiness (the self-opinion criterion and the criterion of high and low variability) will yield different patterns of significant personality variables.

Results

1. The self-opinion criterion (the MAT criterion)

Tables 2, 3 and 4 are presented showing the significant personality factors distinguishing "moody" from "non-moody" subjects, for subjects designated "moody" on the MAT criterion.

Table 5 is a summary table of Tables 2, 3 and 4.

Examining the first criterion of moodiness, the self-opinion criterion (MAT criterion), Table 5 shows that moody subjects were distinguished from non-moody subjects at the .01 level of significance on these dimensions:

On the 16 PF -
scored higher on the dimension Trusting vs. Suspicious

On the EPPS -
scored lower on the dimension Deference

On the ACL -
scored lower on the dimension Ratio of favourable to

TABLE 2

HOTELLING T² TEST OF SIGNIFICANCE ON THE CATTELL 16 PF BETWEEN MOODY AND NON-MOODY DESIGNATED ON THE MAT CRITERION

Hotelling T	df	F-Value
51,69	16 88	2,76 **

Note

* p <0,05.

** p <0,01.

The Cattell 16 PF

	Low Score	High Score	Non-Moody		Moody		t
			M	STD	M	STD	
1. Factor A (Reserved vs. Outgoing)			5,40	2,01	5,13	2,45	0,53
2. Factor B (Less Intelligent vs. More Intelligent)			6,20	1,90	5,79	1,85	1,02
3. Factor C (Affected by Feelings vs. Emotionally Stable)			5,07	2,32	3,95	2,11	2,39*
4. Factor E (Humble vs. Assertive)			5,47	2,10	6,17	2,08	-1,57
5. Factor F (Sober vs. Happy-go-lucky)			5,10	2,01	5,44	2,21	-0,73
6. Factor G (Expedient vs. Conscientious)			3,93	1,64	4,56	2,15	-1,44
7. Factor H (Shy vs. Venturesome)			5,23	1,85	4,49	2,17	1,64
8. Factor I (Tough-minded vs. Tender-minded)			5,90	2,41	6,35	2,10	-0,94
9. Factor L (Trusting vs. Suspicious)			5,53	1,53	6,65	1,94	-2,83**
10. Factor M (Practical vs. Imaginative)			6,03	2,11	6,44	2,09	-0,90
11. Factor N (Forthright vs. Shrewd)			5,37	2,00	5,33	2,16	-0,37
12. Factor O (Placid vs. Apprehensive)			5,57	1,92	6,72	2,18	-2,53*
13. Factor Q1 (Conservative vs. Experimenting)			6,17	1,84	6,59	2,04	-0,98
14. Factor Q2 (Group-dependent vs. Self-sufficient)			5,80	1,94	6,44	2,05	-1,46
15. Factor Q3 (Undisciplined Self-conflict vs. Controlled)			5,00	2,38	4,16	2,05	1,81
16. Factor Q4 (Relaxed vs. Tense)			5,63	2,09	6,68	2,35	-2,13*

* p <0,05.

** p <0,01.

Sample size for non-moody is 30 throughout.

Sample size for moody is 75 throughout.

Degrees of freedom are 103 throughout.

F_{crit} = 34,38T_{crit} = 5,86

α = 0,05

TABLE 3 HOTELLING T² TEST OF SIGNIFICANCE ON THE EDWARDS BETWEEN MOODY AND NON-MOODY DESIGNATED ON THE MAT CRITERION

Hotelling T ²	df	F-Value
36,89	15 89	2,13*

Note
 * p <0,05.
 ** p <0,01.

The Edwards Personal Preference Schedule

	Non-Moody		Moody		t
	M	STD	M	STD	
1. Achievement	54,77	28,32	59,24	28,06	-0,74
2. Deference	49,20	27,75	31,85	23,70	3,22**
3. Order	46,07	29,92	36,29	28,56	1,56
4. Exhibition	36,67	25,70	49,47	27,78	-2,18*
5. Autonomy	60,13	24,80	71,48	24,96	-2,11*
6. Affiliation	59,77	25,72	44,79	27,24	2,59*
7. Intraception	62,57	27,34	52,80	26,53	1,69
8. Succorance	65,17	25,86	60,29	27,80	0,83
9. Dominance	34,37	26,74	36,09	27,54	-0,29
10. Abasement	45,83	26,97	47,76	29,13	-0,31
11. Nurturance	69,13	19,71	57,01	27,36	2.21*
12. Change	61,70	29,82	63,51	26,78	-0,30
13. Endurance	47,70	27,55	46,09	26,97	0,27
14. Heterosexuality	46,10	26,19	59,88	24,67	-2,54*
15. Aggression	53,00	22,98	60,40	28,50	-1,27

* p <0,05.
 ** p <0,01.
 Sample size for non-moody is 30 throughout.
 Sample size for moody is 75 throughout.
 Degrees of freedom are 103 throughout.

T²_{crit} = 31,88
 T_{crit} = 5,65
 = 0,05

TABLE 4

HOTELLING T² TEST OF SIGNIFICANCE ON THE GOUGH ACL BETWEEN MOODY AND
NON-MOODY DESIGNATED ON THE MAT CRITERION

Hotelling T ²	df	F-Value
11,48	7 97	1,55

Selected Variables from The Gough Adjective Checklist

	Non-Moody		Moody		t
	M	STD	M	STD	
1. Defensiveness	42,23	11,73	37,19	10,98	2,09*
2. Ratio of Fav. to Unfav. Adj.	10,72	13,83	5,10	6,92	2,77**
3. Self-confidence	48,67	9,40	46,56	11,11	0,92
4. Self-control	45,13	12,67	40,67	10,53	1,85
5. Lability	52,93	11,67	51,08	11,92	0,72
6. Personal Adjustment	45,03	10,04	39,87	10,52	2,30*
7. Counselling Readiness	54,53	8,36	59,77	11,70	-2,23*

* p < 0,05.

** p < 0,01.

Sample size for non-moody is 30 throughout.

Sample size for moody is 75 throughout.

Degrees of freedom are 103 throughout.

TABLE 5 SUMMARY TABLE SHOWING PERSONALITY FACTORS WHICH DIFFER SIGNIFICANTLY BETWEEN MOODY AND NON-MOODY ON THE MAT CRITERION

Test	Factor	Direction of Score	Significance Level
Cattell 16 PF	Factor C (Affected by Feelings vs. Emotionally Stable)	Moody subjects score <u>low</u> (Affected by Feelings)	p < 0,05.
	Factor L (Trusting vs. Suspicious)	Moody subjects score <u>high</u> (Suspicious)	p < 0,01.
	Factor O (Placid vs. Apprehensive)	Moody subjects score <u>high</u> (Apprehensive)	p < 0,05.
	Factor Q4 (Relaxed vs. Tense)	Moody subjects score <u>high</u> (Tense)	p < 0,05.
Edwards	Deference	Moody subjects score <u>low</u> (less Deference)	p < 0,01.
	Exhibition	Moody subjects score <u>high</u> (more Exhibition)	p < 0,05.
	Autonomy	Moody subjects score <u>high</u> (more Autonomy)	p < 0,05.
	Affiliation	Moody subjects score <u>low</u> (less Affiliation)	p < 0,05.
	Nurturance	Moody subjects score <u>low</u> (less Nurturance)	p < 0,05.
	Heterosexuality	Moody subjects score <u>high</u> (more Heterosexuality)	p < 0,05.
Cough ACL	Defensiveness	Moody subjects score <u>low</u> (less Defensiveness)	p < 0,05.
	Ratio of Fav. to Unfav. Adj.	Moody subjects score <u>low</u> (Moody subjects see themselves in a less favourable light)	p < 0,01.
	Personal Adjustment	Moody subjects score <u>low</u> (less Personal Adjustment)	p < 0,05.
	Counselling Readiness	Moody subjects score <u>high</u> (more potential for counselling)	p < 0,05.

unfavourable adjectives (saw themselves in a less favourable light)

At the ,05 level of significance:

On the 16 PF -

scored higher on the dimensions Placid vs. Apprehensive, and Relaxed vs. Tense; scored lower on the dimension Affected by Feelings vs. Emotionally Stable

On the EPPS -

scored higher on the dimensions Exhibition, Autonomy and Heterosexuality; scored lower on the dimensions Affiliation and Nurturance

On the ACL -

scored higher on the dimension Counselling Readiness; scored lower on the dimensions Defensiveness and Personal Adjustment.

2. The criterion of high and low mean variability

Tables 6, 7 and 8 are presented showing the significant personality factors distinguishing "moody" from "non-moody" subjects, for subjects designated "moody" on the high and low mean variability criterion.

Table 9 is a summary table of Tables 6, 7 and 8.

Examining the second criterion of moodiness, the high and low mean variability criterion, Table 9 shows that moody subjects were distinguished from non-moody subjects at the ,01 level of significance on these dimensions:

On the 16 PF -

scored higher on the dimensions Humble vs. Assertive, and Trusting vs. Suspicious

TABLE 6

HOTELLING T² TEST OF SIGNIFICANCE ON THE CATTELL 16 PF BETWEEN MOODY AND NON-MOODY DESIGNATED IN TERMS OF HIGH AND LOW MEAN VARIABILITY CRITERION

Hotelling T ²	df	F-Value
96,14	16 17	3,19 **

Note

* p < 0,05.

** p < 0,01.

The Cattell 16 PF

	Non-Moody		Moody		t
	M	STD	M	STD	
1. Factor A (Reserved vs. Outgoing)	5,32	2,06	5,71	2,11	-0,49
2. Factor B (Less Intelligent vs. More Intelligent)	6,24	1,60	5,65	2,42	0,84
3. Factor C (Affected by Feelings vs. Emotionally Stable)	5,59	2,55	4,29	1,93	1,67
4. Factor E (Humble vs. Assertive)	5,00	2,09	7,53	1,97	-3,63**
5. Factor F (Sober vs. Happy-go-lucky)	5,24	1,61	6,35	1,54	-2,07*
6. Factor G (Expedient vs. Conscientious)	4,41	1,73	3,94	2,30	0,67
7. Factor H (Shy vs. Venturesome)	4,65	1,80	6,00	2,12	-2,00
8. Factor I (Tough-minded vs. Tender-minded)	5,65	2,09	6,59	2,15	-1,29
9. Factor L (Trusting vs. Suspicious)	5,29	1,45	7,53	1,59	-4,29**
10. Factor M (Practical vs. Imaginative)	6,71	2,05	5,88	1,65	1,29
11. Factor N (Forthright vs. Shrewd)	5,47	2,07	4,59	2,27	1,19
12. Factor O (Placid vs. Apprehensive)	5,82	2,56	7,12	2,12	-1,61
13. Factor Q1 (Conservative vs. Experimenting)	6,71	1,40	7,47	2,24	-1,19
14. Factor Q2 (Group-dependent vs. Self-sufficient)	6,53	1,97	5,88	2,00	0,95
15. Factor Q3 (Undisciplined Self-conflict vs. Controlled)	5,65	2,18	4,12	1,90	2,18*
16. Factor Q4 (Relaxed vs. Tense)	5,47	2,72	7,53	1,59	-2,70*

* p < 0,05.

** p < 0,01.

Sample size for non-moody is 17 throughout.

Sample size for moody is 17 throughout.

Degrees of freedom are 32 throughout.

T²_{crit} = 72,39T_{crit} = 8,51

= 0,05

TABLE 7 HOTELLING T² TEST OF SIGNIFICANCE ON THE EDWARDS BETWEEN MOODY AND NON-MOODY DESIGNATED IN TERMS OF HIGH AND LOW MEAN VARIABILITY CRITERION

Hotelling T ²	df	F-Value
44,32	15 18	1,66

The Edwards Personal Preference Schedule

	Non-Moody		Moody		t
	M	STD	M	STD	
1. Achievement	51,29	24,50	59,65	29,83	-0,89
2. Deference	51,88	27,82	23,41	21,83	3,32**
3. Order	43,94	28,63	41,18	29,47	0,28
4. Exhibition	34,59	20,75	58,65	25,63	-3,01**
5. Autonomy	56,82	22,52	68,82	30,38	-1,31
6. Affiliation	54,24	30,28	47,12	29,53	0,69
7. Intraception	62,47	21,23	55,76	26,31	0,82
8. Succorance	57,18	27,96	59,41	26,60	-0,24
9. Dominance	38,18	27,49	41,00	29,11	-0,29
10. Abasement	47,12	31,26	46,29	27,40	0,08
11. Nurturance	62,35	23,05	43,29	27,59	2,19*
12. Change	59,71	30,01	63,71	33,21	-0,37
13. Endurance	56,76	29,19	54,29	27,63	0,25
14. Heterosexuality	45,94	26,57	64,76	27,27	-2,04*
15. Aggression	56,06	25,57	68,06	24,85	-1,39

* p <0,05.

** p <0,01.

Sample size for non-moody is 17 throughout.

Sample size for moody is 17 throughout.

Degrees of freedom are 32 throughout.

TABLE 8

HOTELLING T^2 TEST OF SIGNIFICANCE ON THE GOUGH ACL BETWEEN MOODY AND NON-MOODY DESIGNATED IN TERMS OF HIGH AND LOW MEAN VARIABILITY CRITERION

Hotelling T^2	df	F-Value
34,51	7 26	4,01**

Note

* $p < 0,05$.

** $p < 0,01$.

Selected Variables from The Gough Adjective Checklist

	Non-Moody		Moody		t
	M	STD	M	STD	
1. Defensiveness	47,00	9,68	33,35	12,22	3,61**
2. Ratio of Fav. to Unfav. Adj.	12,55	13,53	3,47	4,57	2,62
3. Self-confidence	50,29	12,31	47,88	11,30	0,60
4. Self-control	47,88	11,23	34,59	9,91	3,66**
5. Lability	52,94	11,17	50,47	12,75	0,60
6. Personal Adjustment	49,18	8,85	35,47	9,43	4,37**
7. Counselling Readiness	54,29	8,10	63,18	10,28	-2,80**

* $p < 0,05$.

** $p < 0,01$.

Sample size for non-moody is 17 throughout.

Sample size for moody is 17 throughout.

Degrees of freedom are 32 throughout.

$T^2_{crit} = 33,92$
 $T_{crit} = 5,82$
 $\alpha = 0,05$

TABLE 8

HOTELLING T² TEST OF SIGNIFICANCE ON THE GOUGH ACL BETWEEN MOODY AND NON-MOODY DESIGNATED IN TERMS OF HIGH AND LOW MEAN VARIABILITY CRITERION

Hotelling T ²	df	F-Value
34,51	7 26	4,01**

Note

* p < 0,05.

** p < 0,01.

Selected Variables from The Gough Adjective Checklist

	Non-Moody		Moody		t
	M	STD	M	STD	
1. Defensiveness	47,00	9,68	33,35	12,22	3,61**
2. Ratio of Fav. to Unfav. Adj.	12,55	13,53	3,47	4,57	2,62
3. Self-confidence	50,29	12,31	47,88	11,30	0,60
4. Self-control	47,88	11,23	34,59	9,91	3,66**
5. Liability	52,94	11,17	50,47	12,75	0,60
6. Personal Adjustment	49,18	8,85	35,47	9,43	4,37**
7. Counselling Readiness	54,29	8,10	63,18	10,28	-2,80**

* p < 0,05.

** p < 0,01.

Sample size for non-moody is 17 throughout.

Sample size for moody is 17 throughout.

Degrees of freedom are 32 throughout.

T²_{crit} = 33,92
T_{crit} = 5,82
= 0,05

TABLE 9 SUMMARY TABLE SHOWING PERSONALITY FACTORS WHICH DIFFER SIGNIFICANTLY BETWEEN MOODY AND NON-MOODY IN TERMS OF HIGH AND LOW MEAN VARIABILITY CRITERION

Test	Factor	Direction of Score	Significance Level
Cattell 16 PF	Factor E (Humble vs. Assertive)	Moody subjects score <u>high</u> (Assertive)	p <0,01.
	Factor F (Sober vs. Happy-go-lucky)	Moody subjects score <u>high</u> (Happy-go-lucky)	p <0,05.
	Factor L (Trusting vs. Suspicious)	Moody subjects score <u>high</u> (Suspicious)	p <0,01.
	Factor Q3 (Undisciplined Self-conflict vs. Controlled)	Moody subjects score <u>low</u> (Undisciplined self-conflict)	p <0,05.
	Factor Q4 (Relaxed vs. Tense)	Moody subjects score <u>high</u> (Tense)	p <0,05.
Edwards EPPS	Deference	Moody subjects score <u>low</u> (less Deference)	p <0,01.
	Exhibition	Moody subjects score <u>high</u> (more Exhibition)	p <0,01.
	Nurturance	Moody subjects score <u>low</u> (less Nurturance)	p <0,05.
	Heterosexuality	Moody subjects score <u>high</u> (more Heterosexuality)	p <0,05.
Gough ACL	Defensiveness	Moody subjects score <u>low</u> (less Defensiveness)	p <0,01.
	Ratio of Fav. to Unfav. Adj.	Moody subjects score <u>low</u> (Moody subjects see themselves in a less favourable light)	p <0,01.
	Self-control	Moody subjects score <u>low</u> (less Self-control)	p <0,01.
	Personal Adjustment	Moody subjects score <u>low</u> (less Personal Adjustment)	p <0,01.
	Counselling Readiness	Moody subjects score <u>high</u> (more potential for counselling)	p <0,01.

On the EPPS -

scored higher on the dimension Exhibition; scored lower on the dimension Deference

On the ACL -

scored higher on the dimension Counselling Readiness; scored lower on the dimensions Defensiveness, Ratio of favourable to unfavourable adjectives (saw themselves in a less favourable light), Self-Control and Personal Adjustment

At the ,05 level of significance:

On the 16PF -

scored higher on the dimension Sober vs. Happy-go-lucky, and Relaxed vs. Tense; scored lower on the dimension Undisciplined Self-Conflict vs. Controlled

On the EPPS -

scored higher on the dimension Heterosexuality; scored lower on the dimension Nurturance

On the ACL -

showed no differences at the ,05 level of significance

Table 10 is an overall summary table that shows significant personality variables common and unique to the two criteria of moodiness.

Examining Table 10 (the following page), it can be seen that scores for personality variables unique to the self-opinion criterion (MAT criterion) are:

On the 16PF -

lower on Affected by Feelings vs. Emotionally Stable; higher on Placid vs. Apprehensive

On the EPPS -

higher on Autonomy; lower on Affiliation

TABLE 10

SUMMARY TABLE SHOWING SIGNIFICANT PERSONALITY VARIABLES COMMON AND UNIQUE TO THE TWO CRITERIA OF MOODINESS

Test	MAT Criterion (self-opinion)	High and Low Mean Variability Criterion
Factors Common		
16 PF	scored high on Trusting vs. Suspicious ** scored high on Relaxed vs. Tense *	scored high on Trusting vs. Suspicious ** scored high on Relaxed vs. Tense *
EPPS	scored higher on Exhibition * scored lower on Deference ** scored lower on Nurturance * scored higher on Heterosexuality *	scored higher on Exhibition** scored lower on Deference ** scored lower on Nurturance * scored higher on Heterosexuality *
ACL	scored lower on Defensiveness * scored lower on the Ratio of Favourable to Unfavourable Adjectives (saw themselves in a less favourable light) ** scored lower on Personal Adjustment * scored higher on Counselling Readiness *	scored lower on Defensiveness ** scored lower on the Ratio of Favourable to Unfavourable Adjectives (saw themselves in a less favourable light) ** scored lower on Personal Adjustment ** scored higher on Counselling Readiness **
Factors Unique		
16 PF	scored lower on Affected by Feelings vs. Emotionally Stable ** scored higher on Placid vs. Apprehensive *	scored higher on Humble vs. Assertive ** scored higher on Sober vs. Happy-go-lucky * scored lower on Undisciplined Self-Conflict vs. Controlled *
EPPS	scored higher on Autonomy * scored lower on Affiliation *	-
ACL	-	scored lower on Self-Control **

Note:

* p < 0,05.

** p < 0,01.

On the ACL -
no personality variables unique.

For the high and low mean variability criterion, scores for personality variables unique are:

On the 16 PF -
higher on Humble vs. Assertive; higher on Sober vs. Happy-go-lucky; lower on Undisciplined Self-Conflict vs. Controlled

On the EPPS -
no personality variables unique

On the ACL -
lower on Self-Control.

Scores on personality variables common to both the self-opinion criterion and the high and low mean variability criterion are:

On the 16 PF -
higher on Trusting vs. Suspicious; higher on Relaxed vs. Tense

On the EPPS -
higher on Exhibition; higher on Heterosexuality; lower on Deference; lower on Nurturance

On the ACL -
lower on the Ratio of favourable to unfavourable adjectives (saw themselves in a less favourable light); lower on Defensiveness; lower on Personal Adjustment; higher on Counselling Readiness.

Acceptance or Rejection of Hypotheses

These results, Tables 2-10, show that the two different criteria of moodiness each establishes a different pattern of significant

personality variables (although there are common variables). Hence the Null Hypothesis (4.1.1.1) that the different criteria of moodiness will not yield different patterns of significant personality variables, is rejected.

It has been shown that "moody" subjects can be distinguished from "non-moody" subjects in terms of personality variables revealed by standard tests and that different criteria of moodiness are significantly correlated with different sets of personality variables. Hence the experimental data is consonant with the experimental hypothesis.

SECTIONS 4.2 - 4.5

In the sections that follow evidence is accumulated for the case that the Mood Analysis Technique (MAT) has a determinate and specifiable effect on moods. The evidence is not absolutely conclusive, but it is believed to be sufficiently persuasive to suggest that the MAT does globally influence mood (section 4.2), that it influences mood in ways different from the other experimental sessions (section 4.3), and that in particular it has a positive effect on moods classified as "negative" (section 4.5).

4.2 Absolute Magnitude of Mood Change across the Four Experimental Sessions

Description

This section examines the mean absolute magnitude of change scores, i.e. the total amount of change on the 12 Nowlis Mood Factors irrespective of sign (increase or decrease of magnitude) for each of the four experimental sessions. It may be the case that Session 2, the experimenter administered Mood Analysis Technique (MAT) designed both as a probe to elicit basic information concerning subjects' mood and as a modifier of negative moods, will have a greater effect on all types of mood across all the twelve Nowlis Mood Dimensions; or its effect may be more specific, i.e. a modification of specific mood dimensions for specific moods. At this point in the analysis it will be suggested that the effect of Session 2, the experimenter administered Mood Analysis Technique, may be a global effect. This global effect is formulated in terms of four hypotheses given below.

Summary of Findings

1. There is an overall difference in absolute magnitude of change between the four experimental group means at the 0,01 level of significance (Table 11).
2. Across the four experimental sessions (N=105), Session 2, the experimenter administered Mood Analysis Technique (MAT) has a greater mean absolute magnitude of change than Session 3 or 4. This is established at the 0,01 level of significance. However, Session 2 is not statistically distinguishable from

Session 1, the personality testing session (Table 12).

Hypotheses

4.2.1.1 Null Hypothesis H_0 :

It is hypothesized that the mean absolute magnitude of change score for Session 2, the experimenter administered Mood Analysis Technique (MAT) will not differ from the mean absolute magnitude of change score for Session 1, the personality testing session.

4.2.1.2 Alternative Hypothesis H_1 :

It is hypothesized that Session 2, the experimenter administered Mood Analysis Technique (MAT), will have a different mean absolute magnitude of change score than Session 1, the personality testing session.

4.2.1.3 Null Hypothesis H_0 :

It is hypothesized that the mean absolute magnitude of change score for Session 2, the experimenter administered Mood Analysis Technique (MAT) will not differ from the mean absolute magnitude of change score for Session 3, the quiet activities session.

4.2.1.4 Alternative Hypothesis H_1 :

It is hypothesized that Session 2, the experimenter administered Mood Analysis Technique (MAT), will have a different mean absolute magnitude of change score than Session 3, the quiet activities session.

4.2.1.5 Null Hypothesis H_0 :

It is hypothesized that the mean absolute magnitude of change score for Session 2, the experimenter administered Mood Analysis Technique (MAT), will not differ from the mean absolute magnitude of change score for

Session 4, the self-administered Mood Analysis Technique.

4.2.1.6 Alternative Hypothesis H_1 :

It is hypothesized that Session 2, the experimenter administered Mood Analysis Technique (MAT), will have a different mean absolute magnitude of change score than Session 4, the self-administered Mood Analysis Technique.

Results

Table 11 presents the mean absolute magnitude of change scores for each of the four experimental sessions and the one-way analysis of variance with repeated measures. The F-statistic was found to be significant at the 0,01 level of significance.

Table 12 presents the pair-wise differences.

TABLE 11 ONE-WAY ANALYSIS OF VARIANCE WITH REPEATED MEASURES ON MEAN ABSOLUTE MAGNITUDE OF CHANGE SCORES COMPARING THE FOUR EXPERIMENTAL SESSIONS (See Appendix D, Tables G-J for data)

Table of Means

Treatment Group	1	2	3	4
Mean	17,93	17,06	13,86	13,09

Analysis of Variance

Source	df	S.S	M.S	F-Value
Between Groups	3	1771,61	590,54	8,67**
Within Groups	416	28349,27	68,15	

Note:

- * p<0,05.
- ** p<0,01.

TABLE 12 SUMMARY TABLE OF SIGNIFICANT PAIR-WISE DIFFERENCES BETWEEN THE MEAN ABSOLUTE MAGNITUDE OF CHANGE SCORES ON THE FOUR EXPERIMENTAL SESSIONS

Direction	t-Value
1 > 3	-3,71**
1 > 4	-4,35**
2 > 3	-2,75**
2 > 4	-3,37**

Note:

- * p<0,05.
- ** p<0,01.
- Sample size is 105 throughout.
- df are 208 throughout.

Table 11 has shown that there is a statistically significant difference in mean absolute magnitude of change scores across the four experimental sessions.

Table 12 has shown that Session 1, the personality testing session, and Session 2, the experimenter administered Mood Analysis Technique (MAT), have a greater mean absolute magnitude of change scores than Session 3, the quiet activities session and Session 4, the self-administered MAT.

Acceptance or Rejection of Hypotheses

Across the four experimental sessions:

Hypothesis 4.2.1.1 that the mean absolute magnitude of change score for Session 2, the experimenter administered Mood Analysis Technique (MAT), will not differ from the mean absolute magnitude of change score for Session 1, the personality testing session, is accepted.

Hypothesis 4.2.1.2 that the mean absolute magnitude of change score for Session 2, the experimenter administered Mood Analysis Technique (MAT), will not differ from the mean absolute magnitude of change score for Session 3, the quiet activities session, is rejected.

The experimental results indicate that Session 2 had a greater mean absolute magnitude of change score than Session 3.

Hypothesis 4.2.1.5 that the mean absolute magnitude of change score for Session 2, the experimenter administered Mood Analysis Technique (MAT), will not differ from the mean absolute magnitude of change score for Session 4, the self-administered Mood Analysis Technique, is rejected.

The experimental results indicate that Session 2 had a greater mean absolute magnitude of change score than Session 4.

The experimental results have shown that Session 2 has a global effect on mood greater than two of the other three experimental sessions.

In summary: In terms of global effect on mood, Session 2, the experimenter administered Mood Analysis Technique (MAT) is distinguished from Sessions 3 and 4 by its greater global effect. However, Session 2 cannot be statistically distinguished from Session 1. Since Session 2 and Session 1 both showed a high absolute magnitude of change score relative to the other sessions, each of the 12 Nowlis Mood Factors will be examined individually to determine more precisely the nature of the effect of Sessions 1 and 2. In addition, attention will be given to Session 4 in comparison with Session 2, to indicate the effect of a self-administration of the MAT.

4.3 Analysis of Mood Change on the Twelve Nowlis Mood Factors across the Four Experimental Sessions

Description

In this section both the magnitude of change scores (section 4.31) and the component change scores (section 4.32) on the 12 Nowlis Mood Factors will be considered (see Appendix D and E for data). This will indicate the effect of Session 2, the experimenter administered Mood Analysis Technique (MAT) in terms of mean increase or mean decrease on particular mood dimensions (the Nowlis Mood Factors) in comparison with the three other experimental sessions. It does not, however, indicate the effect of Session 2 on different types of mood. This will be considered in section 4.5.

Summary of Findings

(a) Magnitude of Change Scores

1. There is an overall difference in group means across the four experimental sessions at the 0,01 level of significance (Table 13).
2. The individual Nowlis Mood Factors were tested for significance by calculating the 95% simultaneous confidence

intervals (see Table 14). None of these factors were found to be different. However, since the MANOVA was significant, there exists at least one contrast of factors which is significant. As this would be difficult to interpret, one-way anovas were computed for each factor to give an indication of which factors are contributing to this overall difference (Tables 15 and 16).

3. Across the four experimental sessions, where N=105, the Nowlis Mood Factors statistically distinguishing the experimental sessions were:
Aggression, Surgency, Social Affection, Sadness, Egotism and Scepticism (Table 15).
4. Focusing on Session 2, the experimenter administered Mood Analysis Technique (MAT), in summary it was found:
Session 2 increased the mood dimensions Aggression, Social Affection, Sadness and Egotism; and showed a lesser decrease in Surgency and Scepticism.
5. Focusing on Session 4, the self-administered Mood Analysis Technique, in summary it was found: Session 4 increased the mood dimensions Aggression, Sadness, Egotism and Scepticism; and showed a lesser decrease in Surgency and Social Affection.

(b) Component Change Scores (Results appear in Tables 17-40)

1. For Factor 1 (Aggression) Sessions 2 and 4 resulted in significantly more new components than Session 3.
Session 2 was also significantly higher in number of new components than Session 1. Hence Session 2 in particular had the ability to generate new components.
2. For Factor 2 (Anxiety) Session 2 was found to be the most active experimental session in terms of influencing this mood dimension. It had the ability both to generate new components and to make components disappear.
3. For Factor 3 (Surgency) Session 2 was not significantly distinguished from Sessions 3 and 4. However, when compared with Session 1, it showed a greater number of new components and fewer components disappeared.
Session 4 also showed fewer components disappeared than

Session 1.

4. For Factor 4 (Elation) no variables were significant.
5. For Factor 5 (Concentrating) no variables were significant.
6. For Factor 6 (Fatigue) Session 4 showed significantly less total change than the other experimental sessions.
7. For Factor 7 (Vigour) Session 2 showed more components decreased than on Session 1.
8. For Factor 8 (Social Affection) Session 2 had the ability to generate more new components than any of the other experimental sessions. In addition Session 2 showed more total change than Sessions 3 and 4. Session 4 showed less total change than Session 1.
In general, Session 2 was the most influential session in affecting Social Affection. It did so by generating more new components.
9. For Factor 9 (Sadness) Session 2 showed more total change in components than Sessions 3 and 4. Session 2 showed more new components than Session 1. Session 1 was significant in that it showed more components disappeared than any of the other experimental sessions.
In general, Session 2 was the most influential session in affecting the mood dimension Sadness. Its influence can be related both to increasing components and to bringing new components into existence. Session 4 was relatively ineffectual in influencing this mood dimension.
10. For Factor 10 (Egotism) Sessions 2 and 4 were both different from Session 1 in terms of generating more new components and showing fewer components disappeared. Session 2 showed more new components than Session 3. Session 4 showed both fewer components disappeared and more new components than Session 3.
In general, Sessions 2 and 4 increased Egotism by generating new components. In particular Session 4 is unusual in that it both showed fewer components disappeared as well as generating new components.
11. For Factor 11 (Deactivation) Session 4 showed less total change than any of the other experimental sessions.

Examining the other variables: Session 4 showed fewer components decreased than any of the other experimental sessions. Both Session 2 and Session 1 showed more components disappeared than Sessions 3 and 4.

In general, Session 4 showed less overall effect on this factor than the other experimental sessions; it showed fewer components decreased than any of the other experimental sessions, and fewer components disappeared than Sessions 1 and 2. This can perhaps be viewed as a stabilization effect of Session 4 on the initial level of Deactivation.

12. For Factor 12 (Scepticism) Session 2 showed more total change than Session 3, but less total change than Session 1. Session 4 also showed less total change than Session 1. Examining the other variables: Session 3 showed fewer components decreased than any of the other experimental sessions. Both Sessions 2 and 4 showed fewer components disappeared than Session 1. In addition Session 4 showed fewer components disappeared than Session 2.
- In general, Sessions 2 and 4 showed less overall effect on this factor than Session 1. However Session 2 did show more total change than Session 3. Sessions 2 and 4 showed more components decreased than Session 3. Session 2 showed more components disappeared than Session 4, but fewer components disappeared than Session 1.

Hypotheses

4.3.1.1 Null Hypothesis H_0 :

It is hypothesized that Session 2, the experimenter administered Mood Analysis Technique (MAT), will not differ from Session 4, the self-administered Mood Analysis Technique, in terms of

- (a) the magnitude of change scores on the 12 Nowlis Mood Factors of the Nowlis Mood Adjective Check List, MACL, and
- (b) the number of mood components increased, decreased, disappeared, new and total change in mood components.

4.3.1.2 Alternative Hypothesis H_1 :

It is hypothesized that Session 2, the experimenter administered Mood Analysis Technique (MAT), will be different from Session 4, the self-administered Mood Analysis Technique, in terms of

- (a) the magnitude of change scores on the 12 Nowlis Mood Factors of the Nowlis Mood Adjective Check List, MACL, and
- (b) the number of mood components increased, decreased, disappeared, new and total change in mood components.

4.3.1.3 Null Hypothesis H_0 :

It is hypothesized that Session 2, the experimenter administered Mood Analysis Technique (MAT), will not differ from Session 1, the personality testing session, and Session 3, the quiet activities session, in terms of

- (a) the magnitude of change scores on the 12 Nowlis Mood Factors of the Nowlis Mood Adjective Check List, MACL, and
- (b) the number of mood components increased, decreased, disappeared, new and total change in mood components.

4.3.1.4 Alternative Hypothesis H_1 :

It is hypothesized that Session 2, the experimenter administered Mood Analysis Technique (MAT), will be different from Session 1, the personality testing session, and Session 3, the quiet activities session, in terms of

- (a) the magnitude of change scores on the 12 Nowlis Mood Factors of the Nowlis Mood Adjective Check List, MACL, and
- (b) the number of mood components increased, decreased, disappeared, new and total change in mood components.

4.3.1.5 Null Hypothesis H_0 :

It is hypothesized that Session 4, the self-administered

Mood Analysis Technique, will not differ from Session 1, the personality testing session, and Session 3, the quiet activities session, in terms of

- (a) the magnitude of change scores on the 12 Nowlis Mood Factors of the Nowlis Mood Adjective Check List, MACL, and
- (b) the number of mood components increased, decreased, disappeared, new and total change in mood components.

4.3.1.6 Alternative Hypothesis H_1 :

It is hypothesized that Session 4, the self-administered Mood Analysis Technique, will be different from Session 1, the personality testing session, and Session 3, the quiet activities session, in terms of

- (a) the magnitude of change scores on the 12 Nowlis Mood Factors of the Nowlis Mood Adjective Check List, MACL, and
- (b) the number of mood components increased, decreased, disappeared, new and total change in mood components.

Results

4.31 Magnitude of Change Scores

Table 13 presents the calculated U-statistic (see section 3.332, and Morrison 1967, p.179) for the one-way multivariate analysis of variance with repeated measures which compare the four experimental sessions on the mean magnitude of change scores on the twelve Nowlis factors simultaneously. The appropriate F-statistic, calculated from the U-statistic, was found to be significant at the 0,01 level.

TABLE 13

ONE-WAY MULTIVARIATE ANALYSIS OF VARIANCE WITH REPEATED MEASURES COMPARING THE FOUR SESSIONS ON THE MAGNITUDE OF CHANGE SCORES ON THE 12 NOWLIS FACTORS SIMULTANEOUSLY (See Appendix D, Tables G-J for data)

	Table of Means				Overall Mean
	1	2	3	4	
Factor 1 (Aggression)	-0,39	0,01	-0,64	0,03	-0,25
2 (Anxiety)	-0,55	-0,15	-0,49	-0,02	-0,30
3 (Surgency)	-0,97	-0,08	-0,18	-0,39	-0,40
4 (Elation)	-0,50	-0,08	-0,23	-0,34	-0,29
5 (Concentrating)	0,39	0,33	0,10	0,57	0,34
6 (Fatigue)	0,30	-0,01	0,70	0,26	0,31
7 (Vigour)	-0,70	-0,28	-0,84	-0,36	-0,54
8 (Social Affection)	-0,91	0,06	-0,18	-0,29	-0,33
9 (Sadness)	-0,60	0,16	-0,09	0,11	-0,10
10 (Egotism)	-0,34	0,17	-0,26	0,21	-0,05
11 (Deactivation)	-0,18	-0,10	0,35	0,36	0,11
12 (Scepticism)	-1,01	-0,31	-0,29	0,09	-0,38

Analysis of Variance			
U-Statistic	df	Approximate F-Statistic	df
0,77	12	3,00**	36
	3		1197,35
	416		

Note:
 * p<0,05.
 ** p<0,01.
 Sample size is 105 throughout.

Table 13 has shown that the four experimental sessions are different overall in terms of the mean magnitude of change scores on the twelve Nowlis factors simultaneously, at the 0,01 level of significance.

The F-statistic calculated in the MANOVA, for the magnitude of change scores on the 12 Nowlis Mood Factors simultaneously across the four experimental sessions was statistically significant. This indicates that the four experimental sessions differ on the 12 Nowlis Mood Factors simultaneously. The individual Nowlis Factors can now be tested for significance by calculating the 95% simultaneous confidence intervals, where width of the confidence interval =

$$\sqrt{\frac{X_{\alpha}}{1 - X_{\alpha}} e_{ii} \left(\frac{1}{N_j} + \frac{1}{N_{j+1}} \right)}$$

Note: X_{α} is the critical value of X taken from the Heck charts.

$e_{ii} = SS_E$ taken from the appropriate Anova table
(Appendix D, Table K).

N_j is the number of observations in the jth group.

The following table summarizes the common components and the width of the confidence intervals for each factor calculated from the critical $x_{0,05}$ taken from Heck charts (Morrison, 1967, p.314). In this procedure, if a difference between any two group means (here means for the experimental sessions) on a factor is smaller than the width of the confidence interval, then the two groups do not differ on this factor. If a difference between two group means on a factor is greater than the width of the confidence interval, then the two groups differ on this factor.

Table 14 presents the common components and simultaneous confidence intervals for the twelve Nowlis Mood Factors across the four experimental sessions.

TABLE 14 COMMON COMPONENTS AND SIMULTANEOUS CONFIDENCE INTERVALS FOR THE TWELVE NOWLIS MOOD FACTORS ACROSS THE FOUR EXPERIMENTAL SESSIONS

Factor	$\sqrt{e_{ii}} = \sqrt{SS_E}$	Interval width ($0,0393 \sqrt{e_{ii}}$)
1. Aggression	35,48	1,39
2. Anxiety	35,12	1,38
3. Surgency	42,65	1,68
4. Elation	45,23	1,78
5. Concentrating	46,59	1,83
6. Fatigue	49,53	1,95
7. Vigour	48,49	1,91
8. Social Affection	42,22	1,66
9. Sadness	32,78	1,29
10. Egotism	24,74	0,97
11. Deactivation	50,03	1,97
12. Scepticism	33,43	1,31

$\alpha = 0,05$

$x_{0,05; s,m,n} = x_{0,05; 3,4,201} = 0,075$

From Table 14 it can be seen that none of the factors were found to be significantly different. However, since the MANOVA was significant, there is at least one contrast of factors which is significant. As this would be difficult to interpret, one-way anovas were computed for each factor to give an indication of which factors were contributing to the overall difference. This is detailed in Table 15.

Table 15 presents the means of magnitude of change scores on the twelve Nowlis Mood Factors and the F-values from the one-way analysis of variance, across the four experimental sessions.

TABLE 15 MEANS OF MAGNITUDE OF CHANGE SCORES ACROSS THE FOUR SESSIONS ON THE 12 NOWLIS FACTORS AND F-VALUES FROM THE ONE-WAY ANALYSIS OF VARIANCE ON MAGNITUDE OF CHANGE FOR EACH FACTOR

(See Appendix D, Tables G-K, for data and Anova Tables)

Factor	Session				Overall Mean	F-Value
	1	2	3	4		
1 (Aggression)	-0,39	0,01	-0,64	0,03	-0,25	3,65*
2 (Anxiety)	-0,55	-0,15	-0,49	-0,02	-0,30	2,35
3 (Surgency)	-0,97	-0,08	-0,18	-0,39	-0,40	3,84**
4 (Elation)	-0,50	-0,08	-0,23	-0,34	-0,29	0,67
5 (Concentrating)	0,39	0,33	0,10	0,57	0,34	0,78
6 (Fatigue)	0,30	-0,01	0,70	0,26	0,31	1,55
7 (Vigour)	-0,70	-0,28	-0,84	-0,36	-0,54	1,33
8 (Social Affection)	-0,91	0,06	-0,18	-0,29	-0,33	4,21**
9 (Sadness)	-0,60	0,16	-0,09	0,11	-0,10	4,94**
10 (Egotism)	-0,34	0,17	-0,26	0,21	-0,05	5,83**
11 (Deactivation)	-0,18	-0,10	0,35	0,36	0,11	1,45
12 (Scepticism)	-1,01	-0,31	-0,29	0,09	-0,38	8,16**

Note:

* $p < 0,05$.

** $p < 0,01$.

Sample size is 105 throughout.

Degrees of freedom are 3 and 416.

Table 15 has shown that statistically significant differences exist on the 12 Nowlis Mood Factors in terms of mean magnitude of change across the four experimental sessions. Factors significant at the 0,01 level are: Surgency, Social Affection, Sadness, Egotism and Scepticism. The factor Aggression is significant at the 0,05 level of significance.

Table 16 is the summary table presenting the significant inter-session comparisons for each significant Nowlis Mood Factor, as derived from the analysis of variance.

(See Appendix D, Table K, for the analysis of variance).

TABLE 16

SUMMARY TABLE SHOWING SIGNIFICANT MAGNITUDE OF CHANGE SCORE
COMPARISONS ACROSS THE FOUR SESSIONS ON THE 12 NOWLIS FACTORS
(See Appendix D, Table K, for the analysis of variance tables)

Factor	F-Value	Direction	t-Value
1 (Aggression)	3,65*	Session 2 shows an increase and Session 3 shows a decrease	-2,66**
		Session 3 shows a decrease and Session 4 shows an increase	2,99**
3 (Surgency)	3,84**	Session 1 shows a greater decrease than Session 2	3,05**
		Session 1 shows a greater decrease than Session 3	2,71**
		Session 1 shows a greater decrease than Session 4	2,15*
8 (Social Affection)	4,21**	Session 2 shows an increase and Session 1 shows a decrease	3,18**
		Session 1 shows a greater decrease than Session 3	2,73**
		Session 1 shows a greater decrease than Session 4	2,28*
9 (Sadness)	4,94**	Session 2 shows an increase and Session 1 shows a decrease	3,34**
		Session 1 shows a greater decrease than Session 3	2,68**
		Session 4 shows an increase and Session 1 shows a decrease	3,21**
10 (Egotism)	5,83**	Session 2 shows an increase and Session 1 shows a decrease	2,90**
		Session 2 shows an increase and Session 3 shows a decrease	-2,43*
		Session 3 shows a decrease and Session 4 shows an increase	2,97**
		Session 4 shows an increase and Session 1 shows a decrease	3,49**
12 (Scepticism)	8,16**	Session 1 shows a greater decrease than Session 2	2,61**
		Session 1 shows a greater decrease than Session 3	3,18**
		Session 1 shows a decrease and Session 4 shows an increase	4,35**
		Session 4 shows an increase and Session 3 shows a decrease	2,11*

Note:

* $p < 0,05$.

** $p < 0,01$.

Sample size is 105 throughout.

Degrees of freedom are 208.

Table 16 has presented the summary of the significant inter-session differences on the significant Nowlis Mood Factors, in terms of change on magnitude scores. Focusing on Sessions 2 and 4 it can be seen that:

In particular Session 2, the experimenter administered Mood Analysis Technique (MAT), was found to increase Aggression when compared with Session 3 ($p < 0,01$); to show a lesser decrease on Surgency than Session 1 ($p < 0,01$); to increase Social Affection when compared with Session 1 ($p < 0,01$); to increase Sadness when compared with Session 1 ($p < 0,01$); to increase Egotism when compared with Sessions 1 ($p < 0,01$); and 3 ($p < 0,05$); and showed a lesser decrease in Scepticism when compared with Session 1 ($p < 0,01$).

In summary, Session 2, the experimenter administered Mood Analysis Technique, was found to increase the mood dimensions Aggression, Social Affection, Sadness and Egotism; and to show a lesser decrease in Surgency and Scepticism.

In particular Session 4, the self-administered Mood Analysis Technique (MAT), was found: to show an increase in Aggression when compared with Session 3 ($p < 0,01$); to show a lesser decrease in Surgency when compared with Session 1 ($p < 0,05$); to show a lesser decrease in Social Affection than Session 1 ($p < 0,05$); to show an increase in Sadness when compared with Session 1 ($p < 0,01$); to show an increase in Egotism when compared with Sessions 1 ($p < 0,01$) and 3 ($p < 0,01$); and to show an increase in Scepticism when compared with Sessions 1 ($p < 0,01$) and 3 ($p < 0,05$).

In summary, Session 4, the self-administered Mood Analysis Technique, was found to increase the mood dimensions Aggression, Sadness, Egotism and Scepticism; and to show a lesser decrease in the mood dimensions Surgency and Social Affection.

Hence although Session 2 cannot be distinguished from Session 1 in terms of absolute magnitude of mood change, an examination of the individual Nowlis Mood Factors establishes that Session 2 (relative to Session 1) shows an increase in the mood factors Social Affection, Sadness and Egotism; and a lesser decrease in the mood factors Surgency and Scepticism.

4.32 Component Changes

In this section the component changes on the twelve Nowlis Mood Factors across the four experimental sessions are presented. It is important to examine the component changes because there can be no change in magnitude, i.e. zero magnitude change on a factor and this can be due to one component appearing for the first time and a different component disappearing; in this case there is internal change on the factor but no magnitude change. Similarly, an increase in one component can be offset by a decrease in another component of the same factor. This type of change can be detected only by examining factor components.

The fact that there can be significant differences in component changes between experimental sessions, which do not result in significant magnitude of change scores, is shown in Table 18 below. This table shows that Session 2 is different from Session 1 on the factor Aggression, in terms of Session 2 showing more new components, but this does not result in a significant difference in magnitude change. The reason for this can be seen by examining Table 17, i.e. Session 1 on average shows more components decreased and more components disappeared than Session 2.

Tables 17-40 present the means of component changes and the summary tables of significant component changes and significant inter-session comparisons across the four experimental sessions (see Appendix E, Tables L and M for data and analysis of variance tables).

For Factor 1 (Aggression) Tables 17 and 18 present the means of component changes across the four experimental sessions and the summary of significant changes in components across the four experimental sessions, as derived from the analysis of variance (see Appendix E, Table M, for details of the analysis).

TABLE 17

FACTOR 1 (AGGRESSION)

TABLE OF MEANS OF COMPONENT CHANGES ACROSS THE FOUR EXPERIMENTAL SESSIONS
(See Appendix E, Table M for details of the analysis)

Session	1	2	3	4	Overall Mean	F-Value
Number of Components Increased	0,04	0,07	0,01	0,07	0,05	1,17
Number of Components Decreased	0,10	0,06	0,12	0,09	0,09	0,69
Number of Components Disappeared	0,39	0,31	0,31	0,20	0,30	1,57
Number of New Components	0,13	0,31	0,07	0,19	0,17	4,58**
Total Change	0,66	0,74	0,51	0,54	0,61	1,58

Note:

* $p < 0,05$.

** $p < 0,01$.

Sample size is 105 throughout.
Degrees of freedom are 208 throughout.

TABLE 18

FACTOR 1 (AGGRESSION)

SUMMARY TABLE OF SIGNIFICANT CHANGES IN COMPONENTS
ACROSS THE FOUR EXPERIMENTAL SESSIONS

Significant Variables	F-Value	Comparison of Sessions	Direction	t-Value
Number of New Components	4,58**	2 is different from 1	More new components on session 2	2,23*
		2 is different from 3	More new components on session 2	-3,49**
		4 is different from 3	More new components on session 4	2,26*

Note:

* $p < 0,05$.

** $p < 0,01$.

Sample size is 105 throughout.
Degrees of freedom are 208 throughout.

For Factor 1 (Aggression) Table 17 has shown that the variable number of new components was significant at the 0,01 level.

For the variable number of new components:

Sessions 2 and 4 were high on average and Sessions 1 and 3 were low on average.

Table 18 has shown that for the variable number of new components:

Sessions 2 and 4 are higher than Session 3 ($p < 0,01$; $p < 0,05$ respectively). Session 2 is higher than Session 1 ($p < 0,05$).

Summary

In general, Sessions 2 and 4 brought about significant increases on the mood dimension Aggression and this was achieved by the generation of new components. Session 2 in particular had the ability to generate new components. For Factor 1 (Aggression) Sessions 2 and 4 resulted in significantly more new components than Session 3. Session 2 was also significantly higher in number of new components than Session 1. Hence Session 2 in particular had the ability to generate new components.

For Factor 2 (Anxiety) Tables 19 and 20 present the means of component changes across the four experimental sessions and the summary of significant changes in components across the four experimental sessions, as derived from the analysis of variance (See Appendix E, Table M, for details of the analysis).

TABLE 19

FACTOR 2 (ANXIETY)

TABLE OF MEANS OF COMPONENT CHANGES ACROSS THE FOUR EXPERIMENTAL SESSIONS
(See Appendix E, Table M, for details of the analysis)

Session	1	2	3	4	Overall Mean	F-Value
Number of Components Increased	0,06	0,11	0,03	0,10	0,07	0,27
Number of Components Decreased	0,14	0,11	0,11	0,13	0,13	0,94
Number of Components Disappeared	0,47	0,44	0,34	0,19	0,36	3,68*
Number of New Components	0,15	0,31	0,11	0,24	0,21	3,50*
Total Change	0,83	0,97	0,60	0,66	0,76	3,51*

Note:

* $p < 0,05$.

** $p < 0,01$.

Sample size is 105 throughout.

Degrees of freedom are 208 throughout.

TABLE 20

FACTOR 2 (ANXIETY)

SUMMARY TABLE OF SIGNIFICANT CHANGES IN COMPONENTS
ACROSS THE FOUR EXPERIMENTAL SESSIONS

Significant Variables	F-Value	Comparison of Sessions	Direction	t-Value
Number of Components Disappeared	3,68*	2 is different from 4	More components disappeared on session 2	-2,93**
		4 is different from 1	More components disappeared on session 1	-3,22**
Number of New Components	3,50*	2 is different from 1	More new components on session 2	2,34*
		2 is different from 3	More new components on session 2	-2,86**
Total Change	3,51*	2 is different from 3	More total change on session 2	-2,94**
		2 is different from 4	More total change on session 2	-2,38*

Note:

* $p < 0,05$.

** $p < 0,01$.

Sample size is 105 throughout.

Degrees of freedom are 208 throughout.

For Factor 2 (Anxiety) Table 19 has shown that the variable number of components disappeared, new and total change in components were all significant at the ,05 level.

For the variable number of components disappeared:

Sessions 1 and 2 were high on average and Sessions 3 and 4 were low on average.

For the variable number of new components:

Sessions 2 and 4 were high on average and Sessions 1 and 3 were low on average.

For the variable total change in components:

Sessions 1 and 2 were high on average and Sessions 3 and 4 were low on average.

Table 20 has shown that for the variable number of components disappeared:

Session 2 is significantly higher than Session 4 ($p < 0,01$);

Session 1 is significantly higher than Session 4 ($p < 0,01$).

For the variable number of new components:

Session 2 is significantly higher than Sessions 1 and 3 ($p < 0,05$; $p < 0,01$ respectively).

For the variable total change:

Session 2 is significantly higher than Sessions 3 and 4 ($p < 0,01$; $p < 0,05$ respectively).

Summary

In general, Session 2 showed more total internal change than Sessions 3 and 4; more new components than Sessions 1 and 3; and more components disappeared than on Session 4. Session 2 was the most active experimental session in terms of affecting the mood dimension Anxiety. It had the ability both to generate new components and to make components disappear.

For Factor 3 (Surgency) Tables 21 and 22 present the means of component changes across the four experimental sessions and the summary of significant changes in components across the four experimental sessions, as derived from the analysis of variance (see Appendix E, Table M, for details of the analysis).

TABLE 21

FACTOR 3 (SURGENCY)

TABLE OF MEANS OF COMPONENT CHANGES ACROSS THE FOUR EXPERIMENTAL SESSIONS
(See Appendix E, Table M. for details of the analysis)

Session	1	2	3	4	Overall Mean	F-Value
Number of Components Increased	0,16	0,20	0,11	0,18	0,16	0,88
Number of Components Decreased	0,20	0,17	0,19	0,17	0,18	0,09
Number of Components Disappeared	0,72	0,43	0,35	0,48	0,50	4,46**
Number of New Components	0,11	0,35	0,27	0,23	0,24	3,34*
Total Change	1,20	1,15	0,91	1,06	1,08	1,69

Note:

* $p < 0,05$.

** $p < 0,01$.

Sample size is 105 throughout.

Degrees of freedom are 208 throughout.

TABLE 22

FACTOR 3 (SURGENCY)

SUMMARY TABLE OF SIGNIFICANT CHANGES IN COMPONENTS
ACROSS THE FOUR EXPERIMENTAL SESSIONS

Significant Variables	F-Value	Comparison of Sessions	Direction	t-Value
Number of Components Disappeared	4,46**	2 is different from 1	More components disappeared on session 1	-2,58*
		3 is different from 1	More components disappeared on session 1	-3,42**
		4 is different from 1	More components disappeared on session 1	-2,10*
Number of New Components	3,34*	2 is different from 1	More new components on session 2	3,05**
		3 is different from 1	More new components on session 3	2,14*

Note:

* $p < 0,05$.

** $p < 0,01$.

Sample size is 105 throughout.

Degrees of freedom are 208 throughout.

For Factor 3 (Surgency) Table 21 has shown that the variable number of components disappeared and number of new components were significant at the ,01 and ,05 levels respectively.

For the variable number of components disappeared:

Session 1 was high on average and Sessions 2, 3 and 4 were low on average.

For the variable number of new components:

Sessions 2 and 3 were high on average and Sessions 1 and 4 were low on average.

Table 22 has shown that for the variable number of components disappeared: Sessions 2, 3 and 4 are significantly lower than Session 1 ($p < 0,05$; $p < 0,01$; $p < 0,05$ respectively).

For the variable number of new components:

Sessions 2 and 3 are significantly higher than Session 1 ($p < 0,01$; $p < 0,05$ respectively).

Summary

In general, Session 2 showed both fewer components disappeared and more new components than Session 1, and in this respect Session 2 had an effect similar to Session 3. In terms of internal change Session 2 appeared to stabilize or slightly increase Surgency.

For Factor 4 (Elation) Tables 23 and 24 present the means of component changes across the four experimental sessions and the summary of significant changes in components across the four experimental sessions, as derived from the analysis of variance (see Appendix E, Table M, for details of the analysis).

TABLE 23

FACTOR 4 (ELATION)

TABLE OF MEANS OF COMPONENT CHANGES ACROSS THE FOUR EXPERIMENTAL SESSIONS
(See Appendix E, Table M, for details of the analysis)

Session	1	2	3	4	Overall Mean	F-Value
Number of Components Increased	0,18	0,21	0,17	0,11	0,17	0,82
Number of Components Decreased	0,21	0,18	0,26	0,18	0,21	0,58
Number of Components Disappeared	0,52	0,36	0,37	0,36	0,40	1,18
Number of New Components	0,30	0,31	0,29	0,22	0,28	0,48
Total Change	1,21	1,07	1,09	0,88	1,06	2,04

Sample size is 105 throughout.
Degrees of freedom are 208 throughout.

TABLE 24

FACTOR 4 (ELATION)

SUMMARY TABLE OF SIGNIFICANT CHANGES IN COMPONENTS
ACROSS THE FOUR EXPERIMENTAL SESSIONS

Significant Variables	F-Value	Comparison of Sessions	Direction	t-Value
No variable significant				

For Factor 4 (Elation) Table 23 has shown that there are no significant component variables across the four experimental sessions.

For Factor 5 (Concentrating) Tables 25 and 26 present the means of component changes across the four experimental sessions and the summary of significant changes in components across the four experimental sessions, as derived from the analysis of variance (See Appendix E, Table M, for details of the analysis).

TABLE 25

FACTOR 5 (CONCENTRATING)

TABLE OF MEANS OF COMPONENT CHANGES ACROSS THE FOUR EXPERIMENTAL SESSIONS
(See Appendix E, Table M, for details of the analysis)

Session	1	2	3	4	Overall Mean	F-Value
Number of Components Increased	0,60	0,47	0,37	0,35	0,45	2,26
Number of Components Decreased	0,29	0,27	0,27	0,20	0,25	0,47
Number of Components Disappeared	0,30	0,36	0,34	0,24	0,31	0,84
Number of New Components	0,33	0,39	0,37	0,46	0,39	0,62
Total Change	1,51	1,49	1,35	1,25	1,40	1,65

Sample size is 105 throughout.
Degrees of freedom are 208 throughout.

TABLE 26

FACTOR 5 (CONCENTRATING)

SUMMARY TABLE OF SIGNIFICANT CHANGES IN COMPONENTS
ACROSS THE FOUR EXPERIMENTAL SESSIONS

Significant Variables	F-Value	Comparison of Sessions	Direction	t-Value
No variable significant				

For Factor 5 (Concentrating) Table 25 has shown that there are no significant component variables across the four experimental sessions.

For Factor 6 (Fatigue) Tables 27 and 28 present the means of component changes across the four experimental sessions and the summary of significant changes in components across the four experimental sessions, as derived from the analysis of variance (See Appendix E, Table M, for details of the analysis).

TABLE 27

FACTOR 6 (FATIGUE)

TABLE OF MEANS OF COMPONENT CHANGES ACROSS THE FOUR EXPERIMENTAL SESSIONS
(See Appendix E, Table M, for details of the analysis)

Session	1	2	3	4	Overall Means	F-Value
Number of Components Increased	0,26	0,15	0,24	0,11	0,19	1,86
Number of Components Decreased	0,21	0,17	0,14	0,11	0,16	0,91
Number of Components Disappeared	0,40	0,42	0,24	0,23	0,32	2,30
Number of New Components	0,57	0,43	0,61	0,38	0,50	1,94
Total Change	1,44	1,17	1,23	0,84	1,17	6,06**

Note:

* $p < 0,05$.

** $p < 0,01$.

Sample size is 105 throughout.

Degrees of freedom are 208 throughout.

TABLE 28

FACTOR 6 (FATIGUE)

SUMMARY TABLE OF SIGNIFICANT CHANGES IN COMPONENTS
ACROSS THE FOUR EXPERIMENTAL SESSIONS

Significant Variables	F-Value	Comparison of Sessions	Direction	t-Value
Total Change	6,06**	2 is different from 4	More total change on session 2	-2,52*
		4 is different from 1	More total change on session 1	-4,39**
		4 is different from 3	More total change on session 3	-2,76**

Note:

* $p < 0,05$.

** $p < 0,01$.

Sample size is 105 throughout.

Degrees of freedom are 208 throughout.

For Factor 6 (Fatigue) Table 27 has shown that the variable total change was significant at the 0,01 level.

For the variable total change:

Sessions 1 and 3 were high on average and Session 4 was low on average.

Table 28 has shown that for the variable total change:

Sessions 1, 2 and 3 were significantly higher than Session 4 ($p < 0,05$; $p < 0,01$; $p < 0,01$ respectively).

Summary

For Factor 6 (Fatigue) Session 4 showed significantly less total change than the other experimental sessions.

For Factor 7 (Vigour) Tables 29 and 30 present the means of component changes across the four experimental sessions and the summary of significant changes in components across the four experimental sessions, as derived from the analysis of variance (See Appendix E, Table M, for details of the analysis).

TABLE 29

FACTOR 7 (VIGOUR)

TABLE OF MEANS OF COMPONENT CHANGES ACROSS THE FOUR EXPERIMENTAL SESSIONS
(See Appendix E, Table M, for details of the analysis)

Session	1	2	3	4	Overall Mean	F-Value
Number of Components Increased	0,19	0,19	0,12	0,14	0,16	0,64
Number of Components Decreased	0,10	0,30	0,27	0,15	0,21	3,45*
Number of Components Disappeared	0,68	0,47	0,50	0,47	0,53	1,52
Number of New Components	0,28	0,33	0,18	0,27	0,26	1,18
Total Change	1,25	1,30	1,09	1,03	1,16	1,57

Note:

* $p < 0,05$.

** $p < 0,01$.

Sample size is 105 throughout.

Degrees of freedom are 208 throughout.

TABLE 30

FACTOR 7 (VIGOUR)

SUMMARY TABLE OF SIGNIFICANT CHANGES IN COMPONENTS
ACROSS THE FOUR EXPERIMENTAL SESSIONS

Significant Variables	F-Value	Comparison of Sessions	Direction	t-Value
Number of Components Decreased	3,45*	2 is different from 1	More components decreased on session 2	2,57*
		3 is different from 1	More components decreased on session 3	2,60*

Note:

* $p < 0,05$.

** $p < 0,01$.

Sample size is 105 throughout.

Degrees of freedom are 208 throughout.

For Factor 7 (Vigour) Table 29 has shown that the variable number of components decreased was significant at the 0,05 level.

For the variable number of components decreased Sessions 2 and 3 were high on average and Sessions 1 and 4 were low on average.

Table 30 has shown that for the variable number of components decreased Sessions 2 and 3 were significantly higher than Session 1 ($p < 0,05$ in both cases).

Summary

For Factor 7 (Vigour) Session 2 showed more components decreased than on Session 1.

For Factor 8 (Social Affection) Tables 31 and 32 present the means of component changes across the four experimental sessions and the summary of significant changes in components across the four experimental sessions, as derived from the analysis of variance (See Appendix E, Table M, for details of the analysis).

TABLE 31

FACTOR 8 (SOCIAL AFFECTION)

TABLE OF MEANS OF COMPONENT CHANGES ACROSS THE FOUR EXPERIMENTAL SESSIONS
(See Appendix E, Table M, for details of the analysis)

Session	1	2	3	4	Overall Means	F-Value
Number of Components Increased	0,23	0,30	0,25	0,23	0,25	0,44
Number of Components Decreased	0,31	0,23	0,26	0,23	0,26	0,53
Number of Components Disappeared	0,55	0,41	0,36	0,30	0,41	2,21
Number of New Components	0,14	0,42	0,20	0,17	0,23	5,41**
Total Change	1,24	1,36	1,07	0,93	1,15	3,89**

Note:

* $p < 0,05$.

** $p < 0,01$.

Sample size is 105 throughout.

Degrees of freedom are 208 throughout.

TABLE 32.

FACTOR 8 (SOCIAL AFFECTION)

SUMMARY TABLE OF SIGNIFICANT CHANGES IN COMPONENTS
ACROSS THE FOUR EXPERIMENTAL SESSIONS

Significant Variables	F-Value	Comparison of Sessions	Direction	t-Value
Number of New Components	5,41**	2 is different from 1	More new components on session 2	3,26**
		2 is different from 3	More new components on session 2	-2,49*
		2 is different from 4	More new components on session 2	-2,82**
Total Change	3,89**	2 is different from 3	More total change on session 2	-2,12*
		2 is different from 4	More total change on session 2	-3,01**
		4 is different from 1	More total change on session 1	-2,34*

Note:

* $p < 0,05$.

** $p < 0,01$.

Sample size is 105 throughout.

Degrees of freedom are 208 throughout.

For Factor 8 (Social Affection) Table 31 has shown that the variable number of new components and total change were each significant at the 0,01 level.

For the variable number of new components: Session 2 was high on average and Sessions 1, 3 and 4 were low on average. For the variable total change: Sessions 1 and 2 were high on average and Sessions 3 and 4 were low on average.

Table 32 has shown that for the variable number of new components Session 2 is significantly higher than Sessions 1, 3 and 4 ($p < 0,01$; $p < 0,05$; $p < 0,01$ respectively).

For the variable total change: Session 2 is significantly higher than Sessions 3 and 4 ($p < 0,05$; $p < 0,01$ respectively). Session 1 is significantly higher than Session 4 ($p < 0,05$).

For Factor 8 (Social Affection) Session 2 had the ability to generate more new components than any of the other experimental sessions. In addition Session 2 showed more total change than Sessions 3 and 4. Session 4 showed less total change than Session 1.

Summary

In general, Session 2 was the most influential session in affecting Social Affection. It did so by generating more new components.

For Factor 9 (Sadness) Tables 33 and 34 present the means of component changes across the four experimental sessions and the summary of significant changes in components across the four experimental sessions, as derived from the analysis of variance (see Appendix E, Table M, for details of the analysis).

TABLE 33

FACTOR 9 (SADNESS)

TABLE OF MEANS OF COMPONENT CHANGES ACROSS THE FOUR EXPERIMENTAL SESSIONS
(See Appendix E, Table M, for details of the analysis)

Session	1	2	3	4	Overall Mean	F-Value
Number of Components Increased	0,06	0,17	0,02	0,10	0,76	3,89**
Number of Components Decreased	0,07	0,08	0,09	0,06	0,90	0,21
Number of Components Disappeared	0,50	0,30	0,22	0,21	0,51	4,88**
Number of New Components	0,14	0,35	0,19	0,26	0,62	2,67*
Total Change	0,76	0,90	0,51	0,62	0,70	3,64*

Note:

* $p < 0,05$.

** $p < 0,01$.

Sample size is 105 throughout.

Degrees of freedom are 208 throughout.

TABLE 34

FACTOR 9 (SADNESS)

SUMMARY TABLE OF SIGNIFICANT CHANGES IN COMPONENTS
ACROSS THE FOUR EXPERIMENTAL SESSIONS

Significant Variables	F-Value	Comparison of Sessions	Direction	t-Value
Number of Components Increased	3,89**	2 is different from 1	More components increased on session 2	2,23*
		2 is different from 3	More components increased on session 2	-3,19**
		2 is different from 1	More components disappeared on session 1	-2,09*
Number of Components Disappeared	4,88**	3 is different from 1	More components disappeared on session 1	-3,15**
		4 is different from 1	More components disappeared on session 1	-3,30**
		2 is different from 1	More new components on session 2	2,72**
Number of New Components	2,67*	2 is different from 3	More total change on session 2	-3,01**
		2 is different from 4	More total change on session 2	-2,20*
		3 is different from 1	More total change on session 1	-2,03*

Note:

* $p < 0,05$.

** $p < 0,01$.

Sample size is 105 throughout.

Degrees of freedom are 208 throughout.

For Factor 9 (Sadness) Table 33 has shown that the variable number of components increased and number of components disappeared were significant at the 0,01 level of significance across the four experimental sessions. The variable number of new components and total change were significant at the 0,05 level of significance across the four experimental sessions.

Table 34 has shown that for number of components increased: Session 2 was high on average and Sessions 1 and 3 were low on average.

For number of components disappeared: Sessions 2, 3 and 4 were low on average and Session 1 was high on average.

For number of new components: Session 2 was high on average and Session 1 was low on average.

For total change: Session 2 was high on average and Sessions 3 and 4 were low on average; Session 1 was high on average in comparison with Session 3.

For Factor 9 (Sadness) Session 2 showed more total change in components than Sessions 3 and 4. Session 2 showed more new components than Session 1. Session 1 was significant in that it showed more components disappeared than any of the other experimental sessions.

Summary

In general, Session 2 was the most influential session in affecting the mood dimension Sadness. Its influence can be related both to increasing components and to bringing new components into existence. Session 4 was relatively ineffectual in influencing this mood dimension.

For Factor 10 (Egotism) Tables 35 and 36 present the means of component changes across the four experimental sessions and the summary of significant changes in components across the four experimental sessions, as derived from the analysis of variance (See Appendix E, Table M, for details of the analysis).

TABLE 35

FACTOR 10 (EGOTISM)

TABLE OF MEANS OF COMPONENT CHANGES ACROSS THE FOUR EXPERIMENTAL SESSIONS
(See Appendix E, Table M, for details of the analysis)

Session	1	2	3	4	Overall Means	F-Value
Number of Components Increased	0,07	0,10	0,03	0,07	0,06	0,93
Number of Components Decreased	0,04	0,07	0,02	0,03	0,04	0,96
Number of Components Disappeared	0,39	0,20	0,27	0,12	0,25	4,37**
Number of New Components	0,07	0,26	0,10	0,23	0,16	4,68**
Total Change	0,56	0,62	0,40	0,45	0,51	1,73

Note:

* $p < 0,05$.

** $p < 0,01$.

Sample size is 105 throughout.

Degrees of freedom are 208 throughout.

TABLE 36

FACTOR 10 (EGOTISM)

SUMMARY TABLE OF SIGNIFICANT CHANGES IN COMPONENTS
ACROSS THE FOUR EXPERIMENTAL SESSIONS

Significant Variables	F-Value	Comparison of Sessions	Direction	t-Value
Number of Components Disappeared	4,37**	2 is different from 1	More components disappeared on session 1	-2,35*
		4 is different from 1	More components disappeared on session 1	-3,47**
		4 is different from 3	More components disappeared on session 3	-2,00*
Number of New Components	4,68**	2 is different from 1	More new components on session 2	2,92**
		2 is different from 3	More new components on session 2	-2,37*
		4 is different from 1	More new components on session 4	2,94**
		4 is different from 3	More new components on session 4	2,27*

Note:

* $p < 0,05$.

** $p < 0,01$.

Sample size is 105 throughout.

Degrees of freedom are 208 throughout.

For Factor 10 (Egotism) Table 35 has shown that the variable number of components disappeared and number of new components were significant at the 0,01 level of significance across the four experimental sessions.

Table 36 has shown that for number of components disappeared: Sessions 2 and 4 were low on average and Session 1 was high on average; Session 4 was low on average when compared with Session 3.

For number of new components: Sessions 2 and 4 were high on average and Sessions 1 and 3 were low on average.

For Factor 10 (Egotism) Sessions 2 and 4 were both different from Session 1 in terms of generating more new components and showing fewer components disappeared. Session 2 showed more new components than Session 3. Session 4 showed both fewer components disappeared and more new components than Session 3.

Summary

In general, Sessions 2 and 4 increased Egotism by generating new components. In particular, Session 4 may be considered to have stabilized Egotism through maintaining existing components (fewer components disappeared), as well as generating more new components.

For Factor 11 (Deactivation) Tables 37 and 38 present the means of component changes across the four experimental sessions and the summary of significant changes in components across the four experimental sessions, as derived from the analysis of variance (See Appendix E, Table M, for details of the analysis).

TABLE 37

FACTOR 11 (DEACTIVATION)

TABLE OF MEANS OF COMPONENT CHANGES ACROSS THE FOUR EXPERIMENTAL SESSIONS
(See Appendix E, Table M, for details of the analysis)

Session	1	2	3	4	Overall Mean	F-Value
Number of Components Increased	0,42	0,34	0,33	0,24	0,34	1,28
Number of Components Decreased	0,46	0,41	0,37	0,19	0,36	2,82*
Number of Components Disappeared	0,40	0,46	0,17	0,20	0,31	5,02**
Number of New Components	0,35	0,38	0,47	0,37	0,39	0,52
Total Change	1,62	1,59	1,34	1,01	1,39	8,75**

Note:

* $p < 0,05$.

** $p < 0,01$.

Sample size is 105 throughout.

Degrees of freedom are 208 throughout.

TABLE 38

FACTOR 11 (DEACTIVATION)

SUMMARY TABLE OF SIGNIFICANT CHANGES IN COMPONENTS
ACROSS THE FOUR EXPERIMENTAL SESSIONS

Significant Variables	F-Value	Comparison of Sessions	Direction	t-Value
Number of Components Decreased	2,82*	2 is different from 4	More components decreased on session 2	-2,37*
		4 is different from 1	More components decreased on session 1	-2,84**
		4 is different from 3	More components decreased on session 3	-2,10*
Number of Components Disappeared	5,02**	2 is different from 3	More components disappeared on session 2	-3,10**
		2 is different from 4	More components disappeared on session 2	-2,79**
		4 is different from 1	More components disappeared on session 1	-2,28*
		3 is different from 1	More components disappeared on session 1	-2,60**
Total Change	8,75**	2 is different from 4	More total change on session 2	-4,25**
		4 is different from 1	More total change on session 1	-4,55**
		4 is different from 3	More total change on session 3	-2,59*
		3 is different from 1	More total change on session 1	-2,07*

Note:

* $p < 0,05$.

** $p < 0,01$.

Sample size is 105 throughout.

Degrees of freedom are 208 throughout.

For Factor 11 (Deactivation) Table 37 has shown that the variable number of components disappeared and total change were significant at the 0,01 level of significance. The variable number of components decreased was significant at the 0,05 level of significance.

Table 38 has shown that for number of components decreased: Session 4 is low on average and Sessions 1 and 3 are high on average; Session 2 is high on average when compared with Session 4.

For number of components disappeared: Session 2 is high on average and Sessions 3 and 4 are low on average; Sessions 3 and 4 are low on average and Session 1 is high on average. For total change: Session 4 is low on average and Sessions 1 and 3 are high on average.

For Factor 11 (Deactivation) Session 4 showed less total change than any of the other experimental sessions. Examining the other variables: Session 4 showed fewer components decreased than any of the other experimental sessions. Both Session 2 and Session 1 showed more components disappeared than Sessions 3 and 4.

Summary

In general, Session 4 showed less overall effect on this factor than the other experimental sessions; it showed fewer components decreased than any of the other experimental sessions, and fewer components disappeared than Sessions 1 and 2. This can perhaps be viewed as a stabilization of the initial level of Deactivation.

For Factor 12 (Scepticism) Tables 39 and 40 present the means of component changes across the four experimental sessions and the summary of significant changes in components across the four experimental sessions, as derived from the analysis of variance (See Appendix E, Table M, for details of the analysis).

TABLE 39

FACTOR 12 (SCEPTICISM)

TABLE OF MEANS OF COMPONENT CHANGES ACROSS THE FOUR EXPERIMENTAL SESSIONS
(See Appendix E, Table M, for details of the analysis)

Session	1	2	3	4	Overall Means	F-Value
Number of Components Increased	0,12	0,08	0,04	0,11	0,09	1,31
Number of Components Decreased	0,17	0,11	0,01	0,10	0,10	3,81*
Number of Components Disappeared	0,74	0,39	0,32	0,20	0,41	13,86**
Number of New Components	0,17	0,22	0,09	0,24	0,18	2,34
Total Change	1,21	0,80	0,46	0,65	0,78	13,52**

Note:

* $p < 0,05$.

** $p < 0,01$.

Sample size is 105 throughout.

Degrees of freedom are 208 throughout.

TABLE 40

FACTOR 12. (SCEPTICISM)

SUMMARY TABLE OF SIGNIFICANT CHANGES IN COMPONENTS
ACROSS THE FOUR EXPERIMENTAL SESSIONS

Significant Variables	F-Value	Comparison of Sessions	Direction	t-Value
Number of Components Decreased	3,81*	2 is different from 3	More components decreased on session 2	-3,21**
		4 is different from 3	More components decreased on session 4	2,39*
		3 is different from 1	More components decreased on session 1	-3,20**
Number of Components Disappeared	13,86**	2 is different from 1	More components disappeared on session 1	-3,49**
		2 is different from 4	More components disappeared on session 2	-2,49*
		4 is different from 1	More components disappeared on session 1	-5,89**
		3 is different from 1	More components disappeared on session 1	-4,23**
Total Change	13,52**	2 is different from 1	More total change on session 1	-3,14**
		2 is different from 3	More total change on session 2	-3,06**
		4 is different from 1	More total change on session 1	-4,22**
		3 is different from 1	More total change on session 1	-6,35**

Note:

* $p < 0,05$.

** $p < 0,01$.

Sample size is 105 throughout.

Degrees of freedom are 208 throughout.

For Factor 12 (Scepticism) Table 39 has shown that the variable number of components disappeared and total change are significant at the 0,01 level of significance across the four experimental sessions. The variable number of components decreased is significant at the 0,05 level of significance across the four experimental sessions.

Table 40 has shown that for number of components decreased: Sessions 1, 2 and 4 are high on average and Session 3 is low on average.

For number of components disappeared: Sessions 2 and 4 are low on average and Session 1 is high on average; Session 2 is high on average when compared with Session 4; Session 1 is high on average when compared with Session 3. For total change: Sessions 2 and 4 are low on average and Session 1 is high on average; Sessions 1 and 2 are high on average and Session 3 is low on average.

For Factor 12 (Scepticism) Session 2 showed more total change than Session 3, but less total change than Session 1. Session 4 also showed less total change than Session 1. Examining the other variables: Session 3 showed fewer components decreased than any of the other experimental sessions. Both Sessions 2 and 4 showed fewer components disappeared than Session 1. In addition Session 4 showed fewer components disappeared than Session 2.

Summary

In general, both Sessions 2 and 4 showed less of an ability to decrease components (relative to Session 3) or to make components disappear (relative to Session 1). For Sessions 2 and 4, this may again suggest a stabilization of the initial levels of Scepticism.

Table 41 is a summary table which juxtaposes the magnitude of change scores and component change scores which were significantly different on the 12 Nowlis Mood Factors across the four experimental sessions (see Appendices D and E, Tables G-M, for data and analysis of variance tables).

Table 42 presents a summary of significant component changes on the 12 Nowlis Mood Factors that did not show significant magnitude of change scores (see Appendices D and E, Tables G-M, for data and analysis of variance tables).

TABLE 41

SUMMARY OF SIGNIFICANT MAGNITUDE OF CHANGE SCORES AND COMPONENT CHANGES ON THE TWELVE NOWLIS MOOD FACTORS ACROSS THE FOUR EXPERIMENTAL SESSIONS (See Appendices D and E, Tables G-M, for data and analysis of variance tables)

Factor	Magnitude of Change Scores			Change in Components						
	F-Value	Direction	t-Value	Significant Variable	F-Value	Comparison of Sessions	Direction	t-Value		
1 Aggression	3,65*	Session 2 shows an increase and Session 3 shows a decrease Session 3 shows a decrease and Session 4 shows an increase	-2,66** 2,99**	Number of New Components	4,58**	2 is different from 1	More new components on Session 2	2,23*		
						2 is different from 3	More new components on Session 2	-3,49**		
						4 is different from 3	More new components on Session 4	2,26*		
3 Surgency	3,84**	Session 1 shows a greater decrease than Session 2 Session 1 shows a greater decrease than Session 3 Session 1 shows a greater decrease than Session 4	3,05** 2,71** 2,15*	Number of Components Disappeared	4,46**	2 is different from 1	More components disappeared on Session 1	-2,58*		
						3 is different from 1	More components disappeared on Session 1	-3,42**		
						4 is different from 1	More components disappeared on Session 1	-2,10*		
						Number of New Components	3,34*	2 is different from 1	More new components on Session 2	3,05**
								3 is different from 1	More new components on Session 3	2,14*
8 Social Affection	4,21**	Session 2 shows an increase and Session 1 shows a decrease Session 1 shows a greater decrease than Session 3 Session 1 shows a greater decrease than Session 4	3,18** 2,73** 2,28*	Number of New Components	5,41**	2 is different from 1	More new components on Session 2	3,26**		
						2 is different from 3	More new components on Session 2	-2,49*		
						2 is different from 4	More new components on Session 2	-2,82**		
				Total Change	3,89**	2 is different from 3	More total change on Session 2	-2,12*		
						2 is different from 4	More total change on Session 2	-3,01**		
						4 is different from 1	More total change on Session 1	-2,34*		
Number of Components Increased	3,89**	2 is different from 1	More components increased on Session 2	2,23*						
		2 is different from 3	More components increased on Session 2	-3,19**						
9 Sadness	4,94**	Session 2 shows an increase and Session 1 shows a decrease Session 1 shows a greater decrease than Session 3 Session 4 shows an increase and Session 1 shows a decrease	3,34** 2,68** 3,21**	Number of Components Disappeared	4,88**	2 is different from 1	More components disappeared on Session 1	-2,09*		
						3 is different from 1	More components disappeared on Session 1	-3,15**		
						4 is different from 1	More components disappeared on Session 1	-3,30**		
				Number of New Components	2,67*	2 is different from 1	More new components on Session 2	2,72**		
				Total Change	3,64*	2 is different from 3	More total change on Session 2	-3,01**		
2 is different from 4	More total change on Session 2	-2,20*								
3 is different from 1	More total change on Session 1	-2,03*								

TABLE 41 (continued)

10 Egotism	5,83**	Session 2 shows an increase and Session 1 shows a decrease	2,90**	Number of Components Disappeared	4,37**	2 is different from 1	More components disappeared on Session 1	-2,35*	
		Session 2 shows an increase and Session 3 shows a decrease	-2,43*			4 is different from 1	More components disappeared on Session 1	-3,47**	
		Session 3 shows a decrease and Session 4 shows an increase	2,97**			4 is different from 3	More components disappeared on Session 3	-2,00*	
		Session 4 shows an increase and Session 1 shows a decrease	3,49**						
					Number of New Components	4,68**	2 is different from 1	More new components on Session 2	2,92**
							2 is different from 3	More new components on Session 2	-2,37*
							4 is different from 1	More new components on Session 4	2,94**
							4 is different from 3	More new components on Session 4	2,27*
12 Scepticism	8,16**				Number of Components Decreased	3,81*	2 is different from 3	More components decreased on Session 2	-3,21**
							4 is different from 3	More components decreased on Session 4	2,39*
							3 is different from 1	More components decreased on Session 1	-3,20**
		Session 1 shows a greater decrease than Session 2	2,61**						
					Number of Components Disappeared	13,86**	2 is different from 1	More components disappeared on Session 1	-3,49**
		Session 1 shows a greater decrease than Session 3	3,18**	2 is different from 4			More components disappeared on Session 2	-2,49*	
		Session 1 shows a decrease and Session 4 shows an increase	4,35**	4 is different from 1			More components disappeared on Session 1	-5,89**	
		Session 4 shows an increase and Session 3 shows a decrease	2,11*	3 is different from 1			More components disappeared on Session 1	-4,23**	
			Total Change	13,52**	2 is different from 1	More total change on Session 1	-3,14**		
					2 is different from 3	More total change on Session 2	-3,06**		
					4 is different from 1	More total change on Session 1	-4,22**		
					3 is different from 1	More total change on Session 1	-6,35**		

Note:

* p < 0,05.

** p < 0,01.

TABLE 42

SUMMARY TABLE OF SIGNIFICANT COMPONENT CHANGES ON THE NOWLIS MOOD FACTORS
 THAT DID NOT SHOW SIGNIFICANT MAGNITUDE OF CHANGE SCORES
 (See Appendices D and E, Tables G-M, for data and analysis of variance tables)

Factor	Significant Variable	F-Value	Comparison of Sessions	Direction	t-Value
2 Anxiety	Number of Components Disappeared	3,68*	2 is different from 4	More components disappeared on Session 2	-2,93**
			4 is different from 1	More components disappeared on Session 1	-3,22**
	Number of New Components	3,50*	2 is different from 1 2 is different from 3	More new components on Session 2 More new components on Session 2	2,34 -2,86**
	Total Change	3,51*	2 is different from 3 2 is different from 4	More total change on Session 2 More total change on Session 2	-2,94** -2,38*
6 Fatigue	Total Change	6,06*	2 is different from 4 4 is different from 1 4 is different from 3	More total change on Session 2 More total change on Session 1 More total change on Session 3	-2,52* -4,39** -2,76**
7 Vigour	Number of Components Decreased	3,45*	2 is different from 1	More components decreased on Session 2	2,57*
			3 is different from 1	More components decreased on Session 3	2,60*
11 Deactivation	Number of Components Decreased	2,82*	2 is different from 4	More components decreased on Session 2	-2,37*
			4 is different from 1	More components decreased on Session 1	-2,84**
			4 is different from 3	More components decreased on Session 3	-2,10*
	Number of Components Disappeared	5,02**	2 is different from 3 2 is different from 4 4 is different from 1 3 is different from 1	More components disappeared on Session 2 More components disappeared on Session 2 More components disappeared on Session 1 More components disappeared on Session 1	-3,10** -2,79** -2,28* -2,60**
	Total Change	8,75**	2 is different from 4 4 is different from 1 4 is different from 3 3 is different from 1	More total change on Session 2 More total change on Session 1 More total change on Session 3 More total change on Session 1	-4,25** -4,55** -2,59* -2,07*

Note:

* p < 0,05.

** p < 0,01.

Tables 41 and 42 have presented the summaries of magnitude of change scores and component change scores on the 12 Nowlis Mood Factors across the four experimental sessions.

Table 41 presented the significant magnitude of change scores and the associated significant component change scores.

Table 42 presented the significant component change scores on the Nowlis Mood Factors that did not show significant magnitude of change scores. This is attributed to different component changes compensating, cancelling or balancing each other. The specific pattern for each factor can be seen by examining the tables of means for the component changes.

From Tables 41 and 42 it is now possible to compare the different experimental sessions by considering the magnitude of change scores and the component change scores together.

Acceptance or Rejection of Hypotheses and Results of the
Comparison of Magnitude of Change Scores and Component Change
Scores across the Four Experimental Sessions

1. Comparison of Session 2 with Session 4

(a) Magnitude of change scores

Tables 41 and 42 above show that Session 2, the experimenter administered Mood Analysis Technique (MAT), when compared with Session 4, the self-administered Mood Analysis Technique, showed no statistical difference.

Hypothesis 4.3.1.1(a) that Session 2, the experimenter administered Mood Analysis Technique (MAT), will not differ from Session 4, the self-administered Mood Analysis Technique, in terms of the magnitude of change scores on the twelve Nowlis Mood Factors, is accepted.

(b) Component change scores

Tables 41 and 42 above indicate:

Components Increased

No variable statistically significant.

Components Decreased

For the factor Deactivation, Session 2, the experimenter administered Mood Analysis Technique (MAT), showed more components decreased than on Session 4, the self-administered Mood Analysis Technique, on this factor ($p < 0,05$).

Components Disappeared

For the factors Anxiety, Deactivation and Scepticism, Session 2 showed more components disappeared than on Session 4, on these factors ($p < 0,01$, $p < 0,01$, $p < 0,05$ respectively).

New Components

For the factor Social Affection, Session 2 showed more new components than on Session 4, on this factor ($p < 0,01$).

Total Change

For the factors Anxiety, Fatigue, Social Affection and Sadness, Session 2 showed more total change than on Session 4, on these factors ($p < 0,05$, $p < 0,05$, $p < 0,01$, $p < 0,05$ respectively).

Hypothesis 4.3.1.1(b) that Session 2, the experimenter administered Mood Analysis Technique (MAT), will not differ from Session 4, the self-administered Mood Analysis Technique, in terms of mood components: increased, decreased, disappeared, new and total change in mood components, on the twelve Nowlis Mood Factors across the four experimental sessions, is rejected.

The experimental evidence is consonant with viewing Session 2 as influencing magnitude of change scores in a way different from Session 4.

- (c) Summary of the effect of Session 2 compared with Session 4 on the 12 Nowlis Mood Factors in terms of component changes.

Anxiety

Session 2 showed more components disappeared than on Session 4 ($p < 0,01$).

Session 2 showed more total change than on Session 4 ($p < 0,05$).

Fatigue

Session 2 showed more total change than on Session 4 ($p < 0,05$).

Social Affection

Session 2 showed more new components than on Session 4 ($p < 0,01$).

Session 2 showed more total change than on Session 4 ($p < 0,01$).

Sadness

Session 2 showed more total change than on Session 4 ($p < 0,05$).

Deactivation

Session 2 showed more components decreased than on Session 4 ($p < 0,05$).

Session 2 showed more components disappeared than on Session 4 ($p < 0,01$).

Session 2 showed more total change than on Session 4 ($p < 0,01$).

Scepticism

Session 2 showed more components disappeared than on Session 4 ($p < 0,05$).

2. Comparison of Session 2 with Sessions 1 and 3

(a) Magnitude of change scores

Tables 41 and 42 above show that the factors Social Affection, Sadness and Egotism increased on Session 2, and on Session 1, the personality testing session, these factors showed a decrease ($p < 0,01$, $p < 0,01$, $p < 0,01$ respectively).

The factors Aggression and Egotism increased on Session 2, while Session 3, the quiet activities session, showed a decrease on these factors ($p < 0,01$, $p < 0,05$ respectively).

The factors Surgency and Scepticism decreased on Session 2, but decreased to a greater extent on Session 1, the personality testing session ($p < 0,01$, $p < 0,01$ respectively).

Hypothesis 4.3.1.3(a) that Session 2, the experimenter administered Mood Analysis Technique (MAT), will not differ from Session 1, the personality testing session, and Session 3, the quiet activities session, in terms of the magnitude of change scores on the 12 Nowlis Mood Factors, is rejected.

The experimental evidence is consonant with viewing Session 2 as influencing magnitude of change scores in a way different from Sessions 1 and 3.

(b) Component change scores

Tables 41 and 42 above indicate:

Components Increased

For the factor Sadness, Session 2, the experimenter administered Mood Analysis Technique (MAT), showed more components increased than on Session 1, the personality testing session, and than on Session 3, the quiet activities session, for this factor ($p < 0,05$, $p < 0,01$ respectively).

Components Decreased

For the factor Vigour, Session 2 showed more components decreased than on Session 1, for this factor ($p < 0,05$). For the factor Scepticism, Session 2 showed more components decreased than on Session 3, for this factor ($p < 0,01$).

Components Disappeared

For the factors Surgency, Sadness, Egotism and Scepticism, Session 2 showed fewer components disappeared than on Session 1, for these factors ($p < 0,05$, $p < 0,05$, $p < 0,05$, $p < 0,01$ respectively).

For the factor Deactivation, Session 2 showed more components disappeared than on Session 3, for this factor ($p < 0,01$).

New Components

For each of the factors Aggression, Anxiety, Social Affection and Egotism, Session 2 showed more new components than on either Session 1 or Session 3 (with respect to Session 1: $p < 0,05$, $p < 0,05$, $p < 0,01$, $p < 0,01$ respectively; with respect to Session 3: $p < 0,01$, $p < 0,01$, $p < 0,05$, $p < 0,05$ respectively).

For the factors Surgency and Sadness, Session 2 showed more new components than on Session 1, on these factors ($p < 0,01$, $p < 0,01$ respectively).

Total Change

For the factors Anxiety, Social Affection and Sadness, Session 2 showed more total change than on Session 3, on these factors ($p < 0,01$, $p < 0,05$, $p < 0,01$ respectively).

Hypothesis 4.3.1.3(b) that Session 2, the experimenter administered Mood Analysis Technique (MAT), will not differ from Session 1, the personality testing session, and Session 3, the quiet activities session, in terms of mood components: increased, decreased, disappeared, new and total change in mood components, on the 12 Nowlis Mood Factors, is rejected.

The experimental evidence is consonant with viewing Session 2 as influencing mood components in a way different from Sessions 1 and 3.

- (c) Summary of the effect of Session 2 compared with Sessions 1 and 3 on the 12 Nowlis Mood Factors in terms of component changes.

Aggression

Session 2 showed more new components than on Sessions 1 and 3 ($p < 0,05$, $p < 0,01$ respectively).

Anxiety

Session 2 showed more new components than on Sessions 1 and 3 ($p < 0,05$, $p < 0,01$ respectively).

Session 2 showed more total change than on Session 3 ($p < 0,01$).

Surgency

Session 2 showed fewer components disappeared than on

Session 1 ($p < 0,05$).

Vigour

Session 2 showed more components decreased than on Session 1 ($p < 0,05$).

Social Affection

Session 2 showed more new components than on Sessions 1 and 3 ($p < 0,01$, $p < 0,05$ respectively).

Session 2 showed more total change than on Session 3 ($p < 0,05$).

Sadness

Session 2 showed more components increased than on Sessions 1 and 3 ($p < 0,05$, $p < 0,01$ respectively).

Session 2 showed fewer components disappeared than on Session 1 ($p < 0,05$).

Session 2 showed more new components than on Session 1 ($p < 0,01$).

Session 2 showed more total change than on Session 3 ($p < 0,05$).

Egotism

Session 2 showed fewer components disappeared than on Session 1 ($p < 0,05$).

Session 2 showed more new components than on Sessions 1 and 3 ($p < 0,01$, $p < 0,05$ respectively).

Deactivation

Session 2 showed more components disappeared than on Session 3 ($p < 0,01$).

Scepticism

Session 2 showed more components decreased than on Session 3 ($p < 0,01$).

Session 2 showed fewer components disappeared than on Session 1 ($p < 0,01$).

3. Comparison of Session 4 with Sessions 1 and 3.

(a) Magnitude of change scores

Tables 41 and 42 above show that the factors Scepticism, Sadness and Egotism showed an increase on Session 4, the self-administered Mood Analysis Technique, and Session 1, the personality testing session, showed a decrease on these factors ($p < 0,01$, $p < 0,01$, $p < 0,01$ respectively).

The factors Surgency and Social Affection showed a decrease on Session 4, but decreased to a greater extent on Session 1, on these factors ($p < 0,05$, $p < 0,05$ respectively).

The factors Aggression, Egotism and Scepticism showed an increase on Session 4, and Session 3 showed a decrease on these factors ($p < 0,01$, $p < 0,01$, $p < 0,05$ respectively).

Hypothesis 4.3.1.5(a) that Session 4, the self-administered Mood Analysis Technique, will not differ from Session 1, the personality testing session, and Session 3, the quiet activities session, in terms of the magnitude of change scores on the 12 Nowlis Mood Factors, is rejected.

The experimental evidence is consonant with viewing Session 4 as influencing magnitude of change scores in a way different from Sessions 1 and 3.

(b) Component change scores

Tables 41 and 42 above indicate:

Components Increased

No variable significant.

Components Decreased

For the factor Deactivation, Session 4, the self-administered Mood Analysis Technique, showed fewer components decreased than on either Session 1, the personality testing session, or Session 3, the quiet activities session ($p < 0,01$, $p < 0,05$).

For the factor Scepticism, Session 4 showed more components decreased than on Session 3, on this factor ($p < 0,05$).

Components Disappeared

For the factors Surgency, Sadness, Egotism, Deactivation and Scepticism, Session 4 showed fewer components disappeared than on Session 1, on these factors ($p < 0,05$, $p < 0,01$, $p < 0,01$, $p < 0,05$, $p < 0,01$ respectively).

For the factor Egotism, Session 4 also showed fewer components disappeared than on Session 3, on this factor ($p < 0,05$).

For the factor Anxiety, Session 4 showed fewer components disappeared than on Session 1, on this factor ($p < 0,01$).

New Components

For the factor Aggression, Session 4 showed more new components than on Session 3, on this factor ($p < 0,05$).

For the factor Egotism, Session 4 showed more new components than on either Session 1 or Session 3, on this factor ($p < 0,01$, $p < 0,05$ respectively).

Total Change

For the factors Social Affection and Scepticism, Session 4 showed less total change than on Session 1, for these factors ($p < 0,05$, $p < 0,01$ respectively).

For the factor Fatigue, Session 4 showed less total change than on either Session 1 or Session 3 ($p < 0,01$ in both cases).

For the factor Deactivation, Session 4 showed less total change than on Session 3, on this factor ($p < 0,05$).

Hypothesis 4.3.1.5(b) that Session 4, the self-administered Mood Analysis Technique, will not differ from Session 1, the personality testing session, and Session 3, the quiet activities session, in terms of mood components: increased, decreased, disappeared, new and total change in mood components, on the 12 Nowlis Mood Factors, is rejected.

The experimental evidence is consonant with viewing Session 4 as influencing mood components in a way different from Sessions 1 and 3.

- (c) Summary of the effect of Session 4 compared with Sessions 1 and 3 on the 12 Nowlis Mood Factors in terms of component changes.

Aggression

Session 4 showed more new components than on Session 3 ($p < 0,05$).

Anxiety

Session 4 showed fewer components disappeared than on Session 1 ($p < 0,01$).

Surgency

Session 4 showed fewer components disappeared than on Session 1 ($p < 0,05$).

Fatigue

Session 4 showed less total change than on Sessions 1 and 3 ($p < 0,01$, $p < 0,01$ respectively).

Social Affection

Session 4 showed less total change than on Session 1 ($p < 0,05$).

Sadness

Session 4 showed fewer components disappeared than on Session 1 ($p < 0,01$).

Egotism

Session 4 showed fewer components disappeared than on Sessions 1 and 3 ($p < 0,01$, $p < 0,05$ respectively).

Session 4 showed more new components than on Sessions 1 and 3 ($p < 0,01$, $p < 0,05$ respectively).

Deactivation

Session 4 showed fewer components decreased than on Sessions 1 and 3 ($p < 0,01$, $p < 0,05$ respectively).

Session 4 showed fewer components disappeared than on Session 1 ($p < 0,05$).

Session 4 showed less total change than on Sessions 1 and 3 ($p < 0,01$, $p < 0,05$ respectively).

Scepticism

Session 4 showed more components decreased than on Session 3 ($p < 0,05$).

Session 4 showed fewer components disappeared than on Session 1 ($p < 0,01$).

Session 4 showed less total change than on Session 1 ($p < 0,01$).

Although no hypotheses concerning the relationships between Sessions 1 and 3 are formulated, in the interests of a complete analysis these comparisons are given:

4. Comparison of Session 1 with Session 3

(a) Magnitude of change scores

Tables 41 and 42 above show that for the factors Surgency, Social Affection, Sadness and Scepticism, Session 1 showed a greater decrease than Session 3, on these factors ($p < 0,01$ for each factor).

(b) Component change scores

Tables 41 and 42 above indicate:

Components Increased

No variable statistically significant.

Components Decreased

For the factor Vigour, Session 3, the quiet activities session, showed more components decreased than on Session 1, the personality testing session, on this factor ($p < 0,05$).

For the factor Scepticism, Session 1 showed more components

decreased than on Session 3, on this factor ($p < 0,01$).

Components Disappeared

For the factors Surgency, Sadness, Deactivation and Scepticism, Session 1 showed more components disappeared than on Session 3, on these factors ($p < 0,01$ for each factor).

New Components

For the factor Surgency, Session 3 showed more new components than on Session 1, on this factor ($p < 0,05$).

Total Change

For the factors Sadness, Deactivation and Scepticism, Session 1 showed more total change than on Session 3, on these factors ($p < 0,05$, $p < 0,05$, $p < 0,01$ respectively).

- (c) Summary of the effect of Session 1 compared with Session 3 on the 12 Nowlis Mood Factors in terms of component changes.

Surgency

Session 1 showed more components disappeared than on Session 3 ($p < 0,01$).

Session 3 showed more new components than on Session 1 ($p < 0,05$).

Vigour

Session 3 showed more components decreased than on Session 1 ($p < 0,05$).

Sadness

Session 1 showed more components disappeared than on Session 3 ($p < 0,01$).

Session 1 showed more total change than on Session 3 ($p < 0,05$).

Deactivation

Session 1 showed more components disappeared than on

Session 3 ($p < 0,01$).

Session 1 showed more total change than on Session 3 ($p < 0,01$).

Scepticism

Session 1 showed more components decreased than on Session 3 ($p < 0,01$).

Session 1 showed more components disappeared than on Session 3 ($p < 0,01$).

Session 1 showed more total change than on Session 3 ($p < 0,01$).

An Examination for Consistency of the Significant Magnitude of Change Scores and the Significant Component Change Scores

It is now possible to examine the significant magnitude of change scores and the significant component change scores for consistency. It should be the case that the significant inter-session magnitude of change differences on the 12 Nowlis Mood Dimensions are meaningfully associated with the significant change in components.

Relating the Significant Magnitude of Change Scores on the Twelve Nowlis Mood Factors to the Significant Change in Components

Factor 1 (Aggression)

1. Session 2, the experimenter administered Mood Analysis Technique (MAT), shows an increase on this factor, and Session 3, the quiet activities session, shows a decrease on this factor.

This is associated with Session 2 showing more new components than Session 3 ($p < 0,01$).

2. Session 3, the quiet activities session, shows a decrease on this factor, and Session 4, the self-administered Mood Analysis Technique, shows an increase on this factor.

This is associated with Session 4 showing more new components than Session 3 ($p < 0,05$).

Factor 3 (Surgency)

1. Session 1, the personality testing session, shows a greater decrease on this factor than Session 2, the experimenter administered Mood Analysis Technique (MAT), on this factor. This is associated with Session 1 showing more components disappeared than Session 2 ($p < 0,05$), and Session 2 showing more new components than Session 1 on this factor ($p < 0,01$).
2. Session 1 shows a greater decrease on this factor than on Session 3, the quiet activities session. This is associated with Session 1 showing more components disappeared than on Session 3 ($p < 0,01$), and Session 3 showing more new components than Session 1 on this factor ($p < 0,05$).
3. Session 1 shows a greater decrease on this factor than Session 4, the self-administered Mood Analysis Technique. This is associated with Session 1 showing more components disappeared than on Session 4 ($p < 0,05$).

Factor 8 (Social Affection)

1. Session 2, the experimenter administered Mood Analysis Technique (MAT), shows an increase on this factor, and Session 1, the personality testing session, shows a decrease. This is associated with Session 2 showing more new components than Session 1 ($p < 0,01$).
2. Session 1 shows a greater decrease on this factor than Session 3, the quiet activities session. Referring to Table 32 it can be seen that all the component changes follow the indicated direction. Although individually no component changes are significant, it is most likely that they are operating in combination to produce the significant magnitude change.
3. Session 1 shows a greater decrease on this factor than Session 4, the self-administered Mood Analysis Technique. This is associated with Session 1 showing more total change

than Session 4 ($p < 0,05$) and an examination of Table 32, employing the same reasoning as above, can account for the observed result.

Factor 9 (Sadness)

1. Session 2, the experimenter administered Mood Analysis Technique (MAT), shows an increase on this factor, and Session 1, the personality testing session, shows a decrease. This is associated with Session 2 showing more components increased ($p < 0,05$), fewer components disappeared ($p < 0,05$), and more new components ($p < 0,01$) than Session 1.
2. Session 1 shows a greater decrease on this factor than Session 3, the quiet activities session. This is associated with Session 1 showing more components disappeared ($p < 0,01$) and more total change ($p < 0,05$) than Session 3.
3. Session 4, the self-administered Mood Analysis Technique, shows an increase on this factor, and Session 1 shows a decrease. This is associated with Session 4 showing fewer components disappeared ($p < 0,01$) than Session 1.

Factor 10 (Egotism)

1. Session 2, the experimenter administered Mood Analysis Technique (MAT), shows an increase on this factor, and Session 1, the personality testing session, shows a decrease. This is associated with Session 2 showing fewer components disappeared ($p < 0,05$) and more new components ($p < 0,01$) than Session 1.
2. Session 2 shows an increase on this factor and Session 3, the quiet activities session, shows a decrease. This is associated with Session 2 showing more new components ($p < 0,05$) than Session 3.
3. Session 4, the self-administered Mood Analysis Technique,

shows an increase on this factor, and Session 3 shows a decrease.

This is associated with Session 4 showing fewer components disappeared ($p < 0,05$) and more new components ($p < 0,05$) than Session 3.

4. Session 4 shows an increase on this factor, and Session 1 shows a decrease.

This is associated with Session 4 showing fewer components disappeared ($p < 0,01$) and more new components ($p < 0,01$) than Session 1.

Factor 12 (Scepticism)

1. Session 1, the personality testing session, shows a greater decrease on this factor than Session 2, the experimenter administered Mood Analysis Technique (MAT).

This is associated with Session 1 showing more components disappeared ($p < 0,01$) and more total change ($p < 0,01$) than Session 2.

2. Session 1 shows a greater decrease on this factor than Session 3, the quiet activities session.

This is associated with Session 1 showing more components decreased ($p < 0,01$), more components disappeared ($p < 0,01$) and more total change ($p < 0,01$) than Session 3.

3. Session 1 shows a decrease on this factor and Session 4, the self-administered Mood Analysis Technique, shows an increase. This is associated with Session 1 showing more components disappeared ($p < 0,01$) and more total change ($p < 0,01$) than Session 4.

4. Session 4 shows an increase on this factor and Session 3 shows a decrease.

This is associated with Session 4 showing more components decreased ($p < 0,05$) than on Session 3. This apparently anomalous result can be explained by examining Table 39. Although Session 4 showed more components decreased than Session 3,

Table 39 shows that Session 3 showed fewer components increased, more components disappeared and fewer new components than Session 4.

This section has shown that the significant magnitude of change scores and the significant change in component scores are consistent.

4.4 The Effect of the Four Experimental Sessions on "Moody" vs. "Non-Moody" Subjects

Description

In this section the effect of the four experimental sessions on moody subjects in comparison with non-moody subjects, in terms of the mean magnitude of change scores on the 12 Nowlis Mood Factors, is examined. The subjects were divided into two different groups "moody" and "non-moody", according to two different criteria of moodiness, i.e. the MAT criterion (self-opinion criterion) and the high and low mean variability criterion (statistical criterion); then the effect of each experimental session on the "moody" and "non-moody" groups in terms of the mean magnitude of change scores on the 12 Nowlis Mood Factors was determined.

Summary of Findings

None of the Hotelling T^2 tests were found to be significant.

Hypotheses

4.4.1.1 Null Hypothesis H_0 :

It is hypothesized that the four experimental sessions will not differ in their effects on the 12 Nowlis Mood Factors for moody vs. non-moody subjects.

4.4.1.2 Alternative Hypothesis H_1 :

It is hypothesized that the four experimental sessions will yield different effects on the 12 Nowlis Mood Factors for moody vs. non-moody subjects.

Results

Tables 43-46 present the results for the MAT criterion (self-opinion criterion) of moodiness for each of the four experimental sessions.

TABLE 43

HOTELLINGS T^2 TEST BETWEEN NON-MOODY AND MOODY SUBJECTS DESIGNATED ON THE MAT, ON THE 12 NOWLIS FACTORS ACROSS SESSION 1 (See Appendix D, Tables G-J for data)

Hotellings T^2	df	F-Value
12,29	12 92	0,91

Factor	Non-Moody		Moody		t-Value
	M	STD	M	STD	
1 Aggression	-0,19	1,64	-0,47	1,88	0,72
2 Anxiety	-0,16	0,93	-0,72	1,79	1,63
3 Surgency	-0,94	1,79	-0,96	2,14	0,05
4 Elation	0,97	7,62	-0,51	2,42	1,51
5 Concentrating	0,19	2,56	0,47	2,53	-0,51
6 Fatigue	0,39	2,46	0,26	3,12	0,21
7 Vigor	-0,71	2,19	-0,66	2,59	-0,09
8 Social Affection	-0,23	4,11	-0,91	2,17	1,11
9 Sadness	-0,68	1,38	-0,57	1,49	-0,35
10 Egotism	-0,03	1,05	-0,47	1,11	1,88
11 Deactivation	-0,23	2,31	-0,14	3,10	-0,15
12 Scepticism	-0,19	2,54	-1,19	2,31	1,96

Note:

* p < 0,05.

** p < 0,01.

Sample size for non-moody is 31.

Sample size for moody is 74.

Degrees of freedom are 103 throughout.

TABLE 44

HOTELLINGS T² TEST BETWEEN NON-MOODY AND MOODY SUBJECTS DESIGNATED ON THE MAT, ON THE 12 NOWLIS FACTORS ACROSS SESSION 2 (See Appendix D, Tables G-J for data)

Hotellings T ²	df	F-Value
11,41	12 92	0,85

Factor	Non-Moody		Moody		t-Value
	M	STD	M	STD	
1 Aggression	-0,10	1,40	0,05	2,09	-0,37
2 Anxiety	-0,29	1,85	-0,09	2,13	-0,45
3 Surgency	-0,26	1,97	0,00	2,33	-0,54
4 Elation	-0,06	2,14	-0,08	2,53	0,03
5 Concentrating	0,52	2,25	0,26	2,14	0,56
6 Fatigue	0,39	2,32	-0,18	2,59	1,05
7 Vigor	0,23	2,14	-0,49	2,85	1,25
8 Social Affection	-0,13	2,19	0,14	2,47	-0,52
9 Sadness	0,26	1,50	0,12	1,97	0,35
10 Egotism	-0,10	1,04	0,28	1,57	-1,24
11 Deactivation	-0,19	2,21	-0,05	2,86	-0,24
12 Scepticism	-0,35	1,20	-0,30	1,94	-0,15

Note:

* p < 0,05.

** p < 0,01.

Sample size for non-moody is 31.

Sample size for moody is 74.

Degrees of freedom are 103 throughout.

TABLE 45

HOTELLINGS T^2 TEST BETWEEN NON-MOODY AND MOODY SUBJECTS DESIGNATED ON THE MAT, ON THE 12 NOWLIS FACTORS ACROSS SESSION 3 (See Appendix D, Tables G-J for data)

Hotellings T^2	df	F-Value
13,02	12 92	0,97

Factor	Non-Moody		Moody		t-Value
	M	STD	M	STD	
1 Aggression	-0,52	1,50	-0,69	1,67	0,50
2 Anxiety	-0,29	1,40	-0,57	1,55	0,86
3 Surgency	0,45	2,43	-0,45	2,06	1,93
4 Elation	-0,26	2,24	-0,22	2,06	-0,09
5 Concentrating	-0,19	2,57	0,22	2,05	-0,86
6 Fatigue	0,71	2,36	0,70	2,45	0,01
7 Vigor	-0,16	2,24	-1,12	2,15	2,07*
8 Social Affection	0,03	2,18	-0,27	1,71	0,76
9 Sadness	-0,06	0,57	-0,09	1,54	0,11
10 Egotism	-0,35	0,75	-0,22	1,21	-0,59
11 Deactivation	0,55	1,65	0,27	2,28	0,61
12 Scepticism	-0,23	0,80	-0,31	1,10	0,39

Note:

* p <0,05.

** p <0,01.

Sample size for non-moody is 31.

Sample size for moody is 74.

Degrees of freedom are 103 throughout.

TABLE 46

HOTELLINGS T² TEST BETWEEN NON-MOODY AND MOODY SUBJECTS DESIGNATED ON THE MAT, ON THE 12 NOWLIS FACTORS ACROSS SESSION 4 (See Appendix D, Tables G-J for data)

Hotellings T ²	df	F-Value
10,95	12	0,81
	92	

Factor	Non-Moody		Moody		t-Value
	M	STD	M	STD	
1 Aggression	-0,13	1,34	0,09	1,71	-0,65
2 Anxiety	0,35	1,80	-0,18	1,62	1,48
3 Surgency	-0,06	1,29	-0,53	2,09	1,14
4 Elation	-0,03	1,20	-0,47	2,11	1,09
5 Concentrating	0,58	1,86	0,57	2,35	0,03
6 Fatigue	0,35	1,72	0,22	1,68	0,38
7 Vigor	-0,13	1,38	-0,46	2,38	0,72
8 Social Affection	-0,39	1,54	-0,24	2,14	-0,34
9 Sadness	0,45	1,59	-0,03	1,82	1,27
10 Egotism	0,23	1,41	0,20	1,09	0,09
11 Deactivation	0,29	1,85	0,39	2,14	-0,23
12 Scepticism	0,06	1,18	0,09	1,61	-0,09

Note:

* p <0,05.

** p <0,01.

Sample size for non-moody is 31.

Sample size for moody is 74.

Degrees of freedom are 103 throughout.

Tables 43-46 have shown that all the Hotelling T^2 tests are non-significant, and hence subjects designated "moody" and "non-moody" by the MAT criterion do not differ across the four experimental sessions on the 12 Nowlis Mood Factors simultaneously.

Tables 47-50 present the results for the high and low mean variability criterion of moodiness across the four experimental sessions on the 12 Nowlis Mood Factors.

TABLE 47

HOTELLINGS T² TEST BETWEEN NON-MOODY AND MOODY SUBJECTS DESIGNATED BY HIGH AND LOW MEAN VARIABILITY, ON THE 12 NOWLIS FACTORS ACROSS SESSION 1 (See Appendix D, Tables G-J for data)

Hotellings T ²	df	F-Value
20,14	12 21	1,10

Factor	Non-Moody		Moody		t-Value
	M	STD	M	STD	
1 Aggression	-0,18	1,13	-0,29	2,66	0,17
2 Anxiety	-0,24	0,56	-1,18	1,91	1,95
3 Surgency	-0,29	1,21	-1,29	3,24	1,19
4 Elation	2,29	9,85	-0,76	3,58	1,20
5 Concentrating	-0,06	1,85	0,41	3,34	-0,51
6 Fatigue	-0,12	2,03	-0,82	4,75	0,56
7 Vigor	-0,35	1,27	-0,41	2,87	0,08
8 Social Affection	0,24	5,25	-1,76	2,75	1,39
9 Sadness	-0,18	0,64	-1,00	1,17	2,55*
10 Egotism	-0,41	0,87	-0,53	1,81	0,24
11 Deactivation	-0,18	2,30	-0,41	2,92	0,26
12 Scepticism	0,12	3,10	-1,41	2,60	1,56

Note:

* p < 0,05.

** p < 0,01.

Sample size for non-moody is 17.

Sample size for moody is 17.

Degrees of freedom are 32 throughout.

TABLE 48

HOTELLINGS T² TEST BETWEEN NON-MOODY AND MOODY SUBJECTS DESIGNATED BY HIGH AND LOW MEAN VARIABILITY, ON THE 12 NOWLIS FACTORS ACROSS SESSION 2 (See Appendix D, Tables G-J for data)

Hotellings T ²	df	F-Value
15,61	12	0,85
	21	

Factor	Non-Moody		Moody		t-Value
	M	STD	M	STD	
1 Aggression	0,12	0,78	-0,35	2,32	0,79
2 Anxiety	-0,06	0,43	-1,06	2,79	1,46
3 Surgency	-0,06	0,75	-0,06	3,99	0,00
4 Elation	0,18	1,24	0,41	3,79	-0,24
5 Concentrating	0,12	2,09	0,18	2,24	-0,08
6 Fatigue	0,12	1,65	-1,24	2,99	1,63
7 Vigor	-0,41	1,73	0,94	4,26	-1,21
8 Social Affection	0,18	1,94	0,24	3,23	-0,06
9 Sadness	0,24	0,83	0,12	3,08	0,15
10 Egotism	0,00	0,35	-0,06	2,19	0,11
11 Deactivation	0,00	1,54	0,65	3,90	-0,64
12 Scepticism	-0,18	1,07	0,06	2,82	-0,32

Note:

* p < 0,05.

** p < 0,01.

Sample size for non-moody is 17.

Sample size for moody is 17.

Degrees of freedom are 32 throughout.

TABLE 49

HOTELLINGS T² TEST BETWEEN NON-MOODY AND MOODY SUBJECTS DESIGNATED BY HIGH AND LOW MEAN VARIABILITY, ON THE 12 NOWLIS FACTORS ACROSS SESSION 3 (See Appendix D, Tables G-J for data)

Hotellings T ²	df	F-Value
23,94	12	1,31
	21	

Factor	Non-Moody		Moody		t-Value
	M	STD	M	STD	
1 Aggression	-0,12	0,33	-0,76	2,28	1,16
2 Anxiety	-0,29	1,10	-1,71	1,83	2,72*
3 Surgency	-0,12	0,78	0,18	3,34	-0,35
4 Elation	-0,18	1,38	0,41	3,36	-0,67
5 Concentrating	0,18	1,33	-0,88	3,26	1,24
6 Fatigue	0,88	1,83	1,53	3,28	-0,71
7 Vigor	-0,59	1,54	-1,29	3,53	0,76
8 Social Affection	-0,12	1,11	0,12	3,35	-0,27
9 Sadness	-0,12	0,33	0,24	2,17	-0,66
10 Egotism	0,00	0,71	-0,24	1,15	0,72
11 Deactivation	0,88	1,69	1,35	2,12	-0,72
12 Scepticism	-0,12	0,60	-0,18	0,95	0,22

Note:

* p <0,05.

** p <0,01.

Sample size for non-moody is 17.

Sample size for moody is 17.

Degrees of freedom are 32 throughout.

TABLE 50

HOTELLINGS T² TEST BETWEEN NON-MOODY AND MOODY SUBJECTS DESIGNATED BY HIGH AND LOW MEAN VARIABILITY, ON THE 12 NOWLIS FACTORS ACROSS SESSION 4 (See Appendix D, Tables G-J for data)

Hotellings T ²	df	F-Value
18,49	12 21	1,01

Factor	Non-Moody		Moody		t-Value
	M	STD	M	STD	
1 Aggression	-0,18	0,64	1,06	2,70	-1,83
2 Anxiety	-0,06	0,24	1,06	2,30	-1,99
3 Surgency	-0,18	1,33	-0,94	2,30	1,18
4 Elation	-0,12	0,86	-0,76	3,19	0,81
5 Concentrating	0,35	1,66	0,94	3,27	-0,66
6 Fatigue	0,35	1,32	0,18	1,51	0,36
7 Vigor.	0,00	1,50	-0,88	3,00	1,09
8 Social Affection	0,12	1,41	-0,88	2,87	1,29
9 Sadness	0,06	0,24	0,18	1,78	-0,27
10 Egotism	0,18	1,07	0,06	1,39	0,28
11 Deactivation	0,65	1,06	-0,24	3,07	1,12
12 Scepticism	-0,06	0,24	0,76	2,33	-1,45

Note:

* p <0,05.

** p <0,01.

Sample size for non-moody is 17.

Sample size for moody is 17.

Degrees of freedom are 32 throughout.

Tables 47-50 have shown that none of the Hotelling T^2 tests are significant, and hence subjects designated "moody" and "non-moody" by the high and low mean variability criterion do not differ across the four experimental sessions on the 12 Nowlis Mood Factors simultaneously.

Acceptance or Rejection of Hypotheses

These results, Tables 43-50, show that subjects designated "moody" and "non-moody" by both the MAT criterion and the high and low mean variability criterion do not differ across the four experimental sessions on the 12 Nowlis Mood Factors. Hence the Null hypothesis (4.4.1.1) that the four experimental sessions will not differ in their effects on the 12 Nowlis Mood Factors for moody vs. non-moody subjects, is accepted.

This finding suggests that overall the four different experimental sessions were influencing moody and non-moody subjects in similar ways.

4.5 The Effect of Session 2, the Experimenter Administered Mood Analysis Technique (MAT) on Moods Classified as Positive, Neutral and Negative

Introduction

In this section a further more detailed examination of the effects of Session 2 on subjects' moods is carried out. The preceding sections have shown that Session 2, the experimenter administered Mood Analysis Technique (MAT) influences the 12 Nowlis Mood Dimensions across all moods in ways different from the other experimental sessions. The next step taken is to find out if Session 2 is influencing different affective states (subjects' moods) in different ways.

Subjects' descriptive classifications of their affective state at the beginning of Session 2 were divided into three groups: Group 1 (positive moods), Group 2 (neutral moods), and Group 3 (negative moods). These categories cannot be assumed to be entirely homogeneous, e.g. Group 1 contains affective states classified as "happy" and affective states classified as "curious". However, the classification system is not arbitrary.

To be included in Group 1 (positive moods) an affective state had to have either a positive tone and high energy level (e.g. "elated") or simply a positive feeling tone (e.g. "curious" and "expectant"). To be included in Group 2 (neutral moods) an affective state had to have a moderate to low energy level with neither a high positive nor high negative feeling tone; this included such classifications as "detached", "drowsy", "pleased", "relaxed" and "apathetic". It is possible that there is a small degree of overlap between the "pleased" moods of Group 2 and the "good" moods of Group 1 (positive moods). But the overlap is not great because the "good" moods of Group 1 had high energy levels. To be included in Group 3 (negative moods) an affective state had to have either a negative tone and high energy level (e.g. "angry") or simply a negative feeling tone (e.g. "apprehensive"). In general, the moods of Group 3 were moods of negative tone and low energy level, due to the preponderance of depressed moods in this Group.

The clinical value of the MAT will be enhanced if it can be shown

to influence Group 3 (negative moods) in positive ways, i.e. if it can decrease their intensity or facilitate their change into more positive moods.

Summary of Results

1. Group 3 (negative moods) show a greater absolute magnitude of change than Group 2 (neutral moods) $p < 0,01$.
2. The three mood groups were statistically distinguished from each other on the Nowlis Mood Factors: Anxiety $p < 0,01$, Surgency $p < 0,01$, and Elation $p < 0,05$.
3. For the Nowlis Mood Factor Anxiety: Group 3 (negative moods) showed a decrease in the mood factor Anxiety and Groups 1 and 2 showed an increase in Anxiety. A decrease in the mood factor Anxiety for negative moods is taken to be an improvement in these negative moods.

For the Nowlis Mood Factor Surgency: Group 3 (negative moods) showed an increase in the mood factor Surgency and Groups 1 and 2 showed a decrease in Surgency. An increase in the mood factor Surgency for negative moods is taken to be an improvement in these negative moods.

For the Nowlis Mood Factor Elation: Group 3 (negative moods) showed an increase in the mood factor Elation and Group 1 showed a decrease in Elation. An increase in the mood factor Elation for negative moods is taken to be an improvement in negative moods.

Hypotheses

4.5.1.1 Null Hypothesis H_0 :

It is hypothesized that Session 2, the experimenter administered Mood Analysis Technique (MAT) will not differ in its effect on the absolute magnitude of change scores for the three mood groups.

4.5.1.2 Alternative Hypothesis H_1 :

It is hypothesized that Session 2, the experimenter administered Mood Analysis Technique (MAT) will differ

in its effect on the absolute magnitude of change scores for the three mood groups.

Results

Table 51 presents the one-way analysis of variance comparing the absolute magnitude of change of the three mood groups on Session 2. (See Appendix D, Tables G-J for data, and Appendix F, Table N₁ for the analysis of variance).

Table 52 is a summary table showing significant absolute magnitude of change scores of the three mood groups on Session 2.

TABLE 51

ONE-WAY ANALYSIS OF VARIANCE COMPARING THE ABSOLUTE
MAGNITUDE OF CHANGE OF THE THREE MOOD GROUPS ON SESSION 2
(See Appendix D, Tables G-J for data
Appendix F, Table N₁ for the analysis)

Table of Means

	Group 1 (positive moods)	Group 2 (neutral moods)	Group 3 (negative moods)
Mean	16,97	13,58	20,82
Sample size	37	34	34

Analysis of Variance

Source	df	S.S.	M.S.	F-Value
Between Groups	2	916,99	458,50	6,09 **
Within Groups	102	7674,66	75,24	

Note:

* p <0,05.

** p <0,01.

TABLE 52

SUMMARY TABLE SHOWING SIGNIFICANT ABSOLUTE MAGNITUDE
OF CHANGE SCORES OF THE THREE MOOD GROUPS ON SESSION 2

	Direction	t-Value
Session 2	Group 3 (negative moods) show greater absolute magnitude of change than Group 2 (neutral moods)	3,66 **

Note:

* p <0,05.

** p <0,01.

Table 51 has shown that overall there is a significant difference in the absolute magnitude of change scores between the three mood groups. This is established at the 0,01 level of significance.

Table 52 has shown that the greatest absolute magnitude of change occurs for negative moods as compared with neutral moods. Statistically, Group 3, negative moods, show a greater mean absolute magnitude of change than Group 2, the neutral mood group.

Acceptance or Rejection of Hypotheses

The Null Hypothesis (4.5.1.1) that Session 2, the experimenter administered Mood Analysis Technique (MAT), will not differ in its effect on the absolute magnitude of change scores for the three mood groups, is rejected.

It has been shown that Group 3, negative moods, have a greater mean absolute magnitude of change scores than Group 2, neutral moods, ($p < 0,01$). Hence the experimental data is consonant with the alternative hypothesis.

It must now be shown that this greater global effect on Group 3 (negative moods) represents an improvement in these moods. This can be done by (a) examining the means of magnitude of change scores on the 12 Nowlis Mood Factors and (b) examining qualitative data which indicates whether the subjects in Group 3 experienced a change in intensity or a change in quality in their negative mood at the conclusion of Session 2.

Table 53 presents the means of magnitude of change scores on the 12 Nowlis Mood Factors for the three mood groups (See Appendix D, Tables G-J for data; and Appendix F, Table N₂ for analysis of variance tables). Table 54 is a summary table presenting the Nowlis Mood Factors that show significant magnitude of change scores for the three mood groups and the significant inter-group comparisons. Tables 53 and 54 will provide evidence for whether or not the greater absolute magnitude of change for negative moods represents an improvement in these moods.

TABLE 53

TABLE OF MEANS OF MAGNITUDE OF CHANGE ON THE TWELVE
NOWLIS MOOD FACTORS FOR THE THREE MOOD GROUPS ON SESSION 2

(See Appendix D, Tables G-J for data; and Appendix F, Table N₂ for analysis of variance tables)

	Group 1 Positive Moods	Group 2 Neutral Moods	Group 3 Negative Moods	Overall Mean	F-Value
Factor 1 (Aggression)	-0,17	0,08	0,12	0,01	0,24
2 (Anxiety)	0,57	0,08	-1,15	-0,15	7,21**
3 (Surgency)	-0,91	-0,14	0,85	-0,08	6,00**
4 (Elation)	-0,91	0,14	0,56	-0,08	3,60*
5 (Concentrating)	0,49	0,19	0,32	0,33	0,16
6 (Fatigue)	0,49	0,03	-0,56	-0,01	1,51
7 (Vigour)	-1,03	-0,19	0,41	-0,28	2,61
8 (Social Affection)	-0,17	-0,17	0,53	0,06	0,99
9 (Sadness)	0,49	0,17	-0,18	0,16	1,13
10 (Egotism)	0,26	-0,19	0,47	0,17	2,00
11 (Deactivation)	0,09	-0,44	0,09	-0,10	0,46
12 (Scepticism)	-0,23	-0,47	-0,24	-0,31	0,23

Note:

* p < 0,05.

** p < 0,01.

Group 1 contains all moods classified as active, happy, good, excited, curious, energetic, elated and expectant.
n = 37

Group 2 contains all moods classified as content, apathetic, sluggish, quiet, calm, listless, detached, pleased, drowsy, thoughtful, relaxed, indifferent, fragile, restful, comfortable and indecisive.
n = 34

Group 3 contains all moods classified as depressed, angry, anxious, tired, defiant, sceptical, apprehensive, frustrated, upset and dissatisfied.
n = 34

TABLE 54

SUMMARY TABLE SHOWING FACTORS WITH SIGNIFICANT MAGNITUDE OF CHANGE SCORES AND
THE SIGNIFICANT COMPARISONS BETWEEN THE THREE MOOD GROUPS ON SESSION 2

Factor	F-Value	Direction	t-Value
2 Anxiety	7,21**	Group 3 (negative moods) shows a decrease on Anxiety and Group 1 (positive moods) shows an increase on Anxiety	-3,44**
		Group 3 (negative moods) shows a decrease on Anxiety and Group 2 (neutral moods) shows an increase on Anxiety	-2,53*
3 Surgency	6,00**	Group 3 (negative moods) shows an increase on Surgency and Group 1 (positive moods) shows a decrease on Surgency.	3,03**
		Group 3 (negative moods) shows an increase on Surgency and Group 2 (neutral moods) shows a decrease on Surgency	2,25*
4 Elation	3,60*	Group 3 (negative moods) shows an increase on Elation and Group 1 (positive moods) shows a decrease on Elation	2,32*

Note:

* p < 0,05.

** p < 0,01.

Sample size is 35; 36; 34 for the three mood groups.
Degrees of freedom are 2 and 102.

Table 53 has shown that the three mood groups are distinguished from each other at different levels of statistical significance on the Nowlis Mood Factors: Anxiety, Surgency and Elation. Anxiety and Surgency are significant at the 0,01 level, and Elation is significant at the 0,05 level.

Table 54 has shown that for the Nowlis Mood Factor Anxiety: Group 3, negative moods, showed a decrease in Anxiety and Groups 1 and 2 showed an increase in Anxiety ($p < 0,01$, $p < 0,05$ respectively). A decrease in the mood factor Anxiety for negative moods is taken to be an improvement in these negative moods.

For the Nowlis Mood Factor Surgency: Group 3, negative moods, showed an increase in the mood factor Surgency and Groups 1 and 2 showed a decrease in Surgency ($p < 0,01$, $p < 0,05$ respectively). An increase in the mood factor Surgency for negative moods is taken to be an improvement in these negative moods.

For the Nowlis Mood Factor Elation: Group 3, negative moods, showed an increase in the mood factor Elation and Group 1 showed a decrease in Elation ($p < 0,05$). An increase in the mood factor Elation for negative moods is taken to be an improvement in negative moods.

The next section presents qualitative data for the three mood groups.

Table 55 shows the change in Group 3, negative moods, resulting from Session 2, the experimenter administered Mood Analysis Technique.

TABLE 55

GROUP 3 NEGATIVE MOODS

Depressed, Angry, Anxious, Tired, Defiant, Sceptical, Apprehensive, Frustrated, Upset, Dissatisfied

Subject No.	Mean Variability	Pre-Test Mood	Intensity	Post-Test Mood	Intensity	Change in Quality	Change in Intensity
7	21.75	Depressed	+3	Calm	+1	x	
9	19.00	Depressed	+3	Depressed	+2		-1
51	27.50	Depressed	+3	Happy	+2	x	
62	7.80	Depressed	+3	Depressed	+1		-2
65	26.75	Depressed	+1	Happy	+3	x	
68	12.75	Depressed	+2	Depressed	+1		-1
69	23.25	Depressed	+3	Depressed	+2		-1
84	16.50	Depressed	+2	Doubtful	+2	x	
105	12.00	Depressed (tired)	+2	Happy	+2	x	
10	24.20	Tired	+3	Active	+2	x	
13	20.60	Tired (anxious; depressed)	+2	Tired	+1		-1
15	17.80	Tired (cramps)	+2	Tired	+2		
22	15.75	Tired	+1	Tired	0		-1
30	21.50	Tired (sluggish; vulnerable)	+1	Confused (but more aware)	+2	x	
36	29.40	Tired (worried; concerned)	+3	Relaxed	0	x	
40	22.75	Tired	+2	Thoughtful	+3	x	
41	14.50	Tired	+2	Tired (impatient)	+3		+1
80	13.00	Tired (slightly depressed)	+2	Anticipation	+1	x	
86	17.75	Tired (a little tense)	+2	Slightly energetic	+1	x	
91	23.00	Tired (worried)	+1	Pensive	+2	x	
45	12.50	Anxious	+3	Anxious	+1		-2
46	25.75	Anxious	+3	Confused	+2	x	
50	21.50	Anxious	+2	Anxious	-1		-3
31	18.80	Frustrated	+1	Frustrated	+2		+1
55	11.00	Frustrated (tense; bothered)	+2	Sulky	+3	x	
89	22.25	Frustrated (angry)	+2	Frustrated	+3		+1
27	15.25	Apprehensive	+2	Wistful	+3	x	
98	17.60	Apprehensive	+3	Apprehensive	+1		-2
33	26.60	Upset	+3	Upset	+1		-2
34	17.25	Upset	+3	Upset	+3		-
32	11.20	Angry	+3	Angry	+1		-2
19	25.00	Defiant	+3	Thoughtful	+2	x	
44	15.00	Dissatisfied (hindered)	+3	Dissatisfied	+3		-
3	11.00	Sceptical	+2	Sceptical	+3		+1

Table 55 shows:

Depressed moods

For the nine pre-test moods classified as depressed by the subjects, four underwent a change in intensity (Subjects Nos. 9, 62, 68 and 69), and five underwent a change in quality (Subjects Nos. 7, 51, 65, 84 and 105). For those Depressed moods that showed a change in intensity, in each case the change was a decrease in intensity.

For those five moods that underwent a change in quality, three went from Depressed to Happy, one went from Depressed to Doubtful, and the fifth went from Depressed to Calm.

A decrease in the intensity of Depressed moods is taken as an improvement in those moods; for the three moods that went from Depressed to Happy, this change in quality is taken as an improvement. The Depressed mood that changed to Calm also represents an improvement. In the case of the one mood that went from Depressed to Doubtful, this may perhaps be classified as a slight improvement in the sense of a relief or lightening of depression.

Summary

Session 2, the experimenter administered Mood Analysis Technique (MAT), influenced Depressed moods by changing either their intensity or their quality. In each case the change in mood could be viewed as an improvement.

Tired moods

For the eleven pre-test moods classified as Tired by the subjects, three underwent a change in intensity (Subjects Nos. 13, 22 and 41) and seven underwent a change in quality (Subjects Nos. 10, 30, 36, 40, 80, 86 and 91), one mood underwent neither change in intensity nor quality (Subject No. 15), but this was a Tired mood due to menstruation. For those Tired moods that showed a change in intensity, two showed a decrease in intensity and one showed an increase in intensity.

For those seven moods that underwent a change in quality: one went from Tired to Active, one went from Tired to Confused (but more aware), one went from Tired to Relaxed, one went from Tired to Thoughtful, one went from Tired to Anticipation, one went from Tired to Pensive, and one went from Tired to Slightly Energetic. Thus two-thirds of the moods that showed a change in intensity improved; and it is believed that it is reasonable to say that the moods that went from Tired to Active, Relaxed, Thoughtful, Pensive, Anticipation, Slightly Energetic, and Confused (but more aware) showed an improvement.

Summary

Session 2, the experimenter administered Mood Analysis Technique (MAT), influenced Tired moods, in general, by changing either their intensity or their quality. Changes in quality predominated. For those Tired moods that showed a change in intensity, two-thirds decreased in intensity. For those Tired moods that showed a change in quality, all seven could be viewed as an improvement.

Anxious moods

For the three pre-test moods classified as Anxious by the subjects, two underwent a change in intensity (Subjects Nos. 45 and 50) and one underwent a change in quality (Subject No. 46). For the Anxious moods that showed a change in intensity, in each case the change was a decrease in intensity.

In the case of one Anxious mood that showed a change in quality, the change was from Anxious to Confused.

The decrease in intensity for the two Anxious moods is taken as an improvement. In the case of the Anxious mood that changed to Confused, this is taken as a slight improvement.

Summary

Session 2, the experimenter administered Mood Analysis Technique (MAT), influenced Anxious moods by changing either their intensity or their quality. For the Anxious moods that showed a change in intensity, the change in each case was a decrease. The Anxious

mood that showed a change in quality can be viewed as a slight improvement.

Frustrated moods

For the three pre-test moods classified as Frustrated by the subjects, two underwent a change in intensity (Subjects Nos. 31 and 89) and one underwent a change in quality (Subject No. 55). For the Frustrated moods that showed a change in intensity, in each case the change was an increase in intensity.

In the case of the one Frustrated mood that showed a change in quality, the change was from Frustrated to Sulky.

The increase in intensity for the two Frustrated moods cannot be taken as an improvement. In the case of the Frustrated mood that changed to Sulky, this can perhaps be taken as a slight improvement as the original mood contained elements of "tense" and "bothered".

Summary

Session 2, the experimenter administered Mood Analysis Technique (MAT), influenced Frustrated moods by changing either their intensity or their quality. For the Frustrated moods that showed a change in intensity, the change in each case was an increase. This cannot be taken as an improvement. The Frustrated mood that showed a change in quality can be viewed as a slight improvement.

Apprehensive moods

For the two pre-test moods classified as Apprehensive by the subjects, one underwent a change in intensity (Subject No. 98) and one underwent a change in quality (Subject No. 27).

The Apprehensive mood that showed a change in intensity decreased in intensity. The Apprehensive mood that showed a change in quality changed from Apprehensive to Wistful. The decrease in intensity can be taken as an improvement. The change from

Apprehensive to Wistful can also be taken as an improvement.

Summary

Session 2, the experimenter administered Mood Analysis Technique (MAT), influenced Apprehensive moods by changing either their intensity or their quality. For the Apprehensive mood that showed a change in intensity, the change was a decrease. This can be taken as an improvement. For the one Apprehensive mood that showed a change in quality, the change can be taken as a slight improvement.

Upset moods

For the two pre-test moods classified as Upset by the subjects, one underwent a change in intensity (Subject No. 33) and one showed no change (Subject No. 34).

The one Upset mood that showed a change in intensity, decreased in intensity. This is taken as an improvement.

Angry moods

For the one mood classified as Angry (Subject No. 32), the change was a decrease in intensity. This is taken as an improvement.

Defiant moods

For the one mood classified as Defiant (Subject No. 19), the change was a change in quality. This mood changed from Defiant to Thoughtful. This is taken as an improvement.

Dissatisfied moods

For the one mood classified as Dissatisfied (Subject No. 44), there was neither change in intensity nor quality.

Sceptical moods

For the one mood classified as Sceptical (Subject No. 3), the change was an increase in intensity. This cannot be taken as an

improvement.

Summary : Group 3 (negative moods)

In summary Session 2 influenced the mood categories: Depressed, Tired, Anxious, Apprehensive, Upset, Angry and Defiant in predominantly positive ways.

For the mood category Frustrated, Session 2 appeared to have a largely negative effect; for the category Sceptical there was also a negative effect.

For the mood category Dissatisfied there was no change.

In general the effect of Session 2, the experimenter administered Mood Analysis Technique (MAT) on Group 3 (negative moods), has been shown to be a positive effect.

Table 56 shows the change in Group 2 (neutral moods) resulting from Session 2, the experimenter administered Mood Analysis Technique (MAT).

TABLE 56
GROUP 2 NEUTRAL MOODS

Content, Apathetic, Sluggish, Quiet, Calm, Listless, Detached, Pleased, Drowsy, Thoughtful, Relaxed, Indifferent, Fragile, Restful, Comfortable, Indecisive

Subject No.	Mean Variability	Pre-Test Mood	Intensity	Post-Test Mood	Intensity	Change in Quality	Change in Intensity
4	12.75	Contented	+2	Contented	+1		-1
26	12.00	Contented	+2	Contented	+3		+1
35	19.50	Contented	+2	Happy (light and airy)	+3	x	
54	17.40	Contented	+1	Intent (serious)	+1	x	
67	9.80	Contented	+2	Contented	+2		
87	14.75	Contented	+1	Contented	+1		+2
95	31.40	Contented	+2	Relaxed	+1	x	
66	10.50	Relaxed	+2	Relaxed	+2		
70	15.80	Relaxed	+2	Relaxed (mood goes through a cycle: relaxed-anxious-relaxed)	+3		+1
75	8.75	Relaxed	+2	Relaxed	+3		+1
77	18.75	Relaxed	+1	Relaxed	+2		+1
81	20.50	Relaxed	+2	Relaxed	+3		+1
90	12.80	Relaxed	+2	Concentrating	+2	x	
104	26.40	Relaxed	+2	Affectionate	+1	x	
23	10.25	Calm (detached, relaxed)	+1	Calm	+3		+2
38	21.50	Calm	+2	Active	+2	x	
56	12.50	Calm	+1	Tired	+1	x	
57	22.60	Calm (quiet)	+1	Apprehensive	+1	x	
101	11.60	Calm	+3	Calm	+3		
52	22.00	Pleased	+2	Peaceful	+3	x	
59	9.60	Pleased	+2	Pleased	+3		+1
78	15.80	Listless (thoughtful)	+3	Energetic	+1	x	
25	21.25	Listless (and irritable)	+2	Listless	+2		
8	13.40	Apathetic	+3	Apathetic	+3		
85	9.25	Comfortable	+1	Comfortable	+2		+1
43	13.40	Detached (passive, uninvolved)	+3	Detached (frustrated)	+2		-1
53	9.75	Drowsy (calm)	+2	Drowsy	+1		
74	22.80	Fragile	+2	Bitter	+2	x	
92	10.40	Indecisive	+2	Indecisive	+2		
71	18.20	Indifferent - detached	+1	Confused - carefree	+2	x	
17	26.50	Sluggish	+2	Energetic	+2	x	
21	10.25	Quiet (aimless)	+2	Quiet	+2		
82	13.75	Restful	+2	Restful (more in touch)	+1		-1
60	12.25	Thoughtful	+2	Calm	+2	x	

Table 56 has shown:

Contented moods

For the seven pre-test moods classified as Contented by the subjects, two underwent a change in intensity (Subject Nos. 4 and 26), and three underwent a change in quality (Subject Nos. 35, 54 and 95). In two cases there was neither change in intensity nor in quality (Subject Nos. 67 and 87).

For those Contented moods that showed a change in intensity, one increased and one decreased.

For the three Contented moods that underwent a change in quality, one went from Contented to Happy, one went from Contented to Intent, and one went from Contented to Relaxed.

Summary

Session 2, the experimenter administered Mood Analysis Technique (MAT), influenced Contented moods in five out of seven cases by changing either their intensity or their quality. For those Contented moods that changed in intensity the effect was mixed, one mood increasing in intensity and the other decreasing. For those Contented moods that showed a change in quality, in two out of the three cases the results could be viewed as a shift to a mood state of either higher physical or mental energy, e.g. Contented to Happy, Contented to Intent. In the third case the change can be viewed as a shift to a related mood of neutral feeling tone.

Relaxed moods

For the seven pre-test moods classified as Relaxed by the subjects, four underwent a change in intensity (Subject Nos. 70, 75, 77 and 81) and two underwent a change in quality (Subject Nos. 90 and 104). In one case there was neither a change in intensity nor in quality (Subject No. 66).

For those Relaxed moods that showed a change in intensity, the change in each case was an increase in intensity.

For those Relaxed moods that showed a change in quality, in each case the results could be viewed as a shift to a mood state of either higher physical or mental energy, e.g. Relaxed to Affectionate and Relaxed to Concentrating.

Summary

Session 2, the experimenter administered Mood Analysis Technique (MAT), influenced Relaxed moods in six out of seven cases by changing either their intensity or their quality. For those Relaxed moods that changed intensity the effect was the same in each case, an increase in intensity. For those Relaxed moods that showed a change in quality, in each case the change could be viewed as a shift to a mood state of either higher physical or mental energy.

Calm moods

For the five pre-test moods classified as Calm by the subjects, one underwent a change in intensity (Subject No. 23) and three underwent a change in quality (Subject Nos. 38, 56 and 59). In one case there was neither a change in intensity nor quality (Subject No. 101).

For the Calm mood that showed a change in intensity, the change was an increase.

For those Calm moods that showed a change in quality, one went from Calm to Active, one went from Calm to Tired, and one went from Calm to Apprehensive.

Only one mood changed to a mood of higher energy with a positive feeling tone (Calm to Active).

Summary

Session 2, the experimenter administered Mood Analysis Technique (MAT), influenced Calm moods in four out of five cases by changing either their intensity or their quality. For the Calm mood that showed a change in intensity, the change was an increase. For those Calm moods that showed a change in quality, only one mood

changed to a mood of higher energy level and positive feeling tone (Calm to Active).

Pleased moods

For the two pre-test moods classified as Pleased by the subjects, one underwent a change in intensity (Subject No. 59) and one underwent a change in quality (Subject No. 52). For the Pleased mood that underwent a change in intensity, the change was an increase. For the one Pleased mood that underwent a change in quality, the change was to a mood of positive feeling tone and higher intensity (Pleased +2 to Peaceful +3).

Summary

Session 2, the experimenter administered Mood Analysis Technique (MAT), influenced Pleased moods in every case by changing either their intensity or their quality. For the Pleased mood that showed a change in intensity, the change was an increase. For the Pleased mood that showed a change in quality, the change was to a mood of positive feeling tone and higher intensity (Pleased +2 to Active +3).

Listless moods

For the two pre-test moods classified as Listless by the subjects, one underwent a change in quality (Subject No. 78) and one showed no change (Subject No. 25). For the Listless mood that showed a change in quality, the change was to a mood of more positive feeling tone (Listless to Energetic).

Summary

Session 2, the experimenter administered Mood Analysis Technique (MAT), influenced Listless moods in one out of two cases by changing the quality of the mood. The change was to a mood of more positive feeling tone.

Apathetic moods

For the one pre-test mood classified as Apathetic (Subject No. 8),

there was neither a change in intensity nor quality.

Comfortable moods

For the one pre-test mood classified as Comfortable (Subject No. 85), there was a change of increased intensity.

Detached moods

For the one pre-test mood classified as Detached (Subject No. 43), there was a change of decreased intensity.

Drowsy moods

For the one pre-test mood classified as Drowsy (Subject No. 53), there was a change of decreased intensity.

Fragile moods

For the one pre-test mood classified as Fragile (Subject No. 74), there was a change of quality to a mood of more negative feeling tone.

Indecisive moods

For the one pre-test mood classified as Indecisive (Subject No. 92), there was neither a change in intensity nor quality.

Indifferent moods

For the one pre-test mood classified as Indifferent (Subject No. 71), there was a change in quality to a mood of more negative feeling tone but containing a new positive element (carefree), and this mood had a higher intensity level.

Sluggish moods

For the one pre-test mood classified as Sluggish (Subject No. 17), there was a change in quality to a more positive feeling tone.

Quiet moods

For the one pre-test mood classified as Quiet (Subject No. 21), there was neither a change in intensity nor quality.

Restful moods

For the one pre-test mood classified as Restful (Subject No. 82), there was a decrease in intensity and the subject reported feeling more in touch.

Thoughtful moods

For the one pre-test mood classified as Thoughtful (Subject No. 60), there was a change in quality (Thoughtful to Calm).

Summary : Group 2 (neutral moods)

In general, Session 2, the experimenter administered Mood Analysis Technique (MAT), influenced the mood categories Contented (n=7), Relaxed (n=7), Pleased (n=2), Listless (n=2), Comfortable (n=1) by either increasing the intensity of the mood, or shifting the mood to one of higher mental or physical energy.

For the mood category Calm (n=5), one mood increased intensity, but only one out of three moods that changed quality changed to a mood with positive feeling tone.

For the mood categories Apathetic (n=1), Indecisive (n=1), and Quiet (n=1), there was neither change in intensity nor quality.

For the mood categories Detached (n=1), Drowsy (n=1) and Restful (n=1), there was a decrease in intensity. The Restful mood that decreased intensity also showed a new element - "being in touch".

For the mood category Sluggish (n=1), there was a change in quality to a more positive feeling tone. For the mood category Thoughtful (n=1), there was a shift to another mood of neutral feeling tone.

For the mood categories Fragile (n=1) and Indifferent (n=1), there

was a change to a mood of more negative feeling tone. However the Indifferent mood had a "carefree" element and a higher intensity level.

Table 57 shows the change in Group 1 (positive moods) resulting from Session 2, the experimenter administered Mood Analysis Technique (MAT).

TABLE 57
GROUP 1 POSITIVE MOODS

Active, Happy, Good, Excited, Curious, Energetic, Elated, Expectant

Subject No.	Mean Variability	Pre-Test Mood	Intensity	Post-Test Mood	Intensity	Change in Quality	Change in Intensity
5	14.25	Happy (apprehension; sad)	+1	Happy	+3		+2
6	12.00	Happy (anticipating; content)	+3	Happy	+2		-1
14	19.50	Happy (amused; expectant)	+2	Happy	+1		-1
16	20.60	Happy (but worried)	+3	Worried	+3	x	
18	13.50	Happy	+2	Confident	+2	x	
29	19.50	Happy	+3	Confident - Elated	+3	x	
39	17.75	Happy	+2	Pent up	+3	x	
48	20.50	Happy (carefree)	+2	Calm	0	x	
49	12.50	Happy (relaxed; interested)	+2	Anticipating	+2	x	
63	16.50	Happy (elated; anxious)	+2	Irritated	-1	x	
64	18.25	Happy (keen; fresh)	+2	Happy	+3		+1
72	8.25	Happy	+1	Happy	+2		+1
73	17.75	Happy (carefree)	+2	Calm	+2	x	
76	8.60	Happy	+2	Happy	+3		+1
79	12.00	Happy (physically tired)	0	Calm	+1	x	
88	29.00	Happy	+3	Restless	+2	x	
93	12.25	Happy	+1	Happy	+2		+1
94	23.40	Happy (carefree)	+2	Happy	-1		-3
96	3.00	Happy	+3	Happy	+3		
97	28.80	Happy (held in energy)	+2	Sad (wistful)	+2	x	
99	12.75	Happy	+1	Happy	+2		+1
100	20.50	Happy (energetic; thoughtful)	+3	Elated	+3	x	
103	11.60	Happy	+3	Happy	+1		-2
11	16.40	Excited	+3	Reflective	+2	x	
24	19.00	Excited (vaguely anxious)	+1	Excited	+2		+1
28	16.00	Excited (yet apprehensive)	+3	Excited	+3		
61	13.50	Excited (optimistic; physically fit)	+3	Excited	+2		-1
1	17.80	Active	+3	Tense (but calm)	+3	x	
20	31.25	Active (elated; anxious)	+3	Anxious	+3	x	
2	16.75	Good	+2	Good	+3		+1
42	16.25	Good (amiable)	+2	Good	+3		+1
58	13.75	Good	0	Detached	+1	x	
12	19.25	Curious	+2	Relaxed	0	x	
102	6.60	Curious	+3	Tired	+2	x	
37	22.80	Energetic	+3	Serene	+3	x	
47	22.50	Elated	+3	Worried	+2	x	
83	24.25	Expectant	+3	Languid	+3	x	

Table 57 shows:

Happy moods

For the twenty-three pre-test moods classified by subjects as Happy, ten showed a change in intensity (Subject Nos. 5, 6, 14, 64, 72, 76, 93, 94, 99 and 103), and twelve showed a change in quality (Subject Nos. 16, 18, 29, 39, 48, 49, 63, 73, 79, 88, 97 and 100). For one Happy mood there was neither change in intensity nor quality (Subject No. 96).

For those Happy moods that showed a change in intensity, six showed an increase, and four showed a decrease.

For those Happy moods that showed a change in quality, three went to Calm, one went to Confident, one went to Confident-Elated, one went to Elated, and one went to Anticipating. These changes can be viewed as representing a shift to other moods of positive feeling tone. Five moods that changed quality can be viewed as representing a shift to moods of negative feeling tone, i.e. one went to Worried, one went to Pent-up, one went to Irritated, one went to Restless and one went to Sad.

Summary

Session 2, the experimenter administered Mood Analysis Technique (MAT), influenced Happy moods in 22 out of 23 cases by changing either their intensity or their quality. For those moods that showed a change in intensity, six increased and four decreased. For those moods that showed a change in quality, seven can be viewed as shifting to other moods of positive feeling tone, and five can be viewed as shifting to moods of negative feeling tone.

Excited moods

For the four pre-test moods classified by subjects as Excited, two showed a change in intensity (Subject Nos. 24 and 61), and one showed a change in quality (Subject No. 11). For one Excited mood there was neither a change in intensity nor in quality (Subject No. 28).

For those Excited moods that showed a change in intensity, one showed an increase, and one showed a decrease.

For the Excited mood that showed a change in quality, the change was to another mood of positive feeling tone with cognitive elements, a Reflective mood.

Summary

Session 2, the experimenter administered Mood Analysis Technique (MAT), influenced Excited moods in three out of four cases by changing either their intensity or their quality. For those moods that showed a change in intensity, one showed an increase and one showed a decrease. For the one Excited mood that showed a change in quality, the change was to a mood with a greater predominance of cognitive elements.

Active moods

For the two pre-test moods classified by subjects as Active, both moods showed a change in quality (Subject Nos. 1 and 20). One Active mood changed to Tense (but Calm), and the other changed to an Anxious mood.

Summary

Session 2, the experimenter administered Mood Analysis Technique (MAT), influenced Active moods in each case by bringing about a change in quality. In each case the change was to a mood of more negative feeling tone.

Curious moods

For the two pre-test moods classified by subjects as Curious, both moods showed a change in quality (Subject Nos. 12 and 102). One Curious mood changed to Relaxed, and the other changed to a Tired mood.

Summary

Session 2, the experimenter administered Mood Analysis Technique (MAT), influenced Curious moods in each case by bringing about a

change in quality. In one case the change was to a mood of neutral feeling tone, and in the other the change was to a mood of negative feeling tone.

Good moods

For the three pre-test moods classified by subjects as Good, two showed a change in intensity (Subject Nos. 2 and 42), and one showed a change in quality (Subject No. 58).

For the two moods that showed a change in intensity, in each case the change was an increase.

For the mood that showed a change in quality, the change was to a mood of neutral feeling tone (Detached).

Summary

Session 2, the experimenter administered Mood Analysis Technique (MAT), influenced Good moods in each case by changing either their intensity or their quality. For the two moods that showed a change in intensity, in each case the change was an increase. The one mood that showed a change in quality shifted to a mood of neutral feeling tone.

Energetic moods

For the one pre-test mood classified as Energetic (Subject No. 37) the change was one of quality, to a mood of neutral feeling tone (Serene).

Elated moods

For the one pre-test mood classified as Elated (Subject No. 47) the change was one of quality to a mood of negative feeling tone (Worried).

Expectant moods

For the one pre-test mood classified as Expectant (Subject No. 83)

the change was one of quality to a mood of neutral feeling tone (Languid).

Summary : Group 1 (positive moods)

In general, Session 2, the experimenter administered Mood Analysis Technique (MAT), influenced Group 1 (positive moods) by changing either their intensity or their quality.

For Happy moods (n=23) the effect was mixed, an almost equal number of moods increasing and decreasing in intensity (six increased and four decreased). Seven out of the twelve qualitative shifts were to other moods of positive feeling tone and five were to moods of negative feeling tone.

For Excited moods (n=4) an equal number of moods showed an increase and decrease in intensity; the one qualitative shift was to a mood with cognitive elements.

For Good moods (n=3) two moods showed an increase in intensity and the third mood changed in quality to a mood of neutral feeling tone.

For Active moods (n=2) both moods showed a qualitative change to moods of negative feeling tone.

For Curious moods (n=2) both moods showed a qualitative change; one mood shifting to a neutral feeling tone, and one shifting to a negative feeling tone.

For Energetic (n=1) and Expectant (n=1) moods the changes were qualitative, to moods of neutral feeling tone.

For Elated moods (n=1) the change was qualitative, to a mood of negative feeling tone.

4.6 An Analysis of Subjects' Comments upon completion of Session 2, the Experimenter Administered Mood Analysis Technique

Description

Upon completion of Session 2, subjects were asked to give comments concerning the session. The experimenter stressed that negative comments were especially welcome as they could provide information useful in improving the content and/or format of the Mood Analysis Questionnaire. The subjects' comments appear in full in Appendix G. The entire set of comments was read through by the experimenter in order to determine descriptive categories most consonant with the data. The categories employed are: Changed Mood, Increased Awareness, Overall Positive Effect, Interesting-Stimulating, Liked Imagination Questions, No Comments, Too Long-Tedious, Didn't Change Mood, Overall Negative Effect, Found Questions Difficult, Frustrating-Irritating, and Didn't Like Imagination Questions. Frequency counts and percentages for each category were obtained and a χ^2 test of homogeneity was performed. The results are shown in Table 58. It should be noted that the statistical results are directly dependent upon the definition of the categories, and the reliability of their application.

Summary of Findings

Categories with particularly high frequencies were:

Changed Mood

Increased Awareness

Categories with particularly low frequencies were:

Didn't Like Imagination Questions

Frustrating-Irritating

Results

Table 58 presents the observed frequencies for the categories and the χ^2 test of homogeneity. The descriptive categories are rank ordered according to their frequency.

TABLE 58

χ^2 TEST OF HOMOGENEITY ON SUBJECTS' COMMENTS
UPON COMPLETION OF SESSION 2

(See Appendix G for data)

Category	Observed Frequency	Expected Frequency	%
1. Changed Mood	36	16,14	18,56
2. Increased Awareness	33	16,14	17,00
3. Overall Positive Effect	26	16,14	13,40
4. Interesting-Stimulating	23	16,14	11,86
5. Liked Imagination Questions	18	16,14	9,28
6. Too Long-Tedious	12	16,14	6,19
7. No Comments	10	16,14	5,15
8. Didn't Change Mood	9	16,14	4,64
9. Overall Negative Effect	8	16,14	4,12
10. Found Questions Difficult	8	16,14	4,12
11. Frustrating-Irritating	7	16,14	3,61
12. Didn't Like Imagination Questions	4	16,14	2,06

Expected percentage is 8,32 for each category

$$\chi^2 = 80,14 **$$

$$df = 1$$

Note:

* $p < 0,05$.

** $p < 0,01$.

Table 58 has shown that the χ^2 test of homogeneity is significant at the 0,01 level of significance. The expected percentage for each category is 8,32 throughout. Taking a percentage of 16,00 as a cut-off point for high scores, and 4,00 as a cut-off point for low scores it was found:

High Scores

Changed Mood	18,56%
Increased Awareness	17,00%

Low Scores

Didn't Like Imagination Questions	2,06%
Frustrating-Irritating	3,61%

Overall positive comments appeared to predominate, accounting for 70,1% of the responses. This is despite encouragement to give negative or critical opinions.

4.7 An Analysis of Subjects' Definition of Mood

Description

The concept of mood, as regards the type of entity the word "mood" is used to denote, the range of applicability of the term, and the specification of those situations in which it is legitimate to employ the term, is far from clear. This has been shown in section 1.11 and in the review of the experimental literature. Although the term "mood" occurs with relative frequency in the current psychological literature, it is difficult to see how different studies can be compared, or to what extent generalizations can be made, when there is such confusion over the basic parameters of mood. This section is an initial attempt to establish basic parameters of mood by considering how students define mood in terms of their own experience.

Each student was asked to define, in terms of their own experience, the nature of mood. The student definitions were considered in light of the conceptual categories inherent in the psychological and philosophical literatures. These categories are given in the summary sections of the ten viewpoints on mood (Section 1.11). Initially, the experimenter hoped to assess each viewpoint in terms of its ability to incorporate or account for the student definitional elements. It soon became apparent that a direct correspondence between the elements of the various conceptual viewpoints and the student definitions would not occur. This, of course, is due to the level of generality required of the theoretical viewpoints if they are to be explanatory. However, it is the burden of any psychological theory to provide the correspondence rules that will link its higher-order theoretical propositions to lower-level empirical situations and events. There is a tendency in mood theorizing to assign explanatory value to propositions expressed in higher-order theoretical terms at the expense of developing low-level inferences from lower-order descriptive statements. In the author's view this is an erosion of the validity of the higher-order propositions.

As a result, this section moved from an emphasis on the assessment of particular theories (although some general recommendations can be made), to the establishment of base data that any conceptualization

of mood should be able to account for. There exists then an emphasis in this section on the utilization of "ordinary language" and the states of affairs it presents for the establishment of the parameters (the required emphases and boundaries) for an adequate viewpoint on mood. Bird (1972) provides the justification for a utilization of ordinary language in such a task:

Ordinary language may be regarded as historically prior to the technical languages which deviate from it. It may even be regarded as logically prior in providing for those languages a background against which to understand those deviations and in terms of which ultimately to justify them. For ordinary language may also be regarded as containing a basic observation language by reference to which even technical theories may have to be supported and understood (pp. 129-130).

Summary of Findings

The χ^2 test of homogeneity was significant at the 0,01 level of significance.

Categories with particularly high frequencies were:

Mood as a state of mind or feeling

Mood characterized as "pervasive"

Mood as having a causal effect

Mood as the result of both internal and external factors

Mood as an attitude

Categories with particularly low frequencies were:

Mood as a sensation

Mood as having unconscious determinants

Mood as a transient phenomenon alone

The possibility of different moods co-existing

Mood as a barrier to understanding people

Mood as the result of previous moods

Mood as the result of external factors alone

Mood as an in depth experience

Results

Table 59 presents the observed frequencies for the subjects' definition elements of mood and the χ^2 test of homogeneity. The definition elements are rank ordered according to frequency (See Appendix H for definitions and scoring paradigms).

TABLE 59

χ^2 TEST OF HOMOGENEITY ON THE ELEMENTS OF STUDENT DEFINITIONS OF MOOD

Definition Element	Observed Frequency	Expected Frequency	%
1. Mood as a state of mind or feeling	61	13,57	19,50
2. Mood characterized as "pervasive"	39	13,57	12,50
3. Mood as having a causal effect	32	13,57	10,50
4. Mood as the result of both internal and external factors	30	13,57	9,60
5. Mood as an attitude	26	13,57	8,30
6. Mood as internally complex	21	13,57	6,70
7. Mood as both transient and enduring	18	13,57	5,80
8. Mood as intangible and inexplicable	11	13,57	3,50
9. Mood as a cumulative effect	10	13,57	3,20
10. Mood as serving a controlling, monitoring or directing function	10	13,57	3,20
11. Mood as a means of defining or manifesting oneself	8	13,57	2,60
12. Mood as a state or stage of "being"	6	13,57	1,90
13. Mood as a spontaneous occurrence	6	13,57	1,90
14. Mood as the result of internal factors alone	6	13,57	1,90
15. Mood as serving a basic need or performing a basic function	5	13,57	1,60
16. Mood as an in depth experience	4	13,57	1,30
17. Mood as the result of external factors alone	4	13,57	1,30
18. Mood as the result of previous moods	4	13,57	1,30
19. Mood as a barrier to understanding people	3	13,57	1,00
20. Mood as having unconscious determinants	2	13,57	0,60
21. Mood as a transient phenomenon alone	2	13,57	0,60
22. The possibility of different moods coexisting	2	13,57	0,60
23. Mood as a sensation	2	13,57	0,60

Expected percentage is 4,35 for each group.

$\chi^2 = 366,066^{**}$ $df = 22$

Note:

* $p < 0,05$.

** $p < 0,01$.

Table 59 has shown that the χ^2 test of homogeneity is significant at the 0,01 level of significance. The expected percentage for each category is 4,35. The percentage of 8,30 was taken as a cut-off point for high scores and the percentage of 1,30 was taken as a cut-off point for low scores.

The definition elements with a percentage of 8,30 or greater were:

1. Mood as a state of mind or feeling	19,50%
2. Mood characterized as "pervasive"	12,50%
3. Mood as having a causal effect	10,50%
4. Mood as the result of both internal and external factors	9,60%
5. Mood as an attitude	8,30%

The definition elements with a percentage of 1,30 or lower were:

1. Mood as a sensation	0,60%
2. Mood as having unconscious determinants	0,60%
3. Mood as a transient phenomena alone	0,60%
4. The possibility of different moods coexisting	0,60%
5. Mood as a barrier to understanding people	1,00%
6. Mood as a result of previous moods	1,30%
7. Mood as the result of external factors alone	1,30%
8. Mood as an in depth experience	1,30%

The meaning and import of these elements with respect to the experience of mood, a concept of mood, and theoretical attempts to systematize mood data, must be clearly established. This will be considered in the Discussion Chapter, section 5.9.

4.8 An Analysis of Language Acts using the Word Mood

Description

This section is part of the continuing effort to determine the parameters of what can meaningfully be said about "mood" both as a concept and as an empirical state. The present approach utilizes a concept from linguistic philosophy--the notion of a "language act", i.e. roughly the idea that language is used to perform actions of various sorts within a particular context, in conjunction with empirical data in order to determine the major functions of the word "mood" within the context of behaviour, intentions, and social actions.

The subjects were asked to use the word mood in four different grammatical sentences. They were asked to generate sentences that they could imagine themselves saying to a friend. The subjects were acquainted with categories of language acts adapted from the work of Wittgenstein (1972), Strawson (1970), and Austin (1963), and asked to make determinations for their sentences. They were asked: 'In this situation this sentence is being used to.....?' In cases of doubt reference was made to the probable psychological state or disposition state of the hypothetical subject of the sentence. Frequency counts and percentages were determined for each category and a χ^2 test of homogeneity was performed. The results are given in Table 60.

It should be noted that if our examination of these sentences were limited to the semantic and grammatical features of the sentence alone, then our conclusions would have to be restricted to the concept of mood. However by further considering the subjects' projected intentions, implied behaviours, and social actions, we may be justified in establishing conclusions about the experience of mood, bearing in mind that initially with a presuppositionless attitude we cannot be sure that anything empirical corresponds to the concept mood.

The first general point that should be noted is that language is capable of serving a variety of functions, functions we usually disregard when operating within the realm of scientific discourse, a realm which stresses the clear and concise communication of

facts, i.e. the functions of naming, referring and objectively describing. Taking a broader view, language may be used to commend, exhort and encourage, prohibit, solidify cultural identity, express an article of belief, search for and articulate personal identity (as in some poetry), or to constitute an inchoate mode of awareness, to name just a few para-scientific functions.

Specifically, what we wish to know is the way in which mood terms may be said to function, the different types of action mood terms can perform. Bedford (1956) examining the concept of "emotion", and the use of emotion words, attempted to establish that an emotion is not a process or an experience. He writes:

.....my contention is that it would be a mistake to imagine that the primary function of these statements (statements that refer to emotions) is to communicate psychological facts. Their principle functions are judicial, not informative, and when they are informative, it is often not merely psychological information that they give...Emotion concepts, I have argued, are not purely psychological: they presuppose concepts of social relationships and institutions, and concepts belonging to systems of judgement, moral, aesthetic, and legal. In using emotion words we are able therefore, to relate behaviour to the complex background in which it is enacted, and so to make human actions intelligible (pp. 93 and 98).

There exists what may be termed a strong and a weak form of Bedford's thesis. He maintains that an emotion "is not any sort of experience or process" (p.87). This I shall call the strong form of his thesis. Elsewhere, e.g. in the above quotation, he is primarily concerned to show that linguistic expressions referring to emotions, are not necessarily functioning to inform of psychological facts and that these expressions presuppose various social and institutional concepts. This I shall call the weak form of his thesis.

Bedford bases his conclusions on the examination of only eight statements, each using an emotion word:

1. They are very jealous of one another.
2. I envy Schnabel's technique.

3. Well, I hope you are ashamed of yourself.
4. I never feel the slightest pang of regret for what I did.
5. I am quite disgusted with the literary men.
6. I feel ashamed about it now.
7. His pride in the Company's record is unjustified.
8. He is very disappointed in you.

In criticism of Bedford, we have no way of knowing to what extent this is a representative sample of sentences employing emotion words. It is certainly possible that certain of these statements could be functioning with equal probability as either reports of feeling states or as criticisms and appraisals. It is precisely because we do not have contextual information of behaviour, intention and actions subsequent to the statements, that we cannot decide which function is being performed. It is suggested that the empirical data provided in this section will give evidence for or against the view that the chief function of affective words (in particular mood terms) is to make appraisals and criticisms, i.e. that mood discourse functions primarily non-descriptively, as well as indicating the range of functions inherent in such discourse.

Summary of Findings

The χ^2 test of homogeneity was significant at the 0,01 level of significance. (See Table 60 for a presentation of the categories of language acts.)

High Scores

- (C4) Language Acts of Performing Social-Judgemental Actions
 - Judgements concerning others
 - to evaluate others

- (B3) Language Acts of Reporting One's Own Experience
 - to give grammatical objects that indicate systematic influences

- (C3) Language Acts of Performing Social-Judgemental Actions
 - Judgements concerning the self
 - to give warnings, to surprise, to request information

- (C1) Language Acts of Performing Social-Judgemental Actions
Judgements concerning the self
to evaluate the self
- (B1) Language Acts of Reporting One's Own Experience
to give grammatical objects that are mood words
- (E3) Language Acts of Characterizing Mood Experience Itself
to give grammatical objects that indicate systematic
influences

Low Scores

- (A3) Language Acts of Expression
metaphorical expressions
- (D9) Language Acts of Ascribing Mood to Others
To groups
to give action/behavioural consequents of mood states
- (F2) Language Acts of Referring to the Human Condition
to refer to adults
- (F4) Language Acts of Referring to the Human Condition
to refer to children
- (G1) Language Acts of Ascribing Mood Qualities to Environmental
Objects
to ascribe mood qualities to natural or physical objects
- (E5) Language Acts of Characterizing Mood Experience Itself
to give reasons or causes for mood states generally
- (A2) Language Acts of Expression
conventional expression
- (F3) Language Acts of Referring to the Human Condition
to refer to adolescents

Results

Table 60 presents the observed frequencies for the different categories of language acts and the χ^2 test of homogeneity.

TABLE 60

χ^2 TEST OF HOMOGENEITY ON LANGUAGE ACTS OF SENTENCES USING THE WORD MOOD
(See Appendix I for subjects' sentences)

Note: illustrative examples used in this table are subjects' own sentences.

Category of Language Act	Observed frequency	Expected frequency	%
A. <u>Language Acts of Expression</u>			
1. natural or spontaneous expressions e.g. 'I'm in a tremendous mood today!'	10	7,73	3,50
2. conventional expressions e.g. 'I'm enjoying my mood!'	1	7,73	0,35
3. metaphorical expressions e.g. 'A mood is like a leaf, which can be brought by the wind and swept away by a breeze!'	3	7,73	1,05
B. <u>Language Acts of Reporting One's Own Experience</u>			
1. to give grammatical objects that are mood words e.g. 'My mood was ecstatic, I felt like leaping for joy!'	16	7,73	5,59
2. to give grammatical objects that denote bodily states	-	7,73	-
3. to give grammatical objects that indicate systematic influences e.g. 'My moods while affecting my daily interactions do not alter my opinions on intellectual subjects.'	27	7,73	9,44
4. to give action/behavioural consequents of mood states e.g. 'I was in such a bad mood that I started an unnecessary argument with her.'	9	7,73	3,15
5. to give reasons or causes for one's mood state e.g. 'The fact that it was raining all day put me in a low mood.'	11	7,73	3,85

	Observed frequency	Expected frequency	%
<u>C. Language Acts of Performing Social-Judgemental Actions</u>			
Judgements concerning the self			
1. to evaluate the self e.g. 'I want to be without moods, they are selfish.'	16	7,73	5,59
2. to justify one's actions and behaviours; to give excuses e.g. 'My mood has overtaken me and I cannot act any differently.'	5	7,73	1,75
3. to give warnings, to surprise, to request information e.g. 'Don't take your bad mood out on me'; 'I'm in such a good mood today that I'm game to do anything'; 'Sometimes a mood falls over me which I can't understand.'	17	7,73	5,94
Judgements concerning others			
4. to evaluate others e.g. 'His lack of moods made me respect him more.'	48	7,73	16,78
5. to justify the actions and behaviours of others; to give excuses for others e.g. 'Her moods were an excuse to escape from reality.'	5	7,73	1,75
6. to express puzzlement about others; to defer to others e.g. 'What on earth put you in such a mood?'; 'When you are in a bad mood you are overpowering.'	12	7,73	4,20
<u>D. Language Acts of Ascribing Mood to Others</u>			
To individuals			
1. to give grammatical objects that are mood words e.g. 'The student was in an anxious, worried mood for several days during his exams.'	8	7,73	2,80
2. to give grammatical objects that denote bodily states	-	7,73	-
3. to give grammatical objects that indicate systematic influences e.g. 'John was moody, inclined to	8	7,73	2,80

	Observed frequency	Expected frequency	%
rather sudden and intense changes of feeling.'			
4. to give action/behavioural consequences of mood states e.g. 'Her happy mood caused her to kiss her little brother whom usually she could not stand the sight of.'	11	7,73	3,85
5. to give reasons or causes for mood states e.g. 'The way the interview had gone put him in a hopeful mood.'	3	7,73	1,05
To groups			
6. to give grammatical objects that are mood words e.g. 'He told the group to break up because he could sense an agitated mood.'	4	7,73	1,40
7. to give grammatical objects that denote bodily states	-	7,73	-
8. to give grammatical objects that indicate systematic influences e.g. 'The mood of the party was altered by playing faster records.'	6	7,73	2,10
9. to give action/behavioural consequences of mood states e.g. 'The students' lighthearted mood lead to many jokes and amusing stories.'	2	7,73	0,70
10. to give reasons or causes for the mood of groups e.g. 'The mood of the audience was one of great expectation at the thought of the excellent play they were about to see.'	3	7,73	1,05
E. <u>Language Acts of Characterizing Mood Experience Itself</u> (an observational and reflective enterprise)			
1. to give grammatical objects that are mood words e.g. 'A moody person is usually regarded as somebody depressed rather than the opposite, i.e. elated or cheerful.'	3	7,73	1,05
2. to give grammatical objects that denote bodily states	-	7,73	-

	Observed frequency	Expected frequency	%
3. to give grammatical objects that indicate systematic influences e.g. 'Certain moods can take over one's perception completely, altering the way one sees things.'	15	7,73	5,24
4. to characterize mood experience as causally efficacious e.g. 'A mood can make you do anything.'	3	7,73	1,05
5. to give reasons or causes for mood states generally e.g. 'Moods are often the after effects of emotion.'	2	7,73	0,70
<u>F. Language Acts of Referring to the Human Condition</u>			
1. to refer to the human condition most generally e.g. 'I think each person has violent changes of mood and so few admit this fact.'	3	7,73	1,05
2. to refer to adults e.g. 'Adults show their bad mood by quarrelling and being irritable.'	2	7,73	0,70
3. to refer to adolescents e.g. 'Mood and changes thereof are more often perceptible in adolescents.'	1	7,73	0,35
4. to refer to children e.g. 'A mood is something little children change as often as their needs change.'	2	7,73	0,70
<u>G. Language Acts of Ascribing Mood Qualities to Environmental Objects</u>			
1. to ascribe mood qualities to natural or physical objects e.g. 'The mood of the countryside is threatening under a stormy sky.'	2	7,73	0,70
2. to ascribe mood qualities to cultural objects e.g. 'The mood of the painting is violent and restless.'	6	7,73	2,10
<u>H. Language Acts of Idiomatic Use (inclinations, social trends, atmosphere)</u>			
e.g. 'I'm in the mood for a thick bar of Dutch chocolate and a cowboy movie.'	12	7,73	4,20

	Observed Frequency	Expected Frequency	%
I. <u>Language Acts of Idiosyncratic Use</u> (humour, irony, paradox) e.g. 'The cow mood at the cantankerous farmer who was standing on his head in the stable because he felt that he needed to.'; 'The word "mood" can be written back to front as "doom" - the ultimate irony.'; 'I can't really think of another sentence to use the word mood in.'	10	7,73	3,50

Expected percentage is 2,70 throughout.

$\chi^2 = 388,27^{**}$

df = 36

Note:

* $p < 0,05$.

** $p < 0,01$.

Table 60 has shown that the χ^2 test of homogeneity is significant at the 0,01 level of significance. The expected percentage for each category of language act is 2,70 throughout. Taking a percentage of 5,00 as a cut-off point for high scores and 1,35 as a cut-off point for low scores, it was found:

High Scores

- (C4) Language Acts of Performing Social-Judgemental Actions
Judgements concerning others
to evaluate others 16,78%

- (B3) Language Acts of Reporting One's Own Experience
to give grammatical objects that indicate systematic
influences 9,44%

- (C3) Language Acts of Performing Social-Judgemental Actions
Judgements concerning the self
to give warnings, to surprise, to request information 5,94%

- (C1) Language Acts of Performing Social-Judgemental Actions
Judgements concerning the self
to evaluate the self 5,59%

- (B1) Language Acts of Reporting One's Own Experience
to give grammatical objects that are mood words 5,59%

- (E3) Language Acts of Characterizing Mood Experience Itself
to give grammatical objects that indicate systematic
influences 5,24%

Low Scores

- (A3) Language Acts of Expression
metaphorical expressions 1,05%

- (D9) Language Acts of Ascribing Mood to Others
To groups
to give action/behavioural consequents of mood states 0,70%

- (F2) Language Acts of Referring to the Human Condition
to refer to adults 0,70%

- (F4) Language Acts of Referring to the Human Condition
to refer to children 0,70%

- (G1) Language Acts of Ascribing Mood Qualities to Environment
Objects 0,70%

- (E5) Language Acts of Characterizing Mood Experience Itself
to give reasons or causes for mood states generally 0,70%

- (A2) Language Acts of Expression
conventional expressions 0,35%

- (F3) Language Acts of Referring to the Human Condition
to refer to adolescents 0,35%

4.9 Qualitative Data

Description

Fifteen subjects volunteered to participate in an investigation that sought to obtain descriptions of basic recurring moods. A series of questions was designed to elicit information concerning fundamental dimensions, components and parameters of mood. The volunteers were informed of the purpose of the investigation and their individual affective life was discussed. Having determined which were the basic moods for a particular subject, the subject was then asked to write down a description of the mood the next time it occurred. Each subject was encouraged to describe the mood in any way she saw fit, as long as it was a portrayal of the affective state that was meaningful to her. Eleven subjects provided data in sufficient detail for presentation.

Subjects met with the experimenter on a weekly basis to discuss the mood states of the preceding week. If the subject had experienced one of her basic moods, she was asked a series of standard questions pertinent to mood. Thus in most cases the mood descriptions were obtained while the subject was in the particular mood, and the discussion questions were answered subsequent to the mood experience (See Appendix K for data and format of questions).

Results

Table 61 presents an overview of the eleven subjects and their recurring moods.

TABLE 61

SUBJECTS' RECURRING MOODS

Subject No.	Mean Variability	Positive Moods	Neutral Moods	Negative Moods
1	26.40	Restless Creativity	-	1. Tense 2. Irritable
2	22.80	Happy	1. Nothingness 2. Fragile	1. Depressed 2. Deflated-Confused
3	24.20	Happy	Indefinite	Depressed
4	23.40	Elated	Nothing	Depressed
5	20.60	1. Kind-Warmhearted 2. Carefree	Serious-Concentrating	Self-Blaming
6	12.80	Elated	1. Fragile 2. Detached	1. Depressed 2. Restless
7	31.40	1. Elated 2. Ecstatic	-	Tense
8	16.00	Very Happy	-	1. Depressed 2. Self-Pitying
9	12.00	Elated	1. Contented 2. Quiet-Introverted	Depressed
10	16.40	1. Elated 2. Sensitive-Aware	Indifferent	1. Depressed 2. Restless 3. Irritable
11	6.60	-	1. Content 2. Quiet	Insecure

For positive moods n = 13.

For neutral moods n = 12.

For negative moods n = 17.

Table 61 has shown:

1. Positive Moods

Comprises moods categorized by the subjects as: Restless Creativity (n=1), Happy (n=2), Very Happy (n=1), Elated (n=5), Kind-Warmhearted (n=1), Carefree (n=1), Ecstatic (n=1), and Sensitive-Aware (n=1). All were moods of moderate to high energy level with either a positive feeling tone or had positive connotations for the subject.

Total n=13.

2. Neutral Moods

Comprises moods categorized by the subjects as: Nothingness or Nothing (n=2), Indefinite (n=1), Serious-Concentrating (n=1), Fragile (n=2), Detached (n=1), Content or Contented (n=2), Quiet-Introverted or Quiet (n=2), and Indifferent (n=1). All were moods of moderate energy level with neither a strongly positive nor strongly negative feeling tone.

Total n=12.

3. Negative Moods

Comprises moods categorized by the subjects as: Tense (n=2), Irritable (n=2), Depressed (n=7), Deflated-Confused (n=1), Self-Blaming (n=1), Restless (n=2), Self-Pitying (n=1) and Insecure (n=1). All were moods of moderate to high energy level with either a negative feeling tone or had largely negative connotations for the subject.

Total n=17.

In addition it should be noted that the majority of subjects (seven out of eleven) had moods that fell into each of the three general categories. This suggests the possibility of mood systems, e.g. moods of positive and negative feeling tone oscillating around a relative balance point of neutral affect.

The mean variability, or measure of changeability of mood over a given unit of time, is listed for each subject. It is interesting to note that the two subjects with the highest mean variabilities (Subject Nos. 1 and 7) both lacked neutral moods and had more than

one mood in either the positive or negative category. This implies the possibility of fairly rapid change within a category (e.g. positive or negative) and then rapid change across categories to a mood of opposite quality. The three subjects with the lowest mean variabilities (Subject Nos. 6, 9 and 11) were distinguished from the subjects of higher mean variability by having more than one mood in the neutral category. This suggests that subjects of low mean variability may have more neutral moods and spend more time in these moods.

In the presentation that follows subjects' moods will be considered collectively under the general headings positive, neutral and negative moods. The experimenter's intent is not only to show commonalities and basic features, but also to give an idea of what it is like to be experiencing these moods. Dissection and analysis lead to abstract understanding--but concrete inter-personal understanding and communication can also be increased if we realize that to be in a mood is to perceive, feel, and act under various constraints that arise from the mood states themselves.

1. Positive Moods

Analytic categories

(the analytic categories contain statements from all subjects' moods falling in the "positive" category)

Descriptive elements: It's a concentration of energy.... I have to express it, it comes from me and I have to find expression for it....I kind of float, relish in the sun and rain alike - full of the joys of life....I become very talkative and light-hearted, joking and laughing a lot....Not worrying about the future and taking everything as it comesDetermination in this mood, makes me more confident.... My optimism takes over completely....Everyone around me seems beautiful and nice....I want to reach out and touch things....Feel like flying and talking to the birds and people....Feel friendly and want to smile at others, make them happy....I feel very much on the earth, and happy where I am....It's a completed sort of 'couldn't care less' attitude when I bury everything for a few minutes and just forget and feel free to be me....It tends to take over completely....It makes me feel very lively and bubbly, and to envelop everyone else in my happiness....It's a feeling of self-sufficiency, that all is right with myself, a self-acceptance that makes things right again....There is a

general feeling of wellbeing....I want to take hold of life and swing it around me....I'm intensely aware of my body - all parts of it....My brain, mind, does not make itself felt when I am elated....I feel as if I could do anything, achieve everything.

Summary

In general, the positive moods appear to be characterized by an increase in mental and physical energy, the awareness of personal vitality is enhanced, optimistic attitudes predominate, there is an energetic and even hedonic response to the environment, a desire to express and share the feeling with peers, and personal anxieties and self-criticisms ebb away. All suggesting a smooth, vibrant and equilibrated functioning at increased energy levels. In some cases, however, the vibrant feelings appear to be a "magical happiness" with inadequate reality-testing. The pre-emptive quality of these moods should also be noted.

Metaphorical portrayals: I feel like a pelican, graceful, with freedom of flight....Champagne in a glass--some of the bubbles, most of them, escape by jumping right out of the glass--the lightness I feel within me and without, totally free and happy....I feel like a beachball because it is so light and bounces all over always coming up again....I'd be a bird or a small aeroplane--but rather a bird, because it's so much more alive....A smiling sun--I don't feel mature or sophisticated at all....A bunch of scented flowers which have been given to someone with a smile....A purring kitten....This mood feels like a crystal clear mountain stream bubbling over dark as well as sunlit sections of the mountain....The body of a dolphin diving in gay abandon....A nightingale....A butterfly (very brightly coloured)....Bubbles inside me--all coming out of me with all beautiful colours reflected in them....A robin....I would be a beautiful firework....A candystriped body....I feel very aware of everything and as a body to the mood I can see an insect with little antennae flickering all over....A proverbial fountain--I feel so great that my laughs just want to jump out....I'd be a kite in this mood, soaring right up there in the sky....

Summary

In general, the self-expressive images suggest rarified space, soaring flight, effervescent energy, scintillating light, resplendent colour, beauty, clarity and purity. There is a sense of expanded horizons, positive emotional

acceleration, affectionate and warm feelings and a time and space of personal freedom.

Causal factors: It can be a reaction to things I have been doing, e.g. if I have not been spending my time constructively. I think here it's more a frustration that has to be gotten rid of. If I read something, or participate in an excellent discussion I can get overwhelmed, it's fantastic, I absorb it and then have to express it. In this case the energy is more directed, I know what I want to do with it!

Things people say, if they are people I like, or even strangers sometimes, or just the day - thoughts and expectations. I think there are two factors responsible for the mood. I'm getting on especially well with people in general, i.e. with lots of particular people and the weather is a factor too. I think getting on with people is the most important thing. But I don't always have my happy mood when I'm getting on well with people. Receiving a letter, work going well, and actively working and achieving things can all by themselves produce the mood. I think what is necessary is an evaluation that things are going well and therefore I feel more confident and happy about myself. When the mood is at its strongest, I'd say it was because of other people, this leads to the evaluation that things are going well, which in turn gives me confidence and produces the mood. When I'm at home, most of the time it's my happy mood. I think it's because of a lot of little things at home, e.g. I'm more relaxed and feel more secure. The pressure of work at Varsity worries me, I'm duty conscious, I panic and get upset. But I have more friends here at Varsity, so I don't know why - there's only my sister at home. We're quite protective towards one another - it's a deep unspoken bond, that's probably what it is. Here you just see your friends at lunch, everything on the surface comes out - there's no depth to the relationships. Here I think the mood comes on when there is no worry about work, tests and essays, etc., and when things are going well with my flatmates, or if I've had a good weekend. I think other people being friendly is most likely to bring it on. The mood can be brought on by even one or a series of events. If it's a series of events, it's a calmer happiness, less intense, but it will probably last longer. If it's one event, I think it's then a more intense happiness.

I'd say mainly external influences bring it on. I feel the potential is there inside me and it just needs something to bring it out. Music I like is sufficient to bring it on. Sometimes lectures are sufficient to bring it on. It's strongest when I'm with people and communicating well.

It comes from within with the help of other people and situations, e.g. over the holiday mother and I were sewing and chatting. I realized how much more I had to say to her this year than ever before. It's often difficult to say right off what situations it is linked to. I feel it comes

from within me regardless of the situation. Of all my moods this is the one which is least directly linked to specific situations. Possibly, if someone else appeared in need of a kind, warm-hearted person, that could produce it. I think that's about it as far as outside situations evoking it.

I think being with friends in happy surroundings and happy situations and any little thing like getting a letter, or going to town looking at shop windows - things going right tend to produce the mood. All those little things are sufficient to produce the mood. I tend to have a happy content attitude and those things would make it more so. The happy content attitude is produced when things are going well for me in general. So a series of small things would produce the attitude and then just one little thing added to that would produce the mood.

Summary

In general, psycho-social factors acting upon internal potentials seem to be responsible for these moods. The external factors most frequently cited are: the quality or depth of social relations, good communication with others, work proceeding well, and an absence of external coercions and pressures. Cognitive factors also seem to be important, e.g. thoughts and expectations, evaluations that all is going well, and positive self-judgements. (See also the two following analytic categories).

The causal matrix of these moods appears to be complex. Psycho-social factors and cognitive judgements may be the definite eliciting factors, but predisposing factors such as personality structure, salient events and behaviour patterns from the life-history, as well as general patterns of fluctuation in mental and physical energy, are equally important.

Goals as a determining factor: Goals are very important in producing and maintaining this mood....Goals are important, but not totally overwhelmingly. They are part of it, a contribution but not essential....The accomplishment of a goal can play a part, but it doesn't make the mood intense or elated, e.g. work can make me feel happy but doesn't produce elation....This [attaining or not attaining a goal] is not important....I'm uncertain about this. If I feel completed, i.e. if nothing is bothering me at the moment it could contribute....Goals are important, i.e. they would contribute to forming the happy content attitude....That's the something special inside me, if I feel I've achieved

something, if something has been fulfilled.

Summary

The attainment or non-attainment of goals appears to be a contributing factor, but not a sufficient condition in most cases. The responses to this question ranged from 'very important' to 'not important'. Perhaps the most prudent conclusion is to say that for positive moods the attainment of goals facilitates the production of the mood, or increases the intensity, but by itself it is not the only relevant factor.

The role of self-esteem: If something occurs to enhance my self-esteem I think it could both produce and maintain the mood. If something happened to damage my self-esteem I think that could produce the mood but not maintain it. Something negative could lead to the feeling of frustration and that to the restless creativity....Yes, definitely this is an important factor as we said....I think the friendliness coming from other people touches my self-esteem and this makes me feel more confident and worthwhile....This (self-esteem) is a part of it, can either maintain or produce the mood. I think it could be an evaluation of how things are going for me....I think if I feel complete and happy with myself, I'm more willing to give to others. Also how events in general affect my self-esteem can contribute to producing the mood....If something positive happened to enhance my self-esteem, it would maintain the mood or help to produce it, but the happy content attitude would have to be there first....I think if events just make me feel self-satisfied, that produces the mood, it seems to work directly, almost automatically....

Summary

The manner in which events affect the individual's self-esteem appears to be an important variable. In most cases subjects indicated that enhanced self-esteem would be sufficient to produce a positive mood. In particular enhanced self-esteem leads to greater confidence and bolsters the positive self-image. However, one subject indicated that enhanced self-esteem would only produce the mood, not maintain it. Also, this data may shed some light on the preceding category - goals as a determining factor. The attainment of goals enhances self-esteem which may then produce a positive mood. Again, the data suggests enhanced self-esteem is not the only relevant factor.

Creation or choice:

(whether or not the subject feels she herself plays a conscious, active and decisive role in producing the mood)

I can talk myself into it, it's a form of it, but not the mood at its most creative....The mood just happens, I can't decide to be in it or choose to be in it....The mood depends mainly on something outside of myself. But if my prior state was one of upset or worry, it would depend on what's happening inside....I think I do play an active role in creating it....I can't decide to make it happen, it must be released from within me....I can try hard to bring the mood about, but on my own - I can't bring it about in its full strength....If I'm tired, I think I can actively aid in creating the mood, I can give it the final push. If I'm not feeling tired I play much less of an active role in its creation....

Summary

In general, subjects maintained that they did not, through conscious choice or action, produce the mood at its full strength or quality. Subjects could however choose to aid or facilitate the mood. In one case a subject maintained that she did play an active role in "creating" her positive mood.

Who am I?

(the basic identity the subject believes is being manifested in the mood)

A person that wants and yearns to be creative, to establish and create something, anything. A person that wants to find expression for all that is me....I'm [subject gives her name] and very full. I feel like a teddy bear, very contented - people are almost cuddling....In this mood I feel I have everything I want, and I especially want to really get through to people, to go even deeper in my communication with them and to share it with other people....A person that wants things to stay the way they are. I feel the happy mood is pointed at everything and everyone....What I desire most is to have people around me, people I know - but I don't have to like them. For the mood to function I have to have other people. I desire a balance between giving and taking between myself and other people....A person who desires freedom and space to be able to do the things I want to do. I would express it by going to nature or to town, that would add to it....I want everyone to be in the mood, for everyone to experience it. I feel so relaxed and happy, why shouldn't they?....

Summary

A major identity theme was that of someone who wanted or needed to express her moods (either as an act of self-

definition or self-sharing). In several cases there was a predominant self-orientation, a need for self-satisfaction, personal gratification, to enjoy the freedom and independence of the mood. For one subject the identity theme was that of a person who needed balance, giving and receiving.

Relating to other people in the mood: It's a totally ego-centric mood. Expressing the creativity is all that mattersI want to talk to others, to laugh and share things or sit and just listen, feeling their warmth....I become very outgoing, do a lot of communicating, I'm willing to do anything others are doing. Probably I would most like to go somewhere, to go and do something....It's mainly a wanting to do things for others....In this mood it's nice being with people, but I'd be even happier on my own. I'd sing to myself, go for a walk or go shopping....In this mood I'm terribly kind and affectionate and tolerant. People say I'm usually on the critical side and not tolerant....

Summary

Relations with other people in these positive moods appear to be of three types: there is a genuine outgoing benevolent mood, a mood with a more restrained self-sufficiency as a primary focus and out of which the subject can confidently participate with others, and a mood with a more introverted type of self-involvement.

What the subject is most aware of

- a) about herself: My mind working....That I'm a person capable of relating to other people....I am most aware, concerning myself, that I am confident and full of lifeWhat I'm most aware of about myself is that I like being myself....My skin, there is a radiating glow about it. I feel energetic and sensitive to things. It's an expression of how I am feeling toward other people.... I am most aware of my arms, they feel light, buoyant and energetic. My mouth is smiling and it wants to sing and be energetic....I would say that an important thing about this mood is that I'm not aware of myself, because I do get self-conscious....

- b) about the environment: I'm aware of very little. I think an important thing is that I'm aware of my mind, I can see everything flowing together, normally my mind is just skimming along. I feel I am really inside my headThat people prefer me in this type of mood, they relate better to me....I am most aware, concerning my environment of other people - their warmth toward me and my response to that....The whole world seems more aliveThe warmth of the sun, flowers, nature in general,

and the fact that people care about each other and communicate. People are the objects on to which I project this mood, and the environment affects the mood....I'm very aware of nature - trees, flowers, sunlight and breezes. Also people - but they are just there, milling around me, they have no real significance....I'm very aware of nature and less aware of other people - I'm usually very aware of other people, conversations, what they are wearing, etc. Instead I have a smooth feeling all around....

Summary

In terms of self-perception, subjects frequently indicated an awareness of pristine energy, well-being, and confidence. For several subjects there was a more sensitive and differentiated awareness of positive aspects of the self and its functioning. In one case it was the lack of self-awareness which gave the mood its positive quality. There was evidence to suggest a greater awareness of both bodily surfaces and extremities; sensations and/or feelings of "buoyancy", "energy", and "radiating glow".

In terms of environment-perception, subjects seemed to indicate two main types of perception. The first type involved the recognition of people, their personal warmth, and its contribution to the mood. The second type involved the recognition of the natural world, its diversity, harmony and inherent beauty. Usually, when one type of perception predominated the other was held in abeyance.

Function: It enables me to grow, to integrate myself, to be fully aware, to express myself and it opens me up to experience....This mood gives me a centre of worth and cuddly confidence....I think the mood does serve a function. It enables you to get rid of everything in you, anything that has been worrying you, can be expressed. I hold nothing back, all my secrets and fears come out. Also when I'm happy things aren't centralized on me, more on others. Everything is more we, we this and we that. I don't think why did so and so do this and that....It gives me independence and freedom, it revitalizes me and gives me a new energy. I feel unified with my own god....It's the mood where I'm really me and my true self can come out....I feel that the mood is in some way necessary to my personality, maybe because it is rewarding for me to be kind to people. I definitely give myself a chance in this mood, I'm kinder to myself. It makes me feel good, I feel complete and hence can get on with other things - activities or work - I don't

worry about things. I relax and expand and open outwards... I think the mood does serve a function. I'd say I'm very highly strung and this mood enables me to totally relax, I can accept everything, I stop asking why this and why that? It's a complete break, it recharges and revitalizes me. Also it lets people see that I'm not so picky....

Summary

Subjects expressed a variety of opinions concerning the functions of their positive moods. Classifying their responses into general categories yields these major functions -

1. provides a sense of worth and self-confidence
2. promotes growth, openness and integration
3. permits self-expression
4. facilitates positive qualities in personal relationships
5. gives relaxation; revitalizes.

2. Neutral Moods

Analytic categories

(the analytic categories contain statements from all subjects' moods falling in the "neutral" category)

Descriptive elements: Nothingness, where nothing penetrates, nothing is relevant and I float along with a vacuum in my head and body. I'm most aware of the emptiness inside and try to look at the bright side in order to lift myself out and up again. I have no body, I'm just floating in a world of oblivion and unawareness. A useless, pointless mood. Nothingness, emptiness, a really colourless, harmless existence,In this mood I just drift along, usually thinking of nothing - slightly happy, slightly sad and if anything happened, it could switch my mood either way. I don't really notice things around me, especially not people - little things like a pretty leaf or feather I'd stop and admire, pick it up and keep it. Nothing matters much to me....I feel sort of drowsy and not so sure of what is going on. I feel like lying and sleeping in the sun, or floating on water, or in the air. I don't feel in the least bit energetic. I don't feel like doing anything. Although this is a nothing mood, I'm not at all depressed or insensitive to things that I like - clouds, sky, grass, etc. They help to put me into a dream world. I think I'm most aware of my head, because it feels heavy. My eyes do too. I feel almost as if I'm in a different world from other people, and I don't much like it when people talk to me because they interrupt the floating sensations. I would like to curl up like an animal and hibernate for a while....When I'm in this mood I want to be alone, alone with my thoughts. I don't mind it if there are people around me as long as they don't hassle me in any way. This is a moderately strong mood in which I find it very difficult to

be sociable....In this mood I feel very delicate, as if, if someone had to poke me, I'd fall apart. It is a mood where my feelings are just balanced, but where I am very vulnerable, i.e. I would be very easily affected by what people say to me. In fact, "vulnerable" is the key word as regards this mood. This mood makes me feel like being alone. In this mood I feel as if I need someone very soothing and understanding around. I feel my little bubble or protective covering, it's a just balanced mood that could go either way, to happiness or more likely sadness. The protective covering is vulnerable, somebody could break through it rather easily. It's a keyed up mood. You aren't really anything and it depends on outside forces for what you are about to become. Yet there is a tension inside - a balance but it's not calmI am so detached that it is almost trance-like. I don't know why it is, but sometimes I have this need to switch off completely and think my own thoughts, regardless of what is going on around me....Firstly, I am not experiencing this mood intensely. I am more contented than cheerful and not "bouncy" or "communicating" more than usual. I am fairly optimistic. I see this mood as part of an unwinding process after a period of tension and unhappiness. It is both relatively happy and relatively unhappy, i.e. I feel better than before but not as good as I have often felt. A fair degree of contentment, moments of cheerfulness, even moments of bounciness. Feel things will improve in the immediate future....

My "indifference" is a blank feeling - one of no motivation. I don't feel like doing anything - I just sit, not only doing nothing but thinking nothing too. I'm not aware of any special parts of my body, in fact I'm not aware of it at all. Another component of my mood is one of bitterness I think. I feel cynical because one can kill oneself doing something and often it is to no avail. Everything is so pointless somehow. People also are very unreal to me and do not affect me at all in this mood....I just feel warm and calm - not ecstatic but just pleased to be alive....I feel sort of empty inside and I just have to get away because I feel as though there is something inside me preventing me from talking or even listening to anyone else. This mood really swamps me, it affects me mentally in that I want to go somewhere quiet where my thoughts can continue undisturbed, and it affects me physically - I feel heavy and sluggish, but if there was somewhere where I could walk amongst beauty, I could walk for the rest of my life....

Summary

The category "neutral moods" is not a uniform set. Nevertheless some general trends can be identified. Subjects' descriptions suggest major qualitative shifts from their positive moods. Whereas organismic energy was liberated in the positive moods, in the neutral moods it is frequently experienced as bound, congealed, or of a viscous quality.

These moods have a tendency to promote physical lassitude; available energy may become attenuated, or conversely, distended. In either case it is energy of an inferior quality and magnitude. There may be a mental inertia, an involution of will and effort, often a sense of futility. However, beneath the surface dispassion some subjects report a sense of interior movements--a developing surge and flux awaiting manifestation. Sensations of "floating" were mentioned by several subjects; also a detached sensitivity, a trance-like dream world, a personal delicacy, and vulnerability. In personal relations there is a sense of isolation as opposed to the coalescent quality of the positive moods. For some subjects these moods seem to represent not an intermediate stability, but rather a precarious balance point between opposing emotions.

Metaphorical portrayals: I feel like the sound of the cuckoo - you can hear its call, but rarely see it....I think I would be an animal, hibernating, not disturbed by anyone; or maybe a baby, curled up in its mother's body. I would be nothing, so that I could dream without being disturbed. However, to make myself a bit warmer, cosier, my body might be a round ball, very soft....I feel solid inside, sort of like an old wooden grandfather clock performing its duty. This mood would be suited to an old body - weather-beaten and a serene face with small piercing eyes....A cloud....An air particle suspended in space....An eagle soaring high amongst the peaks....A majestic, quiet, dignified mountain....A big old grandfather clock just mechanically ticking away, watching but not participating, having however a function in the home, commanding love and respect through its qualities, i.e. design and age....I don't know - big human eyes capable of perceiving, a mind capable of translating, interpreting, rationalising the actions of others. But an animal body - a vulnerable creature, fallible, helpless....I'd be a loaf of bread but without the yeast; all flat and doughy....If my mood had a body to suit it, the body would be a glass egg-shaped one, completely transparent and empty....I would be a little fat puppy who has just had a bowl of warm milk and who is curling up in his basket for a little sleep....I'd be a rock that seems to be dead with no feeling but that is really moving and thinking so fast that you can't see it. It hasn't moved physically, but its mind has been everywhere and it can see everything....My mood would have the body of an owl during the day, for in the light the owl just sits and protects his eyes but he is very much alive - is he asleep or is he just thinking?....

Summary

Subjects gave a variety of self-expressive images, a spectrum ranging from emptiness, through detached vigilance, to quiet calmness. The imagery of several subjects suggested the pressure of emptiness, a solution of continuity, a pervasive indeterminacy or a homogeneous tranquility spread over interior activity. Interesting themes that emerged were: the tension between rational thought and tender feelings, the personal need for regularity and order, the sense of being suspended between the pulses of alternative emotions, and the presence of an ancient maturity or wisdom called into existence.

Causal factors: Work situations, e.g. when I get an essay back, when I realize what I'll have to do, and also the realization of opportunities missed. It doesn't come from other people....When I'm with people I like, but who are not totally me. It irritates me, they are fond of me and start worrying about me but they start asking questions about things - I want to be totally unknown. I am swamped by the relationship, their "goodness" can be a bit much. It also occurs when I get very tense from my relationships with people, or all of the work, or exam tension.

I think there are about three different situations that produce this mood. One is if I'm disappointed in myself or in other people - or both. I think this is sufficient by itself to produce the mood. Another situation is if I have lots of Varsity work to do, especially if I know I had the time to do it and then let it slip. This situation is not sufficient by itself to produce the mood. The other situation is if there is something I like - something I want to do but have to put it off, e.g. reading a book. This situation is not sufficient by itself to produce the mood. I can be thinking in this mood, but all striving falls away, I feel drugged, everything seems like a haze - there are no strong emotions.

When the weather is not very hot, but summery, with a slight breeze. This is not sufficient by itself. When everything seems calm and still. I can't imagine it calm and still in winter. This is not sufficient by itself. If my friends were in the same mood it could bring the mood on. It might be sufficient if they described to me what they were feeling. I think the mood mainly comes from nature.

It can be produced by other people, if they make some remark that sets me thinking. This sort of situation can singly produce it, but the mood itself would develop when I'm on my own, with my own thoughts, and thinking about it. If everything is going reasonably OKAY for me, but there are one or two small things on my mind. This can produce the mood by itself. It's when I'm not unhappy, but things aren't going

quite as they should, e.g. last vacation wasn't like it used to be since we moved. The routine was changed, e.g. eating times, father is now working at night, the evening scene of everybody relaxing by the fire is gone - mother goes to work with him now. It's routine that I love, it holds so many memories for me. If I consider other people to be acting silly, I refuse to take part. This situation can also produce the mood by itself. I think this situation is responsible for the mood when it lasts a long time, when it settles in. The other two situations tend to spark off the mood when it lasts for a short period.

It's not necessarily connected with definite situations and events. I can wake up feeling that way. Events play a role in that you tend to switch off from some events, e.g. things I feel I have to do and I don't really want to do - sitting in on classes and watching how they teach. You go but you're not really there. It's an uncertainty or unsureness over events and myself.

The mood was born of improved relationships in the family and a slightly better atmosphere in the home - more relaxed. Also, caused probably by the fact that I have been putting tasks which must be done behind me. Look forward to having a friend to stay with me next week. Also, was able to get out this afternoon and by a great coincidence, saw an old acquaintance - very unexpected and pleasant. I see this mood as part of an unwinding process after a period of tension and unhappiness....

Summary

In general, psycho-social factors and external pressures acting upon internal potentials seem to be responsible for these moods. The factors most frequently cited were: pressure of university work, particularly when work on assignments was postponed, deferred activity generally (either work or pleasure), disappointment (in oneself or others), interaction with people who are not congruent with one's personality, cogent or stimulating thoughts from others, and changes in consciousness due to solitary contact with nature. For the subjects who stressed internal origination - uncertainty over oneself and events was most frequently cited. In some cases the mood was a deliberate "switching off" from persistent environmental pressure.

Goals as a determining factor: Goals are not important for this mood....Goals are important for this mood, especially goals relative to work. Or, if I've been depressed and I've said to myself - from now on I will be more friendly and

approachable and I fail to accomplish this, I get angry at myself, it wouldn't be enough to cause a depressed mood but rather an indefinite mood....The fulfilment of a goal would be more likely to change my mood, e.g. if I were successful with some work assignment, I would become determined to do more....Goals are also important. If I were thinking that I wasn't making progress toward a goal, that would contribute to the mood....Yes, goals are important (Subject reports that she wants to get a flat of her own, but her parents would like her to stay at home. She wants to leave home but is unsure)....

Summary

The attainment or non-attainment of goals appears to be a contributing factor. The responses ranged from 'important' to 'not important'. It was also indicated that the achievement of a goal can motivate change within a mood. The assessment of having made progress towards a goal can be a contributor. There is some evidence to suggest that the attainment of self-imposed goals relative to externally imposed requirements, is important.

The role of self-esteem: Self-esteem is not important for this mood....I think that if events happen which make me feel poorly of myself this can produce the mood. Or it could help maintain the mood, if something else had produced the mood... Self-esteem can't produce the mood, but it would help to maintain the mood if it were already there....I think my self-esteem or self-concept is involved in producing or maintaining the mood, because it is usually an event that reminds me I am a serious person....Yes, you want to be independent, but you don't want to hurt them (parents)....

Summary

In general, self-esteem appears to be an important variable. Subjects were not however unanimous in ascribing a causal power to vicissitudes in self-esteem. For several subjects changes in self-esteem were viewed as only maintaining or modifying the mood. One subject excluded self-esteem as a major factor.

Creation or choice:

(whether or not the subject feels she herself plays a conscious, active and decisive role in producing the mood)

I don't choose to be in this mood, but at some level it's almost an escape route to get away from those people....I do

choose this mood in a way - I could have a reason for wanting it. It forces me to quiet down so I can do work. This plus a series of events usually produce the mood....I can choose to be in this mood, and the more I think about it the more I become it....I think it's more likely that I try to get myself out of this mood than a creation of it or choosing to be in it....I think you do create it, you lapse into a reflective state. I feel responsible for it, but don't actively create it. I could take positive action, going out with people, something definite, to disperse it....

Summary

In general, subjects affirmed that they themselves played a determining role in the production of the mood. In most cases it was neither a deliberate choice nor a passive subliminal creation. Reflection upon the nature and causes of the mood heightened the sense of personal responsibility for the mood.

Who am I?

(the basic identity the subject believes is being manifested in the mood)

In this mood what I desire most is to go my own way, free from people who have no right hassling you....What I desire most when in this mood is to be happy and to have good friends. I am someone drifting along without specific goals; restless, waiting for something to happen; anticipating something unknown; impatient, uncommunicative, a daydreamer; someone feeling tied down by obligations to friends, towards work; a loner wanting to be alone; slightly irritated by those around me....A person who yearns for the same as everything is now, everyone and everything to be just drifting and floating, and silent and peaceful - for it to go on awhile... In this mood I strive for perfect happiness and to know exactly where I'm heading and what I want to do. Also I want something better, to be with different people or in a different place, there's some dissatisfaction in the mood. I am someone who is: unresponsive, a stone; a passive observer, a camera; tense, troubled and critical; indifferent, restless....A person that wants a solution that will make everyone happy. I am someone who is vulnerable; someone unimportant; one amongst millions; a female; an individual and yet lost in the masses; a lover of nature; a lover of things genuine, natural, and sincere; a lover of respect by people for each other; someone both introvert and extrovert; idealistic and romantic; stubborn and argumentative; someone who hates violence of any kind, especially by people to people, or animals....

Summary

The major identity themes that emerged suggest:

- 1) a need for: personal freedom, peace, harmony, emotional

equilibrium and mutual respect

- 2) a feeling of being in: a state of isolation, impatience, passivity, dissatisfaction
- 3) a sense of: conflicting needs and attitudes, uncertainty, and sometimes an awareness of discrepancies between ideals and realities.

Relating to other people in the mood: I can relate to some people but not all people when in this mood. I prefer to be by myself, if I had to socialize I'd just observe, unless I was with someone I really liked....I don't communicate in this mood, I tend to ignore other people, and others irritate me especially much....It makes me want to be with people who are in the same mood....It does affect my relationship to people - I become quieter and tend to keep my thoughts to myself....I was tired and only just getting on with people. Perhaps unconsciously I felt it was up to them....

Summary

Relating to other people is generally characterized by inhibition and a degree of irritability. Subjects tend to be uncommunicative and withdraw into themselves. They prefer the role of silent observer, quiet and emotionally aloof.

What the subject is most aware of

- a) about herself: That I'm being a bit vain or crazy to think that others aren't like me, but I can get on top of those feelings....I am most aware of the fact that I am dissatisfied with myself and the whole time I'm thinking about what I do want, that I want to go to a particular place and do a particular thing. Or I want to be in the company of particular people. This process tends to heighten the mood....I'm not sure....I am most aware of a tense feeling all over. I just don't relax. I feel tense in my head and there is a nervousness in my hands. I'm aware of negative qualities about myself, it's a forerunner of my self-blaming mood, indecision and dithering....
- b) about the environment: People look different in this mood in two ways. For one I see only their negative points, their bitchiness, shallowness or stupidity. But I also think that's how they are, let them be, they are happy like that, don't let them irritate you and don't irritate them. Physically people look different, I notice more about them, if they are looking ill or pretty. I tend to see them more positively in a physical way.... I'm most aware of the weather, the trees and flowers, their delicacy and beauty....I'm most aware of the beauty

of my environment....I don't think I am especially aware of my environment - perhaps I do realize the seriousness of things around me, things I wouldn't usually feel so serious about, e.g. I take university seriously, I seclude myself in my room and ask myself do I really want to be at university, and I realize it is a serious choice. I notice people, I analyze them and put them into categories. I am serious and their sayings seem to have more than face value....

Summary

In terms of self-perception subjects frequently indicated an awareness of negative qualities concerning the self. Dissatisfaction, anxious indecision, tension and nervousness were frequently reported. For at least one subject there was insight into the primary importance of her own individuality.

In terms of environment-perception subjects generally reported a change in the way people and nature were discerned. There was a tendency towards a greater cognitive and perceptual differentiation. For one subject people's personality faults were more clearly perceived, and physically, their appearance and state of health were highlighted. For another subject, people were more easily categorized and their communications took on a deeper meaning. For some subjects the physical environment acquired new variations, shadings, and nuances. There was a sense of delicacy, pattern, and internal order.

Function: The mood makes me realize that people are people and you must accept them. Also that I am different from them, but not inseparably removed from them....I think this mood makes me see things more clearly. If I'm depressed I see everything negatively, if I'm happy I don't see things at all. It gives me a lot of time to think things out and sort myself out. Also it enables me to work, it's a good mood to work in. Sometimes the mood is without the splash of happiness and closer to the sadness and at times there is no feeling at all. I'm really not in touch with what is going on around me....It's a time that takes me away from hassles and tension. It enables me to relax and be myself. Things just pass over me....It makes me think and face reality, I don't push aside some of the things I normally do. Sometimes it's uncomfortable it becomes so serious. I exaggerate things, it makes me reason and think deeply, by exaggerating things it makes me act, I only act under

pressure....It allows you to float away from what's going on and look from the outside in, you can look at it dispassionately as if it's not happening to you....

Summary

Subjects gave a range of responses to this question. The responses can be classified under four general headings:

- 1) Neutral moods may facilitate acceptance of the human world - highlighting the individual's general humanity and their specific individuality.
- 2) Neutral moods may promote intellectual and emotional clarity through either providing a multi-faceted viewpoint or a detached and balanced attitude.
- 3) Neutral moods may foster an equilibrium of energies, permitting an efficient deployment of those energies to selected tasks, e.g. work requirements.
- 4) Neutral moods may relieve to a certain extent internal tension and conflict, as well as increasing the capacity to deal with environmental stress.

3. Negative Moods

Analytic categories

(the analytic categories contain statements from all subjects' moods falling in the "negative" category)

Descriptive elements: Everything is pulled tight, contracted, I feel tense inside my body and mind. Something has got to happen and it's just a matter of time before something violent and explosive does happen. It's like holding your breath, it gets worse and worse and then you have to let go. I can still do other things when I'm in this mood, but all the time there is this feeling and then it takes over. I feel there are forces pushing outward from within, and outside forces pushing in on me. It's a very physical feeling, there seems to be too much of everything pushing in. My thoughts become hard like a knot or a clenched fist, there is so much energy tensed up it makes me feel hard. The thoughts won't peel off each other, you can't think, all your thoughts stick together. I get so hard and restless and tense--but I can't do anything. I feel prickly, the smallest thing irritates me....It's a feeling of frustration - edginess, I can't relax - it's something abrasive and intrusive. My thoughts go very fast - it's what I'd like to say and do in the particular situation. I imagine the conversation in my head....This

is a frustrating mood to be in. I'm unable to work things out in my mind and I feel totally flat from the deflation of expectation and thoughts. I feel overpowered and completely deflated. I sort of feel aimless and non-thinking. I'm aware of failures within myself and am most aware of myself in this mood in a critical way - literally on the verge of self-hate. It makes me feel like dwelling in self-pity which I actually hate doing....This mood of depression is actually somehow a really beautiful mood. Because I don't feel totally black, just a sad rainy feeling. I'm closest to nature in this mood, sensitive to the undersides of little daisies growing in the grass, etc. A gentle blowing-in-the-wind sadness reigns over my body bringing almost a halt to the goings on inside. I'm so full of everything that I'm sad, but not a black sad. It's a greyness with black and white spots and with occasionally splashes of rainbow colours.... I become quiet and just sit in my room, most likely listening to music, and thinking back over the good times in the past, analyzing them, trying to see where I went wrong. I relive every minute. I get very aware of my whole body - it feels so big and coarse, out of place and I never know what to do with my hands and where to look. I feel awkward and restless - something inside me wants to escape but can't....I don't feel like doing anything. Whatever I do, or force myself to do is an effort. I find that things I usually like doing become meaningless and not worth the trouble. I feel dead in a way. I think I am most aware of my head and possibly my legs. Everything feels heavier than usual. There seems to be a heavy weight sitting on top of my head, pushing me down, making it difficult to move. My legs feel lazy and useless, as if they're a part of my body that isn't necessary. I feel as if I, myself, am an unnecessary part of this world. I'm just being dragged along, unnecessarily, a hindrance and a burden. I feel as if the world is moving along and leaving me behind, except that I am being forced to trail along and try to keep up with it. I feel useless and unwanted, and that I have no real place in life. I feel drowsy and energyless. I am bored but can't seem to think of anything to do that will lift the boredom and the useless feeling. If I think of something I can't bring myself to get up and do itI feel like a useless blob. I really am depressed by my feebleness. I become so absorbed in myself, trying to think of ways of bettering myself that I am oblivious of others which makes me dislike myself even more. I try my best to look happy and fulfilled but I know I don't succeed. I am angry at my laziness and all sorts of "failures" (according to my standards) flash through my mind - why can't I do something about myself. In this mood I feel as though I need to be in good company, company which can set me an example and wake me up. My body feels awkward in this mood. I feel intense self-pity and self-hate opposing each other within me....In this mood I tend to feel a bit disconcerted as well, as the urge to change my surroundings or occupation stems from discontent with the present occupation or surroundings. However, it won't last very long as something new and stimulating comes up. Rather it is a temporary feeling of wanting to get away from it all, and a holiday in a different part completely and with different people will

usually do the trick. I feel as if I can't possibly sit still and must do something to keep me busy until the restlessness wears off....I am becoming very uncommunicative and the mood overrides everything else. It comes on when I have a problem that there doesn't seem to be an answer to, i.e. there doesn't seem to be anything positive I can do about it. I feel a general heaviness, a restless heaviness. In this mood I feel as if I could scream from frustration to try and get rid of the bottled-up feeling which almost invariably accompanies the mood....In this mood I want to cry and sleep. I have no energy or enthusiasm for doing anything, especially anything requiring effort. I am most aware of my head, which usually aches. I feel as if my eyes are burning and my body is about to sink through the ground. I feel hopeless, futile, irritable, angry and anxious....In this mood I want to be comforted. I want my mother to tuck me into bed and brush my hair off my forehead and hold my hand and tell me it's alright. I am most aware of my eyes and head, which feel heavy and sore. I feel as if the world has hit me hard and doesn't care that I'm bleeding and in pain. I want to hurt the world back because it won't comfort me....A feeling of misery and struggle, struggle between solutions for solving causes of depression. I feel introverted and quiet. I brood, the more I think about my depression, the more reasons for depression I find to think about. This increases the feelings of misery....This mood makes me feel like hibernating. The only part of my body I am aware of in this mood is my stomach and the area of my rib cage because I feel hollow there and sort of hurting. Most intensely I feel this cut off feeling, divorced entirely from people I love and whom I know love me. I can feel this self-pity in me when in this mood. I know I wallow when depressed and I can't seem able to make a strong enough effort to lift myself out of it....Yes, I feel damn restless. It's a weird feeling because it is not actually a mood. In my heart and soul I feel almost impatient or indifferent. It is my body that reflects this mood because I feel I want to do something but don't know what. I'd say it was because of the need to expend physical energy that this frustrated, restless feeling develops into a mood. It's a discontented feeling....I almost feel too impatient and irritable to describe the mood and yet this is such a brilliant opportunity to describe it because I feel intensely irritable. Most intensely, I feel a keyed-up sensation, as if I've been wound up on a winch and I can actually see that as a body for my mood. Every now and then, a friend says something or does something and the winch tightens up a bit. I feel that suddenly the tension will be too much and the whole winch (me) will completely snap....I feel all empty inside, as though I'm foundering in water where there is nothing I can hang on to. In this mood I like to have lots of objects around me. I love my room to be in a mess because then I know I've got to come back and tidy it, but if it is all neat I feel as though it is throwing me out and I have no ties to it. But the more people I have around me, the less secure I feel, I would like just one very special friend to be with me. This mood makes me feel like curling up some-

where where it is safe and where I wouldn't have to think or speak. I am most aware of all inside my body in this mood, it feels empty but tight. In this mood I feel as if I'm grasping for something which is always moving too fast for me to reach. I feel mixed up inside. I feel as though something is moving inside me but I don't know where to....

Summary

In general, the negative moods appear to be characterized by frustration, fretfulness, a captious and abrasive tension. Cognitive processes often move in recursive cycles leaving the subjects enervated and confused. Self-critical attitudes may dominate, abruptly passing over into self-pity and self-hate. The mood can assume an overwhelming self-encapsulated quality, subjects become unable to perform any action to extricate themselves, unable to conceive alternative possibilities. In the most extreme examples there is an inimical dilating-in-the-present darkness.

Subjects frequently reported altered perceptions of body image, the body appearing large, coarse, and clumsy. This was sometimes coupled with impatience, an inability to bear the standard flow of time, an emotional unease, pulses and waves of agitation. Specific bodily areas often appeared drained of energy. Phantom pressures and feelings of being dragged along as a useless appendage to an accelerating world were sometimes noted.

There was occasionally a sense of being abandoned without resources in a hostile world, being the recipient of jarring and hurtful thrusts from a callous environment, being swept away by a whirlwind of inexorable strife without justice or adjudication. One subject reported a feeling of being adrift, without adequate moorings for her sense of self, a sense of her body as being a constricted emptiness.

Metaphorical portrayals: It's like holding your breath, it gets worse and worse and then you have to let go....I feel like a hippo - clumsy 'coz of the confusion, neighing and plainly stupid, wallowing in a mud bath or what might be called a touch of self-pity. But I can lift myself out of this a bit to become like a buck having nothing else to do but graze all day and escape from preying beasts...This

depressed mood is soft like the Cape Town rain and often lasts a long time 'coz I enjoy it. I look to the clouds and see their mood in me....I'd be a heavy stone or a very clumsy animal - big....I would be a dead cat. My body would be a once round object that has been squashed flat and out of shape. It would be very big and conspicuous and heavy. It may be a big ball that has no air in it, and that has therefore lost its shape. Almost as if somebody punctured it and sat on it to squash all the life out of it....I feel like a tennis ball, being hit against a hard wall but bouncing off every time only to be hit again. The body that would suit this mood is a fat uncomfortable body....Molten lava underground (I chose molten lava because this is a very underground sort of feeling, there is heaviness, darkness, a feeling of being trapped, and perhaps a feeling of confusion and being lost, yet a restless tension inside) a gorilla (I chose a gorilla because it's usually considered fearsome and ugly when it's really quite gentle inside - a much misunderstood animal)....An animal in a cage at the zoo; a baby bird almost able to fly, but not quite....I would like to be a mound of old dough; either a hedgehog or a snake....An eiderdown; a tiny, beautiful baby girl....An ugly little brown crawling mean animal, slow and stupid; a round, heavy fat body-smooth and impenetrable, solid....I'd be a weeping willow - bent or bowed over and not strong and upright like a pine, say. A body that would suit my mood would be that of a sad clown with a big red nose, but sorrowful - deep eyes with painted tears on his face, all alone....If the mood was transformed into a material object it would be an electrical current with little sparks occurring at intermittent periods....If my mood were a material object, I think it would be a thin spider on a very light string of web, and there is a strong wind blowing the spider about, which is frantically trying to grab something to secure itself. If my mood had a body, it would be a little bush baby with such big eyes that are desperately looking around for something to hang on to....

Summary

In general, the self-expressive images suggest energy under pressure or retroverted, ponderous density, constrained and detached emotion, and bodily discomfort. For some subjects there is a sense of fragile opalescence, an airy thinness, a poignant vulnerability; for others a welling sorrow, a punctured aspiration, or an underworld like progression - heavy, dark, and burning.

Causal factors: I feel there is never a definite cause. I'm not aware of any reasons for this mood. It could be something I keep out of my awareness. I think the mood began when I first started fighting with my mother. I think it could be influenced by my periods as well, but I think

something over and above that is also involved. It feels physical, my whole skin feels too tight, it's the most physical of all my moods. I feel fuzzy in the head but it's not actually a headache....

The mood occurs when I've been hurt in some way by other people and there are things I can't escape from. In this mood, when you've been hurt by someone you lose the pain in nature, somehow to hurt is okay, you become bigger than it is, and you are filled with everything - hurt, happiness and sadness. Then I can see all the good in people even though they have hurt me in some way. And yet the mood seeks a happiness without people, because you don't want to see through people to know what's going on. It sickens me that people deceive. The mood has latent phases, when there is a collection of moods all together at once. The production of a mood depends on the dominant mood previously there.

It starts off with something unrelated to me, confusion about work, or about my friends, me asking questions why they did or said what they did, it's frustrating. Then the confusion increases, I can't sort things out, then the self-hate.

I think there are three types of situation that can produce the mood. If friends ignore me, or are much less considerate than usual, this can produce the mood. If there is a big disappointment in a person or an event, if I were looking forward to an event and it didn't happen. If I lose trust or confidence in someone important to me, that could produce the mood. I think it's more a collection of events than one single event that produces the mood, e.g. if everything was going well for me but I failed an essay - it would upset me, but it wouldn't be a depression. As I think about it it's definitely a collection of events unless it's one single thing in communicating with people....

My boyfriend left for England on Saturday night....It had been coming on for the whole week, because I knew he was leaving. When I'm depressed there is usually a reason I can identify but not always....

When I feel myself not responding to other people in the way that would be expected of me, e.g. if you told a very fantastic story, I'd let the others respond to it and keep silent myself. This could produce the mood by itself. When things occur and I feel I am not appreciating the things I've got, e.g. if I saw a handicapped person and say I had just argued with my mother. This is not sufficient to produce the mood by itself, but it could help to maintain the mood. When I compare myself to other people and I feel I am not meeting their standards, what I call my feebleness. This could produce the mood by itself....

It occurs mainly because of the heavy demands of my ballet schedule, e.g. on Saturday I had ballet all afternoon and evening. It was such a nice day, I was at a cricket game and could only stay for half an hour, it seemed a waste. In the afternoon we were just shadowing our seconds and then

in the evening it was actively rehearsing. In general, I think the same ballet day after day gradually builds up into this mood.

As we said, it occurs in response to exams; sometimes my friends and the situation at home.

I have been thinking about how much work I have to do before exams. Also, a dilemma concerning a love relationship which I am seeing in another perspective as the result of having, at the same time, a potential love relationship. Questioning of self as regards own worth. Identity crisis - who am I, what sort of person am I, how do others see me?

I've been thinking about joining my brother. He's not entirely certain. He's sure about going but not definite about when. Also, leaving my family to come back to Varsity, I think is also responsible for it.

Summary

In general, psycho-social factors and external pressures acting on internal potentials seem to be responsible for these moods. In some cases there was clearly a major physiological contribution. The psycho-social factors most frequently cited were: losing trust and confidence in others, being confronted with problems that appear to have no solution, uncertainty and confusion concerning work and friends, dissatisfaction with one's own social skills and responsiveness, and monotony or tedium in daily routine. Subjects sometimes reported it was a collection of events whose cumulative effect produced the mood. Some of the negative moods could not be linked with specific causes. They were often characterized as being physical moods - involving tension, bodily discomfort, and a general sense of confinement.

Goals as a determining factor: I don't think goals are involved, maybe if there is something I should do and I don't really feel like doing it, this could contribute to the mood....This could be important in producing or maintaining the mood, e.g. if people frustrate me in small and unnecessary ways....Goals are not important in this mood... Work-wise goals don't seem to be involved - which is bad. I feel if I haven't done the work, I haven't done it, but I don't become upset by it....The lack of fulfilment of some goal can contribute to the mood, but wouldn't produce it, e.g. goals concerning my work....This is not important.... Not fulfilling goals can be a part. It's tied in with self-esteem. When I don't achieve my goals, my self-esteem is

lowered....It comes on when I have a problem....Goals are not important in this mood....I'm not sure, I think you don't always recognize all your goals....

Summary

Subjects' responses to this question ranged from 'not important' through 'could contribute' to 'could be important'. Subjects appeared to assign a lesser importance to goals with respect to producing their negative moods, than either their neutral or positive moods. The attainment or non-attainment of goals was predominantly a contributing factor, not a necessary or sufficient factor.

The role of self-esteem: I don't think self-esteem is involved, I don't feel anything about myself, I don't think about it, I don't experience emotions or thoughts....I don't think self-esteem is important in this mood....I don't think self-esteem is important in producing this mood, it figures more in my happy and my deflated-confused mood....Yes, this is very important in producing the mood. At Varsity you are nothing amongst all the people and anything which damages your self-concept has a bad effect on you. You are trying to build yourself up most of the time. Your self-concept can only be badly damaged by people. I think damaged self-esteem can either cause or maintain the mood. If I'm confused about friends this lowers my self-esteem and produces the mood. If I'm doing badly with work, I become confused and ask myself why can't I do the work?, and this maintains the mood, but only because lowered self-esteem from friends had been operating earlier....Self-esteem does contribute to producing the mood. If something negative takes place and as a result I think poorly of myself, this is important. Also, if I'm too optimistic, if I expect there to be a shining light and everything to work out and then it doesn't, I think oh you fool, you should have known it wouldn't work. This by itself could produce the mood.... My self-esteem decreases in this mood and I feel sorry for myself. Self-esteem helps to maintain this mood. What makes me feel useless and not worthwhile is the feeling of not being needed by the other person....Yes, this is very important in the mood, i.e. my lack of self-confidence.... I think self-esteem helps to maintain the mood but not produce it. I say to myself what am I doing this for, it's useless....Yes, self-esteem plays an important role. I see myself in a certain way and if I'm not measuring up I become tense....

Summary

In general, subjects ascribed an important role to self-esteem in producing or contributing to their negative moods.

The rigours of university study and the social round frequently decreased self-esteem. A feeling of being inessential, an unnecessary adjunct to others, an undermining of optimism and idealistic attitudes, and eroded self-confidence, were all mentioned.

Creation or choice:

(whether or not the subject feels she herself plays a conscious, active and decisive role in producing the mood)

No, this is one of my moods where I have no choice....I would say I have no choice about this mood....I have no choice concerning this mood, it just comes over me....I don't create or decide to be in this mood....In a way I do create it myself. Well, it's more I'm halfway there - I could talk myself out of it, but I let myself go on into it....I think it's usually beyond creation or choice. In this case, maybe I felt I had to be depressed because I knew I was going to be. It was the natural culmination of what I'd been feeling all week. I expected to be depressed, so I became depressed....I feel a large part of the mood is created by myself. I build up a large part of it. It's because I'm comparing myself all of the time and I often have a distorted view of what others see and think. I need to know what others think because I am lacking in self-confidence....I'd say no creation or choice. I was in a happy mood and didn't want to be restless, it was the circumstances....I can aggravate the mood by what I'm thinking but I can't lessen it. I don't choose it or create it....

Summary

In general, subjects affirmed that they did not actively create or choose the negative mood. However, several subjects indicated that they let the mood envelop them when preventative measures could have been taken. If a negative mood was anticipated through circumstances, the anticipation would most likely be fulfilled. There may occasionally be deliberate "aggravation" of the negative mood.

Who am I?

(the basic identity the subject believes is being manifested in the mood)

A person who wants to get the energy out. It's got to get out by itself, it's a separate entity and must discharge itself. It doesn't make me feel energetic, it's more like something foreign inside, it's there and separate from me, not the sort of thing that running around the block would diminish....I have no desires in this mood, no goals or specific desires - I just want the irritation to terminate...

There is no desire or wanting in this mood. It's just there, it's peaceful, I can experience all that is there....I am a person who yearns for clarity and understanding and somebody I could talk deeply to. But this refers more to earlier this term....What I want and desire most in this mood is for somebody to really care about me. I am unhappy, lonely, irritable, dissatisfied, feeling revengeful, restless, missing certain people, withdrawn, waiting for something pleasant to happen and get me out of this mood, feeling angry towards most people, feeling hurt and sensitive, optimistic in believing that something good and much longed for will happen sometime, bottled up inside, unapproachable, and unfriendly....I yearn to be the opposite of everything I'm criticizing. I am: dull, a rag doll, neglected, lazy, disappointing, regretful, condemning, irrational, a coward, immature, filled with self-pity, filled with self-hate, striving for order, a procrastinator and longing for compliments to be paid to me...What I want most is just for everything to be nice for a change. I don't feel understood and this ties in with the persecuted feeling. They don't seem to care, I feel I'm the scapegoat in the family...I am someone who is fallible, who feels world weary, the product of a home where feelings are fought shy of, one small person among millions of millions, one who is sensitive to the opinion of others, one who hates to think very deeply about herself - can't but wish in a way I could, and one who still seeks to find what she wants..... I am alone, without anyone to turn to, unsure of my future, unsure of my capabilities, lacking in strength, lacking in confidence, without roots, in need of someone to give me strength, unsure of which path to take, unable to reach out to anyone, without trust, pessimistic, all mixed up inside, unhappy, and standing on a little raft in a turbulent sea...

Summary

The major identity themes emphasize the need to express or release internal tension, sometimes perceived as a foreign intruding entity; for some subjects there is a yearning for clarity and understanding, to be the object of affection, to have communication and communion. There is often a need for inward and outward harmony, a surcease of hostile emotions and demands. There occurs an identity theme of personal insignificance, aloneness, uncertainty, confusion; for some subjects irrational thoughts and impulses arise unbidden and take root. There is often a yearning for negative aspects of the personality to be nullified and replaced by positive aspects - a desire to be able to define the core aspect of the self, to have a knowledge of what one truly wants.

Relating to other people in the mood: Others irritate me, I don't feel like talking, there seems to be no reason to talk. If I do, I get bored pretty quickly, especially by people's normal slow way of talking - it irritates me when I'm alive and jumping with energy....If I'm with people who are close to me I can be snappy and tend to express the feeling. With others it comes out more indirectly in my behaviour. I deliberately try not to express it toward people socially. It's not their fault that they irritate me....I want to withdraw, and I can't relate to them because I'm involved inside. It's a selfish mood....I withdraw into myself, I can't communicate at all to other people, I tend to feel inferior to others. I criticize myself and others. It's bad enough when you aren't pleased with things - but when you feel they don't understand and are being critical of you then you become critical back and at the same time you are asking them inside yourself - Why can't you understand?....To people I'm close to I'm abrupt and take it out on them. If they are not close I manage to be civil....I withdraw from other people, if I'm forced to interact - I tend to be cross and nasty and to take it out on them....I'm not very pleasant when I'm in this mood, it makes me less tolerant. It comes to a point where I start snapping at people - there's no other way to express it, Mom gets it the most....I stop relating to others, I expect them to relate to me. I sit around waiting to be entertained, and people don't usually realise this....I know when I'm feeling depressed, I'm very aware of other people nearby, and they seem to be happy and so totally insensitive to your mood or you can recognise other isolated, solitary people and imagine their being depressed....

Summary

Relating to other people is characterized by high levels of irritation, intolerance and boredom. Negative feelings are most forcefully expressed towards those with whom the subject has close contact. Subjects mention an inability to communicate, feelings of inferiority, and withdrawal tendencies. There is a tendency to perceive others as unduly critical, recalcitrant, and insensitive. At the same time there may be an interior voice asking 'Why can't you understand?'

What the subject is most aware of

- a) about herself: Agitation and tension - I want to say or do something - I want to make my reaction known. I want to express it in some way....I'm not aware of myself in this mood....The confusion in my head, an asking: Why can't I this and that? I'm totally involved in myselfI am most aware of my dissatisfaction in myself, that I am misunderstood and unloved....My laziness in the sense of not responding or doing anything....My fidgetiness....I'm aware of my neck and eyes - things

seem to get darker....

- b) about the environment: I'm more aware of everything superfluous, mechanical, invalid, or trivial and that makes the irritation worse. Once I find one thing that irritates me I seem to find many more....I'm most aware of trees, flowers, and nature and I love reading poetryThe environment doesn't penetrate, it's totally self-involved....That the environment is cold, detached and there is a barrier between me and it....Physically I don't notice nature at all, maybe people comparatively. I realise what a wonderful place the world is and that I'm not using it properly....Its irritating quality.... I'm aware of other people's faults more....

Summary

In terms of self-perception subjects most frequently indicated an awareness of negative qualities. In particular subjects indicated a predominance of confusion, tension, and either a general agitated surgency or dull lethargy.

In terms of environment-perception some subjects reported an increased awareness of hostile, mechanical, and contingent world qualities; others were struck by the qualities of nature. For another group the self-involvement and inward spiralling movement of the mood predominated.

Function: I don't think it has a function, it's useless. It makes me irritable and achieves nothing. I feel I can control the mood more now, I can detach myself from the situation and not actually feel irritated. I don't take things as personally or get as involved. I don't see everything as relevant to me, I'm less egocentric and there's more detachment, more tolerance. I don't care or expect others to be anything. I don't expect them to be how I would like them to be....This mood gets me away from hassles, afterwards I feel a better person - able to appreciate things. I realise the mood will come back and I'll have it again, even though the sensitivity is gone. Also the mood gets me away from having to make an effort to penetrate and see through people. You can put yourself out of the picture, and look down and see more clearly, then you can go back and your insights will sustain you. There is a danger in getting totally absorbed back in things - it's a threat, like looking into a mirror - you see what you want to see, but occasionally you get a glimpse of what's really there, then you have to reconcile that with what you want to see... I think the mood does draw my attention to a problem or suggests that I may be doing things the wrong way. It perhaps helps me to get to know myself. You don't always

think what you really think - it helps you to get into your thought processes....It gives me a chance to be on my own and think things over. I can think with some clarity even though I tend to be overly negative....It shakes and wakes me up a bit, but still it's pretty useless....I think the mood reminds me that there are many different things to do in life, and when the mood starts wearing off you realise it's not so bad what you are doing - why not do one thing well and do little pieces of other things too. As you suggest, it presents different possibilities to me, confirms me in what I'm doing and reminds me that I don't want to do it for ever....This mood points out to others that I'm not exactly what they think - easy-going, easy to get on with and entertaining....

Summary

Subjects expressed a variety of opinions concerning the functions of their negative moods. In some cases subjects believed that their mood served no function, was useless and a liability. However, examining the affirmative responses, these functions can be extracted:

1. provides more detachment, impartiality, and ultimately a greater tolerance
2. removes and sequesters the individual from outside stress
3. increases personal independence, can contribute to self-knowledge
4. serves as a catalyst for change
5. prevents others from stereotyping oneself.

CHAPTER 5 : DISCUSSION AND CONCLUSIONS

Summary

Personality sketches of the two types of moody individual.

Sketch (1): the individual is suspicious, tense, apprehensive, knows doubt and self-division, and above all is strongly affected by feelings.

Sketch (2): the individual is impulsive, emotionally explosive, and unpredictable.

Absolute magnitude of change scores: the similarities and differences between the experimental sessions are explained in terms of the cognitive processes instituted and experimental order effects.

Magnitude of change scores and component change scores: the results are explained in terms of subjects' inherent tendencies, aspects of the experimental situation, and the structure and design of the MAT.

The MAT influences the mood states of "moody" and "non-moody" subjects to an equal degree. The MAT influences negative moods in predominantly positive ways. Overall, subjects find that the MAT operates to change mood and increase awareness.

Subjects' definition of "mood": mood as a "state of mind" is susceptible to several interpretations; "pervasiveness" an indispensable element; "mood" as "causal" and "pre-emptive"; the concept "mood" generated at the interface of at least two unique domains; areas of similarity and difference to the concept "attitude".

Language acts of sentences using the word "mood": the mood domain "x" can be interpreted to consist of two main elements--the experience of the vectors of mood and tendencies to make social-evaluative judgements. The data resist any single factor simplification.

Qualitative data: composite representations and specific examples of positive, neutral and negative moods are provided. A structural analysis establishes basic qualitative, systemic and "grammatical" features.

Conclusions

Mood as a concept and experience; general and perspectival mood attributes. The structure and functioning of mood--a psycho-dynamic construction. The Mood Analysis Technique (MAT) functions to bring new feeling elements into awareness, reveal potentials for feeling, and improves negative moods. Personality data permits the conclusion that "moody" subjects may be different from their "non-moody" counterparts; personality patterns associated with the different types of moody individual; conceptual and empirical implications.

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CHAPTER 5

5.1 Personality Variables that Significantly Distinguish "Moody" from "Non-Moody" Subjects

Null Hypothesis 4.1.1.1, that the two different criteria of moodiness (the self-opinion criterion and the criterion of high and low mean variability) will not yield different patterns of significant personality variables, has been rejected.

Section 4.1 has shown that the two different criteria of moodiness (self-opinion and high and low mean variability), corresponding to two different ways of defining and identifying a "moody" individual, are each significantly correlated with standard personality variables. Each criterion revealed both common and unique personality variables (see Table 10). The data will be integrated in this section by the formulation of general personality sketches (clinically impressionistic but empirically grounded) of the two types of moody individual.

The Self-Opinion Criterion

(moody in the sense of having spells of irritability and/or protracted feeling states of moderate intensity)

From the vantage point of this criterion the "moody" female university student emerges, as assessed by the 16PF, Edwards and ACL, as an individual of diverse facets and potentials. Against the background of her self-identity, she is an individual of strong exhibitionistic and heterosexual needs. Her need for autonomy gives her a determination that is not to be contravened. Yet she is suspicious, tense, apprehensive--she knows doubt and self-division, and above all is strongly affected by her feelings. This suggests viability and sensitivity of feeling, but also an equal possibility of stubbornness or indecision in the face of circumstances that contradict her feeling. Her irritability may be the reverse side of her sensitivity. Her behaviour may be further complicated by the fact that she sees herself in a less favourable light than her peers. She usually has poor personal adjustment, but is open about her needs and feelings. She is frequently aware of the conflicts in her personality and when desirous of counselling, she had a good potential.

In her contacts with the external world her high autonomy needs, low need for affiliation and nurturance may lend an air of confident

superiority to her actions, but her internal matrix of feelings and attitudes belies this confidence. Her energy and emotional acuity often lead others to seek out her company, and in a good mood the world seems to respond to her wishes, but in a bad mood she may become a veritable destructive fury. She is probably often misunderstood and this can contribute to her frustration, tension and moodiness.

She may be genuinely struggling to find her way among the variegated elements and fragments of her personality, searching for a new perspective of herself, mediating among her different aspects to find a vital expressive pattern of integration and responsiveness. This can be a formidable task requiring the blending, balancing, resolving, or separating and restraining of sometimes antagonistic needs and feelings.

It will be useful to bear in mind the distinguishing characteristics of this category of mood individual, relative to the next category:

her apprehensiveness and being affected by her feelings (16PF); her relatively high autonomy need and relatively low need for affiliation (Edwards).

The High and Low Mean Variability Criterion

(moody in the sense of variability in feelings over a given unit of time)

From the vantage point of this criterion the "moody" female university student, as assessed by the 16PF, Edwards, and ACL, confirmed ten of the significant personality factors found for the first category of moody individual (see Table 10). Four significant personality variables were unique to this criterion. They were the factors Assertive, Happy-go-lucky, Undisciplined self-conflict, and low Self-control. From the data, one gains the impression of an impulsive, emotionally explosive, and unpredictable individual. Her aggressive assertiveness tends to establish its own law and authority. If constrained she may seek ways to punish those who have trespassed upon her sovereign territory. This alienates her even further from her peers who may be perplexed or devastated by her uncompromising attitudes. Her stubborn self-

affirmation may be coupled with a brutal shortsightedness that commits her to extreme positions that she cannot relinquish because of the force of her emotion. Yet the variability of her feeling makes all her interests spasmodic, former urgencies are forgotten as new emotions demand different investments.

Her impulsive liveliness, the mercurial nature of her feelings--vaporous, combustible, and fluid, may be projected outward into an anarchy of behaviour. In a good mood she is likely to be cheerful, active, talkative and carefree, a tonic for those about her who are less vital, but the slightest agitation may be sufficient to activate her negative and opinionated character. Her low integration, disregard for social demands and restrictions, propel her into difficult and complex interpersonal situations. She finds that she cannot trust her judgement because of her changing feelings. The multiform nature of her affective life --the reverberating trills, echoes, harmonic variations, and disconnected feedback from recently spent feelings may combine to produce confusion, a sense of maladjustment, and discontent.

The distinguishing characteristics of this category of moody individual relative to the first category are:

her Assertiveness, Happy-go-lucky nature and Self-conflict (16PF); and a lesser degree of Self-control (ACL).

Moodiness and variability of feeling

Wessman and Ricks (1966) in a study of mood variability found female university students who scored high on emotional variability (measured across a single bipolar dimension, Elation-Depression) to be more independent, introspective and less conforming than their emotionally stable counterparts. In their research the most general characteristic related to mood variability was the emotional openness of the variable individuals relative to the more stable individuals. The former had a livelier, more textured fantasy life, with little or no suppression of feeling. In addition, for the variable women, the general energy level was higher, more dynamic and future

orientated. The present study generally supports the Wessman and Ricks findings. However, this study is distinguished from the Wessman and Ricks study by its statistically establishing the traits of self-conflict (16PF) and low degree of self-control (ACL) with mean variability across multiple mood dimensions. Also this study found no support for the hypothesis that mood variability is significantly related to introspective needs.

Fiske (1961) has suggested that variability in feeling is not necessarily a liability, but rather may serve an adaptive function. In his view, variability of feeling primes the organism to perform a range of alternative responses, thereby enabling him to respond in a differentiated and effective manner. Variability in feeling enables the individual to adapt to and cope with ambiguity in the environment; it further increases the amount of stimulation that may be received from the environment. It is most likely that consistency and conservatism of emotional response are of greatest utility in an environment which undergoes a slow rate of change, where a premium is placed on regulated and convergent responses. Variability of emotional response on the other hand, is of greatest utility when tentative, exploratory and expressive responses are required. Thus under certain conditions variability of feeling is associated with adaptation, equilibrium and development.

In many cases variability in feeling may be related to a physiological substrate, or to a personality or temperamental pattern. However, it is my experience that variability of feeling may also serve a defensive function, i.e. it can be an acquired psychodynamic trait. Therapeutic work with women of high mood variability has indicated several defensive functions. They are:

Variability in feeling as a flight from fear, or from what is too painful to bear, e.g. being too close to a person where it is feared that one's individuality will be lost or overwhelmed; it can represent avoidance of disappointment or fear of failure; variability in feeling in the sense of fluctuating pleasure and displeasure, acceptance and rejection of people, can represent a search for an ideal relationship--a relationship which is

desperately sought but seen as fraught with danger; it can be an attempt to find the vital and the new, to avoid the debilitated, the worn out, and the mundane; an attempt to be stimulated, a greed for excitement, a need for energy to revitalise an unhappy, exhausted, or lethargic self; variability in feeling can be deliberate change resulting from curiosity, to see what effects a new self and feeling will have on the external world, it may be a need to shock, to surprise, or to get others to notice, to find out about oneself by demonstrating many facets and waiting for the mirrored response from the environment. Above all the variable woman is defending herself against a personal and emotional vacuum --the threat of enveloping darkness or her own disorganization into tesserae of corpuscular light.

Variability in feeling may be an attempt to conceal and camouflage, to keep the inner desires protected and free. When the self-concept is low, the variable individual may feel she is safe only if no one sees or knows her true self; variability in feeling may represent an attempt to meet all the demands of other people, to placate and please, to be what others want. This is especially likely when the individual occupies multiple dependent roles. In several of these cases one of the parents was unstable or unreliable--the subject tried to please the parent, found she couldn't, changed again to please the parent, failed again, and a vicious pattern was established.

Similarities between the two criteria

It should be emphasized that although each criterion of moodiness revealed unique personality characteristics, at the same time ten personality variables were constant for each criterion. Thus despite unique personality variables there is a common and definitive cluster of variables which spans the two common conceptions of moodiness. This suggests a core structure of attributes that is further supplemented according to the specific definition of moodiness. The nomothetic contribution to an understanding of the moody individual may be enhanced if research can establish relationships between this basal configuration and other cognitive, situational and affective variables.

5.2 Absolute Magnitude of Change Scores across the Four Experimental Sessions

Null Hypothesis 4.2.1.3, that the mean absolute magnitude of change score for Session 2, the experimenter administered Mood Analysis Technique (MAT) will not differ from the mean absolute magnitude of change score for Session 3, the quiet activities session, has been rejected.

Section 4.2 has shown that Session 2 has a greater mean absolute magnitude of change score than Session 3.

Null Hypothesis 4.2.1.5, that the mean absolute magnitude of change score for Session 2, the experimenter administered Mood Analysis Technique (MAT) will not differ from the mean absolute magnitude of change score for Session 4, the self-administered MAT, has been rejected.

Section 4.2 has shown that Session 2 has a greater mean absolute magnitude of change score than Session 4. However:

Null Hypothesis 4.2.1.1, that the mean absolute magnitude of change score for Session 2, the experimenter administered Mood Analysis Technique (MAT) will not differ from the mean absolute magnitude of change score for Session 1, the personality testing session, has been accepted.

Section 4.2 has shown that Session 2 cannot be statistically distinguished from Session 1, in terms of mean absolute magnitude of change scores.

For interpretive analysis it should be stressed that the absolute magnitude of change scores are summary measures, implying no reference per se to modulations in specific mood factors. To establish the necessary perspective and arrive at the true significance of these scores, the individual magnitude of change scores and component change scores must be examined.

The absolute magnitude of change scores as indicators of overall or global change provide the first element in the chain of evidence

used to support the contention that Session 2, the experimenter administered Mood Analysis Technique (MAT) has a determinate and specifiable effect on mood. Both Session 2 and Session 1, the personality testing session, had greater mean absolute magnitude of change scores than either Session 3, the quiet activities session or Session 4, the self-administered MAT. This has established that Session 2, the experimenter administered Mood Analysis Technique (MAT) is having a major effect in terms of global influence, but its effect is not greater than Session 1.

What might the reason be for the lack of statistical difference between Session 2 and Session 1? I would speculate that the lack of difference lies in the similarity of the cognitive processes instituted by the two sessions. Both sessions constitute a serious probing of the subject's affects and behaviour (although the personality tests have a more shallow and scattered effect); they both involve decision making concerning patterns of behaviour and feeling, evaluations of thoughts and action tendencies, and require a reflexive awareness of present, past and possible future affective states. It is this general activation of thought and feeling which distinguishes Sessions 1 and 2 from Session 3, the quiet activities session. The question that remains is why Session 4 (which was also a probing session) did not have a higher absolute magnitude of change score, in particular a greater absolute magnitude of change score than Session 3? The most likely explanation can be framed in terms of experimental procedure. Session 4, the self-administered MAT was the final experimental session, thus it did not have the novelty of Session 1, and it is also reasonable to assume a lingering practice effect operating from Session 2. This points to a deficiency in the experimental procedure. If the order of presentation of sessions had been randomized, a more experimentally valid result might have been obtained. However, owing to the relatively unstructured nature of the MAT, it was believed that subjects might have had difficulty with a self-administration without prior exposure to the questions and format.

5.3 Magnitude of Change Scores across the Four Experimental Sessions

Null Hypothesis 4.3.1.3(a) that Session 2, the experimenter adminis-

tered Mood Analysis Technique (MAT) will not differ from Session 1, the personality testing session and Session 3, the quiet activities session, in terms of the magnitude of change scores on the 12 Nowlis Mood Factors of the Nowlis Mood Adjective Check List, MACL, has been rejected.

Section 4.31 has shown that Session 2 influences the 12 Nowlis Mood Factors in ways different from Sessions 1 and 3.

Null Hypothesis 4.3.1.5(a) that Session 4, the self-administered Mood Analysis Technique (MAT) will not differ from Session 1, the personality testing session, and Session 3, the quiet activities session, in terms of the magnitude of change scores on the 12 Nowlis Mood Factors of the Nowlis Mood Adjective Check List, MACL, has been rejected.

Section 4.31 has shown that Session 4 influences the 12 Nowlis Mood Factors in ways different from Session 1 and 3. However:

Null Hypothesis 4.3.1.1(a) that Session 2, the experimenter administered Mood Analysis Technique (MAT) will not differ from Session 4, the self-administered Mood Analysis Technique, in terms of the magnitude of change scores on the 12 Nowlis Mood Factors of the Nowlis Mood Adjective Check List, has been accepted.

Section 4.31 has shown that Sessions 2 and 4 cannot be distinguished from each other in terms of their influence on the magnitude of change scores for the 12 Nowlis Mood Factors.

In discussing the magnitude of change scores on the 12 Nowlis Mood Factors the salient effects of each experimental session will be considered, followed by a comparison of these effects across sessions, and finally a consideration of the experimental effects in terms of influencing "energy" mood factors, "emotion" and "cognitive" mood factors.

The salient effects of Session 1, the personality testing session, were decreases on the mood factors Scepticism, Social Affection, Sadness and Egotism. None of the mood factors were increased by

Session 1. It would appear that Session 1 was generally acting to inhibit or suppress emotional levels present at the beginning of the experimental session. This is perhaps not surprising, because although the personality tests require the subject to reflect upon their thoughts, feelings, and actions, it is basically a surface level reflection and does not encourage the exploration and unfolding of affect. But we may still wish to inquire why it decreased these particular factors? I believe that there was a general tendency, irrespective of the experimental conditions, for subjects to manifest the affects represented by these factors. This could be due to the pressures and frustrations of university life, the close companionship and social warmth shared between friends, and sadness or nostalgic unhappiness at being away from home and family. Session 1 did not resolve these emotions but shunted them aside, subordinating their expression to the demands of the task imposed.

The salient effects of Session 2, the experimenter administered Mood Analysis Technique (MAT), were increases on the mood factors Aggression, Social Affection, Sadness and Egotism. It is most likely that in-depth and concerted attention on needs and feelings was responsible for the increase in Egotism. But this in itself does not explain the increases on such widely divergent factors as Aggression, Social Affection and Sadness. In order to put this finding into perspective, it should be re-emphasized that the Mood Analysis Technique was designed to focus on present feeling, to encourage its intensification and unfolding into new affect. In addition, it brought background and peripheral feelings to the foreground. Emphasis was also placed on "protensional vectors", i.e. the revelation of potentials for feeling through the postulation of possible feelings in the near future (e.g. the questions 'Do you think your mood needs something to be completed or fulfilled? Do you think the mood is stable, or will it change into a different mood?'), as well as the imaginative portrayal of immediate feelings against both inner and outer horizons (proximal and distal limiting conditions). This is to say that in addition to the intensification and unfolding of present feeling, the questions of the Mood Analysis Technique were such that present feeling was situated in terms of past feeling, the latent and shadow aspects of present feeling, and

the projection of future feeling. All aspects being made immanent through the search for expressive metaphors. Thus although it is a post hoc argument, it becomes comprehensible that such diverse factors were increased, and that such a basic, almost primitive affective cluster as Aggression, Social Affection and Sadness was activated, manifested, and developed. At this point the argument can only be adumbrated, it will be more finely articulated and strengthened when the component change scores are discussed.

The salient effects of Session 3, the quiet activities session, were decreases on the mood factors Aggression, Egotism and Scepticism. Thus the general trend for this session was a reduction in intensity for three out of the twelve mood factors. It may be that the experimental situation itself had a tendency to activate Scepticism, hence the quiet activities of doing work assignments or reading periodical literature might be expected to relax the subjects and diminish their suspicion. If, as already noted, it is reasonable to assume a general disposition for subjects to manifest emotional responses of an aggressive nature, the relaxing activities of the session would tend to decrease the associated factor.

The salient effects of Session 4, the self-administered Mood Analysis Technique (MAT), were increases on the mood factors Aggression, Sadness, Egotism and Scepticism. Session 4 is essentially the MAT with the experimenter's verbal involvement removed. We should expect this session to parallel Session 1, the personality testing session, if the two activities are congruent with respect to their major features. However, we find the pattern of increases on the mood factors Aggression, Sadness and Egotism, which has been linked to the reflective activity initiated by the MAT on Session 2. Nevertheless there is one modification--Scepticism appears as a statistically significant factor. The increase on Scepticism is probably an artifact of the experimental procedure. On Session 4 subjects were required to complete the MAT a second time. As there had been no feedback to subjects from Session 2, they may have become doubtful about the whole procedure.

Sessions 1 and 3 presented similar patterns of statistically significant mood dimensions. The effects of these sessions resemble each other to a greater extent than either the effects of Session 2 or Session 4. Sessions 2 and 4 presented similar patterns of statistically significant mood dimensions. The effects of these sessions resemble each other to a greater extent than either the effects of Session 1 or Session 3. Hence with some acution it may be empirically concluded that the activities of Sessions 2 and 4 were fundamentally different from the activities of Sessions 1 and 3.

Some of the differences can be further highlighted by considering the statistically significant mood factors under the headings: affective factors (Aggression, Social Affection, and Sadness), energy factors (Surgency), and cognitive factors (Egotism and Scepticism). For the affective mood factors, Session 2 in each case showed a statistically significant increase on the respective dimensions. This effect has already been explicated in terms of the design and structure of the MAT. For the one significant energy mood factor (Surgency), Session 1 consistently showed a greater decrease than the other experimental sessions. This is to say that although all the sessions were energy absorbing, Session 1 which probably inhibited affective expression because it required standard categorical answers, also dissipated the initial levels of exuberant energy in the majority of cases. For the cognitive mood factors the two factors apposite to this category must be considered separately. In the case of Egotism, Sessions 2 and 4 both showed an increase and Sessions 1 and 3 both showed a decrease. This suggests that Sessions 2 and 4 established an intense degree of self-involvement, the type of thematic self-reflection that is a necessary prerequisite to affective change. For the factor Scepticism, Session 4, the self-administered MAT, showed a significant increase relative to Sessions 1 and 3. This has already been attributed to the experimental procedure. Session 1 showed a greater decrease than either Sessions 2 or 3. This may again be a function of the rationally convergent, affectively controlled, and energy reducing characteristics of this session.

The examination of the significant mood factors under these three

categories permits the conclusion that the MAT is basically affect stimulating, energy reducing (but less so than Session 1), and cognition promoting with respect to the factor Egotism which is an indicator of self-involvement and self-concern. This self-concern is interpreted not as a stagnant or morbid self-concern but as a dynamic self-awareness that is a prerequisite of affective change.

5.4 Component Change Scores for Mood Factors that showed Significant Magnitude of Change Scores

Null Hypothesis 4.3.1.1(b) that Session 2, the experimenter administered Mood Analysis Technique (MAT), will not differ from Session 4, the self-administered Mood Analysis Technique, in terms of the number of mood components increased, decreased, disappeared, new and total change in mood components, has been rejected.

Section 4.32 has shown that Sessions 2 and 4 have influenced the component change scores in different ways.

Null Hypothesis 4.3.1.3(b) that Session 2, the experimenter administered Mood Analysis Technique (MAT), will not differ from Session 1, the personality testing session, and Session 3, the quiet activities session, in terms of the number of mood components increased, decreased, disappeared, new and total change in mood components, has been rejected.

Section 4.32 has shown that Session 2 has influenced the component change scores in ways different from Sessions 1 and 3.

Null Hypothesis 4.3.1.5(b) that Session 4, the self-administered Mood Analysis Technique, will not differ from Session 1, the personality testing session, and Session 3, the quiet activities session, in terms of the number of mood components increased, decreased, disappeared, new and total change in mood components, has been rejected.

Section 4.32 has shown that Session 4 has influenced the component change scores in way different from Sessions 1 and 3.

It will be recalled that component change scores refer to internal change on the 12 Nowlis Mood Factors. Each mood factor is composed of three defining elements or components; internal change on a factor is indicated by these individual components increasing, decreasing, appearing for the first time (new), or disappearing. Thus each magnitude of change score is the result of individual component changes or a pattern of change across components. What we wish to determine is whether the argument that Session 2 is functioning to bring latent or peripheral feeling elements into awareness and reveal potentials for feeling, is cogent. If it is, then we should expect Session 2 to be associated with a greater number of new components. In addition we wish to know if Session 2, the experimenter administered Mood Analysis Technique (MAT), and Session 4, the self-administered MAT, showed characteristic patterns of change for the statistically significant magnitude of change scores.

For the statistically significant factor Aggression, both Sessions 2 and 4 brought about significant increases in Aggression and this was achieved through the generation of more new components (see Table 41). Session 2 in particular relative to Sessions 1 and 3 had the ability to generate new components. Thus the component changes on the mood factor Aggression provide support for the argument.

For the statistically significant factor Surgency, Session 2 generated significantly more new components than Session 1. Despite the fact that none of the experimental sessions showed a net increase in magnitude of change scores, both Sessions 2 and 3 showed more new components and fewer components disappeared than Session 1. Thus the argument receives some support from the component changes on the mood factor Surgency. It is also interesting to note that on the energy factor Surgency, Session 2 seemed to parallel Session 3, the quiet activities session. Possibly Session 2 in addition to activating several affective dimensions, also had a relaxing or stabilizing effect.

For the statistically significant factor Social Affection, Session 2 was distinguished from each of the other experimental sessions by

its greater number of new components. It was the most influential session not only in terms of generating more new components, but also in terms of total change in components. This suggests that in addition to generating new components Session 2 may have had an important effect on other basic components. Thus Social Affection in particular provides strong support for the argument.

For the statistically significant factor Sadness, Session 2 is distinguished in three ways: this session generated more new components than Session 1, showed more components increased than either Sessions 1 and 3, and showed more total change than Sessions 3 and 4. Session 2 appeared to generate new elements, intensify elements already existing, and generally facilitate internal change. As in the case of Social Affection, the mood factor Sadness provides strong support for the argument.

For the statistically significant factor Egotism, Sessions 2 and 4 generated more new components than the other two experimental sessions. This finding supports the point already made that the MAT encourages a self-reflective attitude in the service of affective differentiation and change.

For the statistically significant factor Scepticism, the component changes do not support the argument that Session 2 intensified existing components or brought new components into awareness. Since this factor is a general indicator of subjects' doubt and suspicion concerning the experimental activities, it is both comprehensible and reassuring that in this one case the data was not consonant with the argument.

Comparison of Sessions 2 and 4

It should be noted that there were some differences between Sessions 2 and 4 on the significant mood factors just considered. For Social Affection Session 2 showed more new components and more total change than Session 4. For Sadness Session 2 showed more total change than on Session 4.

The differences can be viewed in either one or both of two ways. The experimenter's verbal involvement on Session 2 may have been

responsible for greater changes in Sadness and Social Affection, or Session 4 being the final experimental session and basically a repetition of Session 2 may have produced less change in Sadness and Social Affection. A consideration relevant to this issue is the degree of the experimenter's verbal involvement on Session 1, the personality testing session. The experimenter read the test directions including sample test items, and answered subjects' questions. In spite of this verbal involvement Session 1 was significantly different from Sessions 2 and 4. In my opinion the differences between Sessions 2 and 4 (which are less salient than the similarities) cannot be wholly attributed to the experimenter's verbal involvement; it is more likely a joint function of experimental order and verbal involvement.

5.5 Component Change Scores for Mood Factors that did not show Significant Magnitude of Change Scores

There were several major mood factors which did not show significant magnitude of change scores across the four experimental sessions but which nevertheless did show significant component change scores. We will turn to these factors in order to collect further evidence for the argument that Session 2 was functioning to intensify mood, bring new feeling elements into awareness, and promote affective change.

For the mood factor Anxiety, Session 2, the experimenter administered Mood Analysis Technique (MAT), generated more new components than either Sessions 1 or 3. Session 2 also showed more total change than either Sessions 3 or 4. Session 2 was the most active experimental session in terms of influencing the mood dimension Anxiety. It had the ability both to generate new components and to make components disappear. Thus the factor Anxiety tends to support the argument. None of the other three factors showing significant component changes (Fatigue, Vigour and Deactivation) revealed significant new components or components increased for any of the experimental sessions.

Comparison of Sessions 2 and 4

Session 2 appeared to differ from Session 4 in terms of total change in components and number of components disappeared. For the factors Anxiety, Fatigue and Deactivation, Session 2 in each case showed

more total change. For the factors Anxiety and Deactivation, Session 2 in each case showed more components disappeared. It would appear that relative to Session 4, Session 2 was having a wider effect (more total change). Interestingly, Session 2 appeared to be reducing anxiety relative to Session 4 while at the same time reducing general enervation and emotional complacency.

The ability of Session 2 to generate more new components over several mood dimensions provides substantial support for the argument that Session 2 is functioning to bring new feeling elements into awareness and to reveal potentials for feeling.

5.6 The Effect of the Four Experimental Sessions on "Moody" vs. "Non-Moody" Subjects

Null Hypothesis 4.4.1.1 that the four experimental sessions will not differ in their effects on the 12 Nowlis Mood Factors for "Moody" vs. "Non-moody" subjects, has been accepted.

Section 4.4 has shown that subjects designated "moody" and "non-moody" by both the MAT criterion (self-opinion criterion) and the high and low mean variability criterion do not differ across the four experimental sessions on the 12 Nowlis Mood Factors.

This analysis suggests that the four experimental sessions were not influencing "moody" individuals differently from "non-moody" individuals. Focusing on Session 2, the experimenter administered Mood Analysis Technique (MAT), this result failed to fulfil the experimenter's expectations. It had been expected that since by one definition the moody individual is a subject whose feelings tend to change under affective provocation, the MAT might provide the stimulus for affective change to such individuals, relative to the non-moody individuals. However, the experimental results indicate this was not the case. This finding suggests two possibilities--either the MAT is deficient and not influencing "moody" individuals or the MAT influences mood irrespective of whether or not the individual can be classified as "moody". It is my belief from examining the magnitude of change scores and the component change scores, subjects' comments upon completion of

Session 2, and the effects of Session 2 on positive, neutral and negative moods (to be discussed below) that the MAT influences mood independently of the individual's affective variability or stability. If this belief is warranted, it becomes prudent to say: the MAT does influence the moods of moody subjects, but it also influences the moods of non-moody subjects to an equal degree.

5.7 The Effect of Session 2, the Experimenter Administered Mood Analysis Technique (MAT) on Moods Classified as Positive, Neutral and Negative

Null Hypothesis 4.5.1.1 that Session 2, the experimenter administered Mood Analysis Technique (MAT), will not differ in its effect on the absolute magnitude of change scores for the three mood groups, is rejected.

Section 4.5 has shown that Session 2 has a greater global effect on Group 3 (negative moods) than Group 2 (neutral moods).

This section will discuss and integrate the effects of Session 2, the experimenter administered Mood Analysis Technique (MAT) on moods classified as positive, neutral and negative. The preceding sections have shown that across all moods Session 2 is: having a major effect in terms of global influence (absolute magnitude of change scores), has a salient effect on specific mood dimensions (magnitude of change scores), and in general operates to intensify existing mood components and bring new mood components into awareness (component change scores). Now we wish to understand in what way Session 2 influences particular categories of mood in terms of its ability to change their quality and intensity. Subjects' moods were assigned to one of three groups: Group 1 (positive moods), Group 2 (neutral moods) and Group 3 (negative moods). Confidence in the utility of the MAT will be enhanced if it shows that Group 3 (negative moods) decrease their intensity or change their quality.

In terms of absolute magnitude of change (global influence) Session 2 influenced Group 3 (negative moods) more than Group 2 (neutral moods). This suggests that overall the negative moods are amenable

to change, and less resistant to change than the more neutral moods. Thus it is incorrect to assume that these negative moods construct an inviolable space which is impervious to external influence. But it must be clearly established that this greater global effect on Group 3 (negative moods) represents an improvement in these moods. This will be achieved by examining the means of magnitude of change scores on the 12 Nowlis Mood Factors and subjects' indications of changes in intensity and quality in their mood state upon completion of Session 2.

The mood factors Anxiety, Surgency and Elation were statistically significant across the three mood groups. For the mood factor Anxiety, Group 3 (negative moods) decreased on this factor while Group 1 (positive moods) and Group 2 (neutral moods) increased. It appears that Session 2 was influencing negative moods by decreasing their anxiety dimension. It is possible that the dimension of anxiety was already active in the negative moods and Session 2 reduced its magnitude by permitting expression of the mood, exploring its roots, thematizing its intentional structure, and situating it amongst other relevant feelings. The mood dimension Anxiety could have been increased in the positive and neutral moods because anxiety was a basic background element. This would be consonant with the demonstrated ability of the MAT to bring new elements into awareness and to reveal potentials for feeling.

For the mood factor Surgency, Group 3 (negative moods) increased on this factor while Group 1 (positive moods) and Group 2 (neutral moods) showed a decrease on this factor. It appears that Session 2 was influencing negative moods by increasing their base level of exuberant energy.

For the mood factor Elation, Group 3 (negative moods) increased on this factor and Group 1 (positive moods) showed a decrease. It appears that Session 2 was also influencing negative moods by increasing the upsurge of vitality, vibrancy and warm excitement.

Thus the magnitude of change scores on the 12 Nowlis Mood Factors suggest that Session 2 was influencing negative moods by reducing

tension, uncertainty and apprehension; increasing the availability of exuberant energy, and increasing vitality, vibrancy and warm excitement.

The three mood groups (Group 1 positive moods, Group 2 neutral moods and Group 3 negative moods) were assessed for mood change in terms of whether the subject gave a different categorization at the end of Session 2 (qualitative change) or whether the intensity rating increased or decreased (intensity change). If neither the categorization changed nor the intensity rating, the mood was characterized as not changing or remaining stable. Appendix J, Tables P, Q and R establish that Session 2, the experimenter administered Mood Analysis Technique (MAT), had the following effects across all three mood groups:

Improvements

Sixty-two negative, neutral and positive moods improved on qualitative and intensity assessments, representing a total improvement of 62/105 or 59,05%; breaking this down in terms of specific mood groups: Twenty-seven out of 34 negative moods improved, 18 out of 34 neutral moods improved, and 17 out of 37 positive moods improved or shifted to other positive moods on the qualitative and intensity ratings. The improvement of 27/34 or 79,41% of all the negative moods is substantial and supports the claim that the MAT is particularly effective in improving negative moods.

Stabilizations

Session 2, the experimenter administered Mood Analysis Technique (MAT), did not affect 13/105 or 12,38% of all moods, in terms of neither changing their categorization nor their intensity rating; breaking this down in terms of specific mood groups: eight out of 34 neutral moods remained the same, two out of 37 positive moods remained the same, and three out of 34 negative moods remained the same. The stabilization of 12,38% of all moods, a low rate relative to the improvement rate, can be used to further support the claim that the MAT induces mood change, and influences all categories of mood.

Deteriorations

Twenty-four negative, neutral and positive moods or 22,86% of all

moods deteriorated; breaking this down in terms of specific mood groups: four out of 34 negative moods deteriorated, 14 out of 37 positive moods deteriorated, and six out of 34 neutral moods deteriorated. The deterioration of 22,86% of all moods (based on decreases in intensity for positive moods, increases in intensity for negative moods, and qualitative shifts of moods to a more negative feeling tone) is an intermediately high rate. However, in many cases despite the deterioration, subjects reported increased awareness concerning the source of their mood, and an ability to adjust to its negative aspects.

What is responsible for the deterioration of the positive moods?

I would offer three basic reasons:

1. Four out of the nine instances of positive moods shifting to a more negative feeling tone (see Appendix J, Table R) are the moods of subjects that had a statistically high mean variability; it would appear that the MAT acted to stimulate their inherent variability. However, once the negative shift took place and as a result of undergoing Session 2, subjects were in a position to utilize the knowledge gained and establish a balance between the extremes of their feeling spectrum.
2. Many of the moods classified as positive nevertheless had latent negative elements; some of the positive moods may have been a magical attempt to deny or banish negative circumstances or feelings. The ability of the MAT to bring latent feeling elements into awareness has already been established. If a number of the positive moods were being used to deny negative circumstances, then these shifts to greater negativity implies that the MAT enhanced reality testing, decreased avoidance reactions, and may have brought the negative circumstances under the executive control of rational and adaptation orientated processes.
3. For the positive moods there were five reductions in intensity (see Appendix J, Table R). This reduction in intensity may be due to the expenditure of energy required to instigate and

maintain the expressive and self-reflective attitude required by the MAT. If this is the case, then the basic feeling energy was not lost but largely rechanneled into expressive activities.

Examining the neutral moods that deteriorated (see Appendix J, Tables O and Q) two out of the four instances of neutral moods shifting to a more negative feeling tone are the moods of subjects that had a statistically high mean variability: the same reasoning that applied in the case of the positive moods applies here in the same way. For the two neutral moods that showed a reduction in intensity, in one case the reduction was small (Contented +2 to Contented +1) and in the other case the reduction was small (Restful +2 to Restful +1) and the subject reported "being more in touch".

In order to finalise the argument that Session 2, the experimenter administered Mood Analysis Technique, was influencing negative moods in predominantly positive ways, let us return to the negative moods that were found to have deteriorated (negative moods that increased their intensity). I would like to individually examine each negative mood that deteriorated, to assess to what extent it was a deterioration, and also to give some examples of how the MAT operates in actual practice.

Subject No. 31 (Frustrated +1 to Frustrated +2)

The subject was frustrated over the demands of her university work. In her words: "I feel the need to work harder but no matter how much I tell myself this I seem never to be able to get down to it but shirk it by making excuses. My concentration is bad and my conscience suffers as a result." The subject believed that her work was lagging because she was becoming increasingly fond of her boyfriend and could feel her doubts about him evaporating. As the mood analysis progressed she felt her frustration growing stronger and she began to feel increasingly guilty. She realised her frustration was due to a "bad conscience", self-disdain, and envy of others whom she perceived as having more willpower. She indicated that in the background were threats of disillusionment and boredom. She then began to search within herself for more

self-control and an enthusiasm to work. She perceived her problem as like 'alleyways and cobbled streets running in patterns like a maze'. This she found oppressive and depressing. At the same time she perceived the potential of the mood to transform itself into a state of relief and gaiety. The frustration returned and she felt she was like a "slot machine" because--'I feel frustrated by my own incompetence and feel the need of someone to "switch me on".' Thus she perceived her willingness to be distracted from what she knew she should be doing, i.e. concentrating on her work.

The overall effect of Session 2 was an increase in her frustration, but she became more aware of its external source, how the situation was priming opposing tendencies within herself, and that if she was to avoid being swept into the whirlpool of her emotion, she would have to make an important decision.

Subject No. 89 (Frustrated +2 to Frustrated +3)

The subject was feeling frustrated, angry, and in the mood to be unpleasant to everyone. In her words: 'It's a sort of self-superior feeling not wanting to be outdone by anybody. At the same time I feel restless, impatient, which causes the mood. Also irritable and touchy - FRUSTRATED.' The subject was able to identify the environmental source of her mood as the arrival of an ex-boyfriend, whom she hadn't seen for some time, in Cape Town. She felt cast aside because she hadn't seen him yet--or vice versa. She expressed the situation by saying: 'I feel as if I were an actress on a stage having a raging argument with my husband because he has been having an affair with another woman.' This metaphor rather aptly established her predicament and the nature of her feeling.

As the mood analysis progressed the mood became even more intense, she felt more angry and frustrated to the point of tears. She believed that in principle she knew how to handle the situation, but a need for some form of violence to relieve the frustration was becoming paramount. At the same time she became aware that she was enjoying the feeling of superiority and power that the mood conferred. There was a growing awareness that she had a tendency to feel sorry for herself but this was urgently suppressed. This background element nevertheless exerted pressure on her. She said:

'Through the anger and nastiness on the surface, there is a streak of blatant unhappiness emerging which changes the mood because I don't feel so joyful in my bitchiness--it isn't giving me so much satisfaction anymore, but the will to be bitchy is still there.' A new need suddenly emerged, to be alone, where nothing commonplace or demeaning could touch or reach her. She then expressed her self-identity when in this mood as being like that of a cat, and with this expression came an insight. She said: 'Cats scratch and sort of give the impression that they want to scratch and destroy--but it's still playful destruction. Sometimes they can play too far and then hurt badly--I feel like that, wanting to playfully hurt, maybe even hurt deeply. I realise that I have a nasty streak inside me, I'm touchy, sensitive, and easily irritated.'

The overall effect of Session 2 was an increase in her frustration, however the mood had become more exact and specific. She became aware of both the internal detail and the range of her feelings. She felt that the mood was accurately telling her something about herself and her potential; her identity had become more articulated through the search for expressive metaphors, and the background structure that she preferred not to experience was brought to light and its relevance established.

Subject No. 41 (Tired +2 to Tired +3)

The subject initially reported feeling contentedly tired after a long afternoon walk. She was physically tired but not unpleasantly so, it was more a peaceful lulling fatigue. As the mood analysis progressed she became aware of disturbing elements impinging at the periphery of her mood, e.g. a test in Xhosa that needed intense study. Along with these disquieting elements, she became more aware of the demands of her tired body--aching feet and drooping eyelids. There seemed to be competing elements of a desire to sleep and to be actively involved with friends. The pace of the temporal present seemed retarded, and she was future orientated. At this point there was an upsurge of impatience and a need to release energy, she felt an urge to laugh and her legs became tingly. She reported she now felt more tired and less content. She realised her tiredness would be a good feeling to have at the end of the day, but would not be a good feeling for her lectures. No particular feeling element was

dominant, but everything seemed to be blending together. In her words: 'If one thing was big I would get upset and then I wouldn't feel content--right?' She appeared to be struggling to retain the cosy enervated quality of her fatigue, afraid to lose the mood, yet aware that there were pressures to manifest more energy for practical tasks. Her reluctance to forsake the languid ambience of the mood was reflected in the imagery she produced, e.g. 'A beautiful sunset over a lake with a sailboat on it'; 'a forest with the sun streaking through'; and 'I feel like lying under trees with green green leaves with the sun warming me up'. With this last image she became aware of a general debility and a chilliness which her fatigue was producing. A degree of impatience and anger then reasserted itself.

The overall effect of Session 2 was an increase in her tiredness, however she became aware that her body was presenting a genuine and legitimate demand for rest, she realised that her work demands and desire for social activity were in conflict, and that this conflict in conjunction with the langour of her body was making her feel impatient and restless. Her restlessness and frustration were further draining her body's energy, increasing the fatigue and abolishing the contented feeling.

Subject No. 3 (Sceptical +2 to Sceptical +3)

At the beginning of the session the subject reported that she was feeling 'slightly sceptical, but at ease'. She indicated that she was doubtful about the purpose of the study (despite the fact that the purpose and aim had been explained), but did not mind participating. She expressed a degree of curiosity and eagerness, in her words: 'It makes me feel like carrying on with the session to find out what is involved'. Her senses were sharpened and her attitudes vigilant, she was aware of everything around her in the room. She revealed that she had received a high mark on a class test and that this was responsible for her feeling at ease. She was orientated towards the present but her spatial experience had changed, objects seemed more close together, space was constricted. As the mood analysis progressed her scepticism became even more intense; yet inwardly she became divided, she reported that she was not in favour of her sceptical mood. This self-division seemed to produce an intense concentration, and accompanying this concen-

tration was doubt and anxiety. She reported: 'I am aware that I am not prepared to answer these questions just for the sake of answering but that I am wary of them'. It appeared that in the face of anxiety and dissatisfaction with her scepticism, the scepticism redoubled its intensity and clamour. Her curiosity, self-dissatisfaction and scepticism were waging a battle in which scepticism was victorious. She detected a background element of uncertainty concerning social relations with a particular person, but she remained guarded about this and did not elaborate. Her self-expressive imagery reflected turbulence and powerful emotion, e.g. 'waves in the sea hitting against rocks and the shore'. She experienced the imagery as unpleasant. A second vivid image produced was that of a mountain, it expressed the dominance of the mood and its recalcitrant immovable quality. The mood was telling her something about herself, in her words: 'It is telling me that I am capable of moods that I would normally not have and which are not pleasant, that is, moods which I would not choose to have.'

The overall effect of Session 2 was an increase in her scepticism, however background elements of uncertainty and anxiety were brought to the fore, the subject became aware of discomposure and agitation with respect to an important social relationship, her expressive imagery revealed to her that she was not quite the calm and self-controlled individual she usually experienced herself as being; she saw that there were stubborn and cognitively aggressive aspects to her personality that ideally she would choose not to possess.

It has been shown that for the great majority of Group 3 (negative moods), Session 2 acted to improve these moods. The individual examination of the four negative moods that deteriorated (increased in intensity) has established that in each case along with the deterioration there were new elements of understanding, an increased awareness of the total problem, the satisfaction of integration through self-expression, and cognizance of the range, potential and pressure of feeling processes.

5.8 Subjects' Comments upon Completion of Session 2, the Experimenter Administered Mood Analysis Technique (MAT)

By and large subjects' comments indicate that the MAT had the ability to influence mood, and did so in such a way that the mood experience was altered in predominantly positive ways and resulted in increased understanding and insight. The data comprising subjects' comments and the data showing the influence of the MAT on positive, neutral and negative moods is congruent and consistent. It has also been shown (section 5.7) that even when subjects were unaware of mood improvements, there is reason to believe they benefited from an increased understanding of the generative conditions, the general trend, and possible conditions for termination of the mood.

Those cases where subjects gave negative comments (and it was part of the design to encourage this in order to avoid "acquiescent" and "socially desirable" responses) occurred in physically tired and irritable moods, or moods demanding immediate action and energetic physical responses. There was evidence to suggest that some subjects would have benefited from a shortened version of the MAT, more simplified questions, and fewer imagination questions-- but these comments were not statistically significant.

5.9 An Analysis of Subjects' Definition of Mood

This section utilizes both a conceptual and an empirical approach in order to partially clarify the concept of mood and to suggest requirements that should be met by a comprehensive model of mood. At present there exists a diversity of viewpoints concerning mood, and several of the perspectives offered have incompatible features. There is also uncertainty about what the base data is, how it should be approached and utilized. In order to suggest constructive directions, the subjects' definition elements of mood are presented and analysed. It is maintained that the definition elements can be used to:

1. Assess the various conceptualisations of mood, in a general way, in terms of the ability of a particular viewpoint to incorporate or account for them.

2. Provide the type of base data that any conceptualisation of mood should be able to account for.

We will turn to examining the meaning and import of the statistically significant definition elements.

Mood as a state of mind or feeling

Mood as a state of mind or feeling is part of our general linguistic usage, i.e. even a pocket dictionary will yield this definition, but subjects were instructed to define mood 'in terms of their own experience' and to the extent that this instruction was heeded we have a definition element that is more than linguistic convention. On at least one interpretation of the disposition view, a mood is not primarily a state or process, but rather a tendency to feel and behave. However it makes little sense to speak of a tendency or capacity unless it is manifested on at least some occasions--with this the disposition theorist would concur. But the disposition view emphasizes the tendency aspect and de-emphasizes mood as a phenomenal state of mind or feeling.

We do not expect to disclaim an entire theoretical system on the basis of one definition element, but we would like to see the emphasis correctly placed and the predominance of this definition element suggests that the emphasis should be on mood as a state of consciousness. In support of this view Wilson (1972) writes:

But other mental reports do seem to report something about a person's present state of consciousness. If A is in pain and B is not, the difference between them is not just a disposition difference, but is a difference in the way they now feel. Reports that someone is now feeling an emotion (though not necessarily all reports that might be called emotion reports) seem to be of this latter kind. To say that someone is now feeling angry, or afraid, is to say something about what he is now feeling - it is not just to ascribe a disposition to him. To feel an emotion is to be in a certain phenomenal state of mind (p.70).

This phenomenal aspect is not the entire story, as Wilson has hinted and as will be shown in section 5.10. The use of mood terms encompasses a wide variety of language actions in addition to

reporting feeling qualities, in particular there is a significant domain of social-judgemental actions. This aspect of mood discourse and its implications for a theory of mood are amenable to a disposition formulation. Thus certain aspects and functions of the word "mood" do point to realities consonant with a disposition analysis.

How could other theoretical perspectives accommodate this definition element? Mood as a state of mind or feeling can suggest a condition of the mind, the self, the doer and the observer. With this emphasis the existential view of mood as "tone" and "attunement" is analogically descriptive. A musical instrument is tuned to sound higher or lower, to give a modulated sound. In doing so, the strings are stretched or made more flaccid--their tension is increased or decreased. Then, by metaphorical transfer the individual's mood in a similar way is both attunement and tone, i.e. the state of feeling constituting mood is also preparedness, general condition and temper, the ability to perform in various modes, and the actual performance. Mood then becomes the inner experience of this general condition or set of conditions.

In less metaphorical language mood as a state of mind or feeling can also be accommodated in Arnold's view of mood as the feeling response to general organismic functioning, and to Nowlis' view of mood as the effect on the individual of his own configuration of activities. In fact the two views are essentially similar, the difference lies in Nowlis' listing of various configurations of activity and his mechanistic feedback model.

Interesting questions arise if we examine more closely the notion of mood as a general condition of the organism. Some theorists, e.g. Konig (1973) would maintain that mood is a general state, not a special element or a new and singular quality of sentiment, but rather the inner experience of a condition, a state of being. With respect to the empirical data of this section, this viewpoint offers difficulties. In most cases it was not possible to distinguish retrospectively whether subjects intended a feeling, a general feeling, or an overarching state of mind or state of being. In at least three cases, however, subjects offered definitions which may

be considered consonant with Konig's view:

1. 'A mood is an individual's state of being; of sensing and perceiving; of feeling towards themselves and other individuals. It is mainly affected by a state of mind at a particular time and I think it can be influenced by different situations and different people. It hangs basically on what is happening now but is also influenced by past events and future obstacles.'
2. 'A mood is a feeling or sense of being which comes over the organism.'
3. 'A mood is a state and stage of being. A mood is a movement. A mood is a reflection. A mood is a question and then it is an answer, and then again it is a question, etc.'

A difficulty with this viewpoint is the achievement of clarity concerning the way in which "general", "feeling", and "condition" are being employed, and their meaningful interconnection. A feeling is concrete, immediate, a qualitative inflection. Its object may be vague or ill-defined, its quality may be difficult to describe, but it is a concrete given, a primitive (or refined) dynamic unit or vector of experience. To speak of a general feeling in any sense other than as "dominant", "overriding", "pervasive", "diversely influential", "exclusive", or "resultant" (the product of several strains of feeling) is ambiguous. However, if all that is intended is mood as the feeling experience of the general (overall) mind-body condition, then the concept is reasonably clear and approximates Arnold's view of mood as the feeling response to general organismic functioning. However, in principle Konig's view could be suggesting that mood is the state of being itself, the total configuration taken uniquely, independent of feeling or any other specific sub-units.

The definition of the first subject quoted above also suggests that mood can exist conceptually, or may be experienced as a unity of awareness (sensing, perceiving, conceiving, experiencing through feeling, taken immediately and synthetically); this implies a colligation, a co-ordination, an interdependency of elements, and an interanimation of dimensions. It becomes clear that mood as a state of mind or feeling is susceptible to more than one interpretation and features in one or another form in most con-

ceptions of mood, although it is de-emphasized by most adherents of disposition conceptions.

Mood characterized as "pervasive"

This category is comprised of definition elements that conform closely to the usage of the adjective "pervasive", i.e. indicates the quality of something which permeates, saturates, or diffuses through; but no commitment is made to an hydraulic model, it is rather a metaphorical indication of general influence. It also refers to statements that indicate that the total person is involved. This is demonstrated in pictorial style by the following subjects' statements:

1. It comes out of every vessel in one's body and captures you.
2. A mood is a deep feeling that swamps your mind and body.
3. It takes over all of you.
4. It influences your whole being to feel, behave, and react in a certain way.

As indicated in section 1.6, "pervasiveness" can be reconstructed and inserted into human feeling and activity in two ways:

In the first way it can be reconstructed as the experience of pervasiveness, in this form it bears affinities to the psycho-analytic idea of "colouration" and the existential ideas of "tone", "reverberation" and "attunement".

In the second way it can be reconstructed as the avowal of pervasiveness, in the sense that the individual is willing to say that the mood influences everything he thinks, feels, says, and does. This reconstruction is in accord with several of the disposition approaches, e.g. Cattell's view that mood should be conceptualised as a higher order factor which sensitizes other factors, producing a modulation involving multi-dimensional change within the organism. Nowlis also sees mood as a type of multiple change or general influence on major organismic variables. He writes:

The layman attributes mood to the total person or self, not to any of his separate organs or individual acts. Ryle finds that mood refers to the "total set of a person during a short term"; Jacobson refers to mood

as a "cross section of the entire state of the ego"; and Skinner to "the whole repertoire of behavior". Thus in studying mood we are concerned with temporary changes in the person or self. (Nowlis, 1963, p.79)

Thus "pervasive" as the quality of general influence cuts through particular theoretical perspectives to emerge as a foundational element. This is a prime example of theories saying substantially the same thing although in different languages; or to state it as an article and vindication of method--the search for logical form reveals constancies beneath surface images and elaborations.

It is because the subject may experience mood as arising, concentrating its potential, and exerting a pressure^{*}, that subjects can speak in terms of "capture", "swamp", and "takes over". Mood does in many instances modulate feeling, perceiving, and behaving in special ways. Nevertheless, subjects do have the ability to adopt a neutral stance, thematize their mood and mood systems, and achieve a degree of understanding that persists even within the mood-specific modulations. I might add that this is close to one goal of self-understanding--to maintain a space of clarity (albeit narrow) above the sinusoidal swirling of overriding affect.

A deficiency of the psychoanalytic and existential approaches with respect to the experience of pervasiveness, is their failure to recognise or accept that mood as the product of the total organism can to some degree be formulated as a range of values on statistically and organismically derived dimensions, e.g. factor-analytic dimensions. On the other hand, the presence of moderator variables, i.e. variables which systematically affect the magnitude and direction of relation between two sets of variables, poses internal difficulties for the statistical approach (Brody, 1972). To define

* Note: Again, this is a way of speaking, a portrayal of animating aspects, and an "as if" approximation which points to experience and its organisation but does not intend to reify it. However, it is the quality and intensity of the experience which necessitates this and not some other more neutral way of speaking.

mood as a particular set of personality-specific moderator variables merely elevates the problem to a higher level of abstraction. In addition the existential approach and to a lesser extent the psychoanalytic approach, tend to neglect that the individual may be physiologically constrained to think, feel, and behave in a particular way.

A deficiency of the disposition and statistical approaches with respect to the avowal of general influence, is that mood for many subjects is primarily a qualitative experience. It is something undergone, suffered or enjoyed, an experience with the palpitation and resonance of a complex and vivific process. It is often a process that requires physical release, self-expression, and symbolic completion.

Mood characterized as having a causal effect

This definition element suggests that "mood" may have a direct and readily discernible effect on the individual. Under the rubric "causal" we can distinguish a strong sense of causal effect, where mood operates directly and immediately to determine one's thoughts, feelings, and actions--though not in the sense of implying an antecedent that invariably and unconditionally produces a specific set of responses. There is also a weaker sense of "causal", where mood operates to influence, to stimulate, and functions as a co-determinator of one's thoughts, feelings, and actions. Representative examples from subjects' definitions include:

1. 'It causes you to act in various ways.'
2. 'A sensation that gives rise to actions which would not normally happen.'
3. 'It influences how you think and also how you act.'

One or both of these two senses of "causal" are compatible with most of the theoretical views of mood. An exception is the existential viewpoint. Here mood is not so much causal as "pre-emptive" and "prepotent". How are we to understand mood as not causal but as pre-emptive? The "cognates" of pre-empt are pre-engage, prepossess, and preoccupy. In the existential view there

is a basic sympathy between the individual and his environment, the environment is the preordained shaping space for the integrity of consciousness; it is his hearth and hard declivity, and the possibility of his endeavours and realisations. The individual is therefore bound over, or pre-engaged, to this environment from the very beginning, before any of his projects take form or place. Mood then represents an inner complicity, a mutual pre-possessing, that supports his actions which shape the world that shapes him (mood as pre-emption and recursive rule). From the existential viewpoint mood is also the prepotent experience and relational vector by which the self discovers its agency and freedom in relation to a world. Mood reverberates between the twin boundaries of self and world; it may infiltrate, penetrate, recoil from, or disassemble (the possibilities are many) before the integument of both "world-substance" and "self-substance". It is through this pre-eminent mood movement and its inherent revealing power, that the individual may gradually learn that he discovers only his own inventions, that scepticism too, is only a game. He may see that simultaneously the "world" is only what he has already abstracted from the indeterminate, and an unyielding boundary intercalated by the mind. Whether or not we choose to adopt this existential recommendation (it is not clear what precisely we would be committing ourselves to) and substitute the concept of "pre-emption" for the concept of "causality", the issue of the way in which mood is causal still challenges the standard empirical view of causation as regularity of association. Indeed, each of the major viewpoints on mood propose at least moderately divergent models. The disposition and statistical viewpoints adopt an inductive-hierarchical model which postulates powers and tendencies - a mediated type of causality; and the psycho-analytic view sees causality in terms of "reasons", topographic structures, and dynamic systems of internalised object relations. If "mood" is to be inserted into the world of personal action and agency, then the sense in which it can be said to be causal will become dependent most generally on the type of explanation we accept for human behaviour and action. It may or may not be advantageous to consider the "causal power" of mood as logically distinct and untranslatable into the causal explanations of physical science. However, at the present time the consensus of theoretical

opinion in the social sciences leans toward a sense of cause independent of the physical science paradigm.

Mood characterised as the result of both internal and external factors

Subjects provided definition elements that suggest, logically, that the locus of formation for mood concepts should lie in a region that integrates external factors (environment) and internal factors (feelings, associations--a personal network). This is illustrated by the following examples:

1. It is an emotional state influenced by inner feelings and outer occurrences.
2. A particular state of mind brought on by the environment and background, especially associations.
3. A mood is a feeling that can come from within you but at the same time can be created by your surroundings.

The most common tendency was to ascribe formative power to internal and external factors acting conjointly. This suggests that the concept mood may stand (or be generated) at the interface of at least two unique but interpenetrating domains. It is for this reason that section 1.7 argued for a concept of mood that could be made to span both the feeling and behavioural or environmental realms. However, most theoretical and conceptual approaches have stressed either the "inner" feeling aspects or the "outer" environmental aspects. This dichotomy was shown in section 2.32 to have been explicit as early as 1938 in the studies of Young (1937) and Johnston (1938).

Is it possible to formulate a general configuration for a concept or model that spans both feeling and behaviour, as well as accommodating physiological and social dimensions? I would suggest that such a configuration would have to accommodate the data of three different but interrelated regions, and it would have to be framed in language that was congruent with each region and compatible across regions. The configuration that I think would be consistent and most adequate, consists of a psycho-social

domain, and an affective domain. The three domains would be linked by a general connecting principle (the accountability of each structure to environmental factors) and several internal conceptual vectors. I envision it in this way:

The Psycho-social Domain - This domain would comprise the needs, goals, and intentions of an individual who acts within a context of social regulations. Descriptions of mood would be in terms of motives, choices, and pragmatic concerns of a primarily (but not exclusively) rational self-interest that was either facilitated or inhibited by the environment. For example, elation would be accounted for in terms of a patterned structure of goal achievement, the quality of interpersonal relationships, events that encouraged a positive self-concept, accumulated confidence in personal capability, pleasant surprises, lack of conflict or dissonance, and an increased sense of personal freedom.

The Physiological Domain - This domain would comprise major physiological and organismic variables such as Nowlis (1965; 1970) has identified and worked into his feedback model. Minimally, this would include: level of activation, level of surgency, level of vigour, and level of fatigue. These dimensions are directly related to physiological variables and would express the direct constraints of physiology. Initially, it might appear that these dimensions of a physiologically grounded feedback model might be in conflict with the constructs of the social action formulation of the psycho-social domain. However, I believe the conflict is more apparent than it is real. Although the organismic dimensions are related to physiology, they are defined verbally by factor-analytic clusters of approximately synonymous words, and these are word clusters that subjects themselves find meaningful with respect to their moods. Furthermore, Schachter and Singer (1962) have provided evidence that affective states are joint functions of physiological arousal and the cognitions available to the subject, hence there is some basis for viewing the physiological substrate and cognitive processes as primitively and fundamentally interrelated. The validity of the psycho-social formulation would still stand, however it would be seen to have, in a certain sense, been "promulgated" by the organismic substrate.

In this domain elation would be described and explained in terms of levels of general activation, surgency, and vigour; elation would be a socially orientated manifestation augmented by a particular physiological substrate.

Zaner (1971) has provided a connecting principle that could contribute to rendering the physiological and psycho-social dimensions logically, and experientially complementary, i.e. the phenomenological principle of the "lived body". For Zaner the body as experienced is the locus of the sentient animate organism; it is the centre around which activities are thought and enacted. The body as lived incarnates and anchors the individual awareness by means of which the environment takes on its cardinal points and meaning for the individual. The body with its coeval awareness opens outward to the environment at the same time that it experiences itself as one synthetic corporeal system, centered in its own synergistic subsystems. As such it is lived, experienced, undergone, and fully mobilized. It is not "its" own centre of reference, so much as it is "my own" centre of reference, by which consciousness, motives, goals and intentions are enacted and dynamically experienced.

A second connecting principle between the physiological and psycho-social realms is the body in its role as a medium for expression. The body "transmits" the physiological level into psycho-social meaning. "Body" is simultaneously a mechanical, topographic, and symbolic complex (Benthall, 1975); it is a radix, a point of origination for individual expression, and the convergence point for social, economic, and political pressures. The body communicates information for and from the social system of which it is part (Douglas, 1971), while it promotes individual needs and feelings. The body is both test and limitation of physiological and psycho-social pressures. Body expression however, is not language-like in a dessicated sign-signified sense, it is rather an independent channel of communicative power.

In summary, the body as physical entity and logical construct is a "natural" mediator between the psycho-social and physiological realms; it is lived as a primary source of awareness and action;

it is constituted by pressures from all domains and as a medium of expression it is a double reflection of "private" and "public" sectors; it is also an independent channel of meaning and communication operating across the physiological and psycho-social realms. Moods then are always bodily orientated, in the special sense of "body" here provided.

The Affective Domain - An adequate concept or model of mood must provide for the flux and intensity of affect, the presence of passion, emotionally rooted phantasy, and the inner tempest which is a commitment to or investiture of: obsessions, chimeras, and emotional debacles. This domain presupposes the physiological domain and is articulated by the psycho-social domain. It is experienced as a movement with quality, magnitude, and direction. It can be compared with a current under pressure, with its own eddies and turbulences, or a collection of internal agitations, excitations, heated abrasions, forming, dissolving, and re-absorbing itself. It is internally complex, unfolds on several levels simultaneously--a surge of images, presences, murmurs, contending voices; always projecting a fragmentary knowledge from its own intimacies, its discontinuities and dispossessions.

In this domain elation would be described and explicated in terms of affective processes and changes in awareness, i.e. the affectively provoked revaluing of concepts, events, and external objects. The impulsion of cheerfulness, the resurgence of hope and the sense of aesthetic harmony, the dialectic of emotional release and internal appropriation, might all feature as component elements or processes. Energetically, the supercharging, the enervation by pristine forces, the dilated fullness, might all predominate. But by itself this remains mere descriptive imagery, united only by its pictorial coherence. It is for this reason that the affective domain must also be historical, must indicate how a network of movements and qualities came to serve the needs of the total organism; this is the point for the introduction of psychological mechanisms, the concepts of adaptation and defence. It is the time to question the limits of the overall system, the source of its inherent energy, the conditions contributing to the achievement of balance points which adjudicate between suppression

and complex liberation. It is the place to adjure adequate reasons for how the component elements are combined into particular constituted products, to determine what limitations were assumed or which fetters deliberately cast aside to give the particular sentence the mood represents.

Mood characterised as an attitude

Although this was not one of the very highest statistically significant definition elements, it is important to determine to what extent the two concepts "mood" and "attitude" are similar. The differentiation of "mood" from "attitude" is a difficult problem both theoretically and empirically. Some conceptualisations of attitude are so global that almost any affective or cognitive phenomenon (or disposition) could be subsumed under them. Fishbein (1967) has pointed out some of the difficulties:

It is not easy to construct a definition sufficiently broad to cover the many kinds of attitudinal determination which psychologists today recognise, and at the same time narrow enough to exclude those types of determination which are not ordinarily referred to as attitudes (p.8).

Campbell (1963) has suggested that there are 80 psychological concepts that share the same operational definition as the concept attitude. In light of this chaotic state of affairs it becomes important to ask whether the concept of mood can be allocated an independent status within the family of affective and cognitive constructs. In particular, when comparing the concept of mood with the concept of attitude, and granting that there may be important similarities, can distinguishing elements (or less adequately relative emphases) of the concept of mood be advanced? In search of some tentative answers we turn to the major theoretical views.

Several authors have argued (e.g. Wilson, 1972) that attitudes are always dispositions toward particular objects or a class of objects, they are not phenomenal states of the individual. Wilson writes:

An attitude, on the other hand, is not phenomenal; it is not a present state of consciousness; to have a

certain attitude towards someone is to have a disposition. One could not, or at any rate one could not generally, talk about how an attitude felt to the person who had it, as one can talk about how an emotion feels to the person who has it (pp.74-75).

Other authors have taken a diametrically opposed view, conceiving of attitude as the total amount of affect towards an object (Thurstone, 1931; Doob, 1957; Fishbein, 1967).

It may be the case that attitudes involve an internal structure of ideas, beliefs, and preferences, which are revealed when we challenge an individual to justify their attitude. In the case of attitude, the request for a justification makes sense in a way that would not be appropriate for all moods. Harre and Secord (1972) point out that a justification of an attitude will make reference to two types of statement, i.e. statements referring to the qualities of the attitude object, and statements referring to why these are advanced as preferable or desirable along with avowals of feeling and emotion. It is uncertain whether it would make sense to ask subjects to justify their moods in precisely this way. This is due to the fact that not all moods have objects, nor do they necessarily establish an explicit awareness of reasons for the preferences that do occur.

The major alternative to the total affect and cognitive views is the multidimensional view of attitude. Triandis (1971) has provided an exemplary definition: "An attitude is an idea charged with emotion which predisposes to a class of actions to a particular class of social situations" (p.2). As Triandis points out, this definition implies that attitudes have a cognitive, an affective, and a behavioural component. Thomas (1971) outlines the difficulty of actually applying the multidimensional perspective:

Attitude in this sense is a 'hidden mechanism' which directs behaviour. But few empirical studies of attitudes operationalize the concept in this complex way. Many papers introduce research by defining attitudes as multidimensional and then measure one or perhaps two aspects of the concept. Frequently the empirical measures are unrelated to any theoretical position. The conclusions, however, tend to be referred to the three components of the attitude construct.

None of the multidimensional definitions of attitude discuss the quantitative nature of the relations between the components, so that where attempts are made to measure affect, cognition and connotation there are no rules for combination of the data. It follows that even where a simple relationship between multidimensional attitude and overt behaviour is predicted it cannot be tested (p.10).

Thus, although the multidimensional view is comprehensive and synthetic on a conceptual level, the diverse aspects have not been operationalized; internal interaction effects are hypothesized but not clearly demonstrated. The result has been a glib conceptual facility that lacks an organized data base with adequately marked empirical relationships; and withholds a specification of the interconnecting links between conceptual and empirical elements.

As there is no one generally accepted concept of attitude, it becomes very difficult (if not impossible) to make major distinctions between the concept attitude and the concept mood, nor is it my intention to attempt a resolution of this issue; however, I think there are some possible distinctions that should be kept in mind. They are:

1. Mood is primarily a phenomenal state with a central feeling component, which can usually be characterized as pervasive. Those "moods" which we tend to conceptualize as dispositions (one thinks here of Ryle's "frivolous mood"), could perhaps be conceptualized as attitudes. On the other hand, if we wished to maintain that there are moods best conceptualized as dispositions but which are not equivalent to attitudes, we could maintain that they involve diverse tendencies to action--but not necessarily towards a particular object or class of objects.
2. The cognitive element of mood is often less marked, sometimes absent, and not necessary to the concept of mood. In the case of attitude, some central idea, evaluation, cognitively deployed preference or judgement does seem to be essential.
3. The relationship between mood and behaviour may be more direct than the relationship between attitude and behaviour, i.e. for

mood as opposed to attitude there is not usually the intermediate stage of having a determining set toward the performance of the behaviour (or act) itself (Fishbein, 1967).

4. Triandis (1971) has suggested that attitudes serve in assisting the individual to "adjust, to defend their egos, to express their values, and to understand their world around them". It is possible that moods can be distinguished in terms of their performing different functions; however, it should be noted that Triandis has listed general parameters of functioning, not situation specific functions that could be compared with situation specific mood functions.
5. Moods are probably more closely linked to physiological variables than attitudes are, but both "entities" are closely linked to psycho-social variables.

5.10 An Analysis of Language Acts of Sentences Using the Word "Mood"

This section schematizes and discusses the linguistic actions performed by sentences using the word "mood". It is suggested that this has empirical as well as logical and grammatical implications. Section 4.8 has established the range and internal divisions of this term's common functioning. Here, we are concerned with providing evidence to confirm or disconfirm two theses:

- 1) that mood is not any sort of experience or process
(to be determined by extrapolations from an examination of how "mood" functions)

This is the application of Bedford's strong thesis to mood discourse--advocated in section 4.8

- 2) that linguistic expressions referring to moods are not necessarily functioning to inform of psychological facts and that these expressions presuppose various social and institutional concepts

(to be determined by examining how "mood" functions)

This is the application of Bedford's weak thesis to mood discourse.

In addition we wish to consider how this data in its interpreted form might contribute to the configuration of a comprehensive concept or model for mood.

Before proceeding we must try to achieve an unobstructed and unequivocal understanding concerning the status of the data. Framed verbally and denotatively, the data is a collection of sentences each employing the term "mood". They were generated in response to this instruction: 'Please write four grammatical sentences employing the word "mood" that you could imagine yourself saying to a friend'. Further, the sentences were classified by the subjects according to the action(s) each sentence was most likely performing, e.g. reporting feeling experience, making a social judgement, characterizing mood experience itself, etc. Primarily the focus was on the action implied by the sentence and the subject's probable intentions with respect to the sentence.

In order to obtain a more precise resolution of the data, its interpreted form, and the goal towards which we are progressing, a schematic construction is provided. From this schematic viewpoint (which is already to introduce a perspectival constraint) the data "appears" in this way:

A. Empirical Phase *1

1. There is a mood domain "x" uninterpreted but defined uniformly by one primary element:
 - (a) = The collection of subjects' individual experience in the sphere of mood and their ability and facility in translating experience into language.

*Note No.1 The phases given are a schematic representation of the overall empirical endeavour; strictly speaking the phases are neither continuous nor sequential--they are static constructions that approximate an encapsulation of the data, and the mood domain "x" uninterpreted persists throughout. It should be pointed out that properties of each phase are defined in terms of the psychological or formal constructs postulated for each phase; the phases are organizational, the constructs are definitive.

2. The mood domain "x" can be interpreted such that it consists of one or two possible elements:

(b) = [The experience of the vectors of mood] *2 AND/OR

(c) = [Tendencies to make social-evaluative judgements]

The mood domain "x" consists primordially of (a), which is made accessible through the interpretations (b) and (c).

Hence for our purposes the mood domain "x" is fully described by (b) AND/OR (c).

B. Operations Phase

(stimulus encoding and response phase)

This is the phase whose end product is sentences employing the term "mood". If (b) AND/OR (c) are adequate representations of (a), then the operations phase will permit a symbolic reflection of (a) through (b) AND/OR (c).

This phase provides:

Sentences [formulating or expressing (b) AND/OR (c)]

C. Metalogical Phase

This phase is the sentence analysis by linguistic actions, and the constructive synthesis towards the configuration of a theory accounting for Sentences [formulating or expressing (b) AND/OR (c)].

The Empirical Phase is formulated and set out, the Operations Phase is collected and analysed, and we are working towards the Metalogical Phase. How the stimulus input was decoded and processed is beyond our investigation. However, due to the standard sequential grammatical form of the stimulus (Please use the word "mood" in four grammatical sentences you could imagine yourself saying to a friend), we may minimally assume that there were approximately four units of

*Note No.2 Wherever brackets occur this indicates that the empirical data is being interpreted in a particular way, or is being viewed from a special perspective. Also, by "vector" is intended any dynamic relational unit of experience.

information conveyed to the subjects. This is well within the standard capacity of immediate memory and codification.

We should also be aware of a possible implicit bias in the nature of the stimulus (the instructions). There may have been a psychosocial bias, i.e. the stimulus suggests a constraint to produce inter-subjective, easily communicable sentences, that could in particular be expressed to a friend. This may increase the likelihood of somewhat more open, more socially orientated, more confidential types of sentences.

Section 4.8 and the χ^2 test of homogeneity have established three subdivisions of Language Acts of Performing Social-Judgemental Actions that are statistically significant. They are:

C4. Judgements concerning others (to evaluate others)

e.g. 'His lack of moods made me respect him more.'

'She is a very moody person and you must be careful how you behave towards her.'

This category accounted for 16,78% of all the responses.

C3. Judgements concerning the self (to give warnings, to surprise, to request information)

e.g. 'Don't take out your bad mood on me.'

'I'm in such a good mood today that I'm game to do anything.'

'Sometimes a mood falls over me which I can't understand.'

This category accounted for 5,94% of all the responses.

C1. Judgements concerning the self (to evaluate the self)

e.g. 'I am impossible when in a self-pitying mood.'

'I want to be without moods, they are selfish.'

This category accounted for 5,59% of all the responses.

There are two subdivisions of Language Acts of Reporting One's Own Experience that were statistically significant. They are:

B3. To give grammatical objects that indicate systematic influence

e.g. 'My moods while affecting my daily interactions do not

alter my opinions on intellectual subjects.'

'When I am in a "bad" mood I think I am a moody person, but when in a "good" mood I think I am balanced and placid.'

This category accounted for 9,44% of all the responses.

Bl. To give grammatical objects that are mood words

e.g. 'My mood was ecstatic, I felt like leaping for joy.'

'The music of Debussy puts me in a melancholic and relaxed mood.'

This category accounted for 5,59% of all the responses.

In addition the category Language Acts of Characterizing Mood Experience Itself, sub-category: To give grammatical objects that indicate systematic influences, what I have called an observational and reflective enterprise (which may presuppose mood experience), was also statistically significant. This category is represented by such sentences as: 'Certain moods can take over one's perception completely, altering the way one sees things', 'The mood is the variable and is dependent on the constant of circumstance.'

Thus considering the total percentage for significant response categories, Social-Judgemental Actions predominate, but not to the exclusion of Language Acts of Reporting One's Own Experience. I believe that these findings permit us to reject Bedford's strong thesis as applied to "mood", i.e. that mood is not any sort of experience or process. If we extrapolate from the subjects' own avowals concerning their sentences, we must conclude that a significant proportion of mood discourse is involved with stating or reporting qualities of experience. However, Bedford's weak thesis, that linguistic expressions referring to moods are not necessarily functioning to inform of psychological facts and that these expressions presuppose various social and institutional concepts, must be accepted.

Some qualifications should be noted:

- 1) If there were a psycho-social bias in the stimulus, this would then suggest that more neutral instructions might have decreased

the number of responses classifiable as Language Acts of Performing Social-Judgemental Actions and/or increased the number of responses classifiable as Language Acts of Reporting One's Own Experience. This implies that we may have an artificially low percentage of Language Acts of Reporting One's Own Experience.

- 2) The category Language Acts of Characterizing Mood Experience Itself, to the extent that it presupposes familiarity with mood experience, could be considered an indirect expression of the reporting of feeling qualities.
- 3) The category Language Acts of Social-Judgemental Actions, Judgements concerning the self (to evaluate the self) suggests a possible interpenetration of what conceptually appeared to be independent, i.e. social judgement and feeling quality. In the final analysis it is likely that empirically in many cases, judgements and feeling qualities may be mutually determining. This militates against a sharp dichotomy between the two general interpretations.

Qualitatively, a number of the sentences suggest the coercive power of mood, and its general modulating effect, e.g. 'Certain moods can take over one's perception completely, altering the way one sees things.' This supports the data of section 4.7 and the interpretations of section 5.8 which found the definition elements "pervasive" and "causal" to be fundamental to an understanding of mood. It is interesting to note that a high proportion of the Language Acts of Performing Social-Judgemental Actions were made with respect to the self, and here some of the mood sentences functioned either as self-criticisms, or as confessions of helplessness, as pleas and excuses. This suggests that "mood" could be understood solely as a tendency towards negative self-ascriptions, as a type of self-denigration; however it may be that mood as an experience leads to feelings of helplessness, and an attitude of self-dissatisfaction. This latter view would tend to be supported by the personality data of section 4.1, where moody subjects were found to score low on Personal Adjustment (ACL) and the qualitative data of section 4.10 which showed the prevalence of self-criticisms in negatively toned feeling states.

It is also noteworthy to compare these two sentences:

1. 'My moods while affecting my daily interactions do not alter my opinions on intellectual subjects.' and
2. 'When I am in a "bad" mood I think I am a moody person, but when in a "good" mood I think I am balanced and placid.'

The important difference between the two sentences is the implied range and "depth" of mood modulation. The first sentence suggests a relatively narrow range modulation of factors, while the second sentence suggests a relatively wide range modulation--a change in individual elements and the total arrangement of factors. Perhaps mood can interact with the individual's personality or defensive structure, the more defensive individual experiencing mood as a limited type of overall influence, and the more open individual experiencing mood as a total global modulation.

Clinically, the latter individual while appearing more affectively vital and involved, would herself find the radical shift in outlook, attitudes and self-evaluation an unsettling state of affairs. However, to recognise this plurality of attitudes, this community of selves, and to give each voice a hearing, is a step towards attaining the "truth" of subjectivity.

Returning to the schematic presentation, it is suggested that interpretations (b) and (c) are adequate representations of the mood domain "x" uninterpreted, but as we have seen they are not in all cases mutually exclusive. Thus Sentences [formulating or expressing (b) AND/OR (c)] is accepted in its conjunctive form as an adequate representation of the mood domain "x" uninterpreted, in terms of the empirical data provided. What can now be said about the Metalogical Phase, i.e. a theory for Sentences [formulating or expressing (b) AND/OR (c)]?

Firstly, we have established that the use of linguistic expressions employing the term "mood" indicates that the term is linked with:

- 1) Phenomena capable of being reported as felt and concerning which various discriminations can be made, including the

notion of systematic regularities, correlations with different types of circumstance, and with specific cognitive and behavioural consequences, as well as

- 2) Tendencies towards making judgements and appraisals concerning oneself and others.

However, the possibility has been raised that only on a conceptual plane can there be a complete separation of these aspects.

Secondly, in the abstract it is difficult to see how these disparate meaning components or aspects (the one favouring a state and process view, the other favouring a cognitive and disposition view) can be reconciled. We have also seen that in at least some cases the two aspects may be complementary. The solution to the difficulty may lie in establishing a two factor model, one that will permit the predominance of one factor in some cases and the equal co-existence of both factors in other cases.

A conservative conclusion would be to say that the social-judgemental function of mood discourse predominates, but not to the exclusion of the function of reporting qualities of affective experience. It is most likely that both general functions are necessary to encompass the diversity of mood discourse and constitute the core meanings of mood terms. A less conservative conclusion would be to say that this dual functioning points to two interdependent experiential realms:

- 1) A realm of the individual's making and projecting affectively prompted judgements and evaluations, and
- 2) A realm of "private", perhaps socially initiated, but nevertheless felt qualities.

Both realms being expressed and made public through mood discourse. In any case whichever conclusion is preferred, the data seems to resist any single factor simplification.

The wider ramifications of these issues suggest that the identification and re-identification of mood is partially dependent on a

public language embedded in a background of social convention, habits, traditions, and personal intentions. But what makes mood identifiable as a particular individual's mood is its quality of feeling, its general interconnectedness, its outward movement or its self-encapsulation. This is not to ignore that the quality is to some extent parasitic upon the forms of description available to the individual, and the symbolic portrayals, stabilizations and transformations, that he is capable of enacting--be they meagre or full; nor is it to deny that the mood quality may be both situated and engendered in a social nexus. It is to stress that the quality and energising characteristic of the feeling may be simultaneously definitive and directional in a wide sense. This directional quality of mood is generally given by:

a longing for; a disappointment over; a questing after (though the quest may be uncertain, discontinuous, or "poorly inked"); a being or dwelling in self-sequestered feeling; a knowing transitively, intransitively or pan-transitively (feeling arcing over its objects precipitates awareness); a sustaining equilibrium between perception and bodily need; a movement on behalf of; a placing of the self in relation to; an assimilating and accommodating of self-qualities and world-qualities; and a succumbing over the imperatives of feeling.

This protean capability of mood, its ability to "infuse" actions, and shape attitudes on a natural or constructed horizon, may modify the initial primary quality or instigate internal motion that results in a change of quality. But it does not eradicate the presence of quality, logically or experientially, because simply and unavoidably for some subjects mood can be a style of living through the changing qualitative voice of feeling. Certainly it is a "voice" that is socially acquired and moulded, but nonetheless it is one which also retains an inner allegiance to its own identity and potential; to deny either social reality or individual unity and self-motion is to have an incomplete understanding of mood.

5.11 A Structural Analysis of the Qualitative Data

In this section I would like to endeavour: to construct a composite representation within each of the three categories of mood, positive, neutral and negative; and to highlight the salient features both within individual representations and across representations. The analysis is structural in that the composite representations construe mood as a system and seek to articulate this system and the "laws" or "rules" that govern it. Attention is given to the smooth or reticulated surfaces of phenomena, and contributions are made to their elaboration, but the primary intent is always a seeking to fathom underlying levels and generative conditions. This is to say that the surface of all phenomena will be accepted in their engorged fullness, but co-ordinately an attempt is made to animate, to mark, to reveal, and to hand over what is deemed essential, i.e. the systemic structures and basic movements.

The procedure will be to consider in advance the mood descriptions and metaphorical portrayals as expressions of mood as a system; the causal factors identified by subjects themselves will then provide the major elements to be related to each other and to the system as a whole. In other words the general structure of the mood category is broken down into a set of elements, and the relationships between these elements are seen as mutually defining, supporting, and amplifying the structure as a whole. Particular stress is given to those equivalences or relationships that thread, buttress, and establish the character and equilibrium of the entire system.

The analysis adopts both an immanent and a transcendent perspective. It locates itself within the texture of the particular mood system and frames an independent viewpoint. The system of a particular mood category is constructed in order to gain insight into the manner of its functioning. In this sense we will have constructed a simulacrum (Barthes, 1973), a new meaning in the imitation, a refraction through an expressive medium, a presentation of a range of moods that is formally coherent and animated by the vectors provided by subjects' own descriptions. We thus create a free reduplicated organisation of the data that both renders it intelligible and provides a route of access into the experience of mood.

Positive Moods

Descriptive elements and metaphorical portrayals*

The descriptive elements and metaphorical portrayals are united around approximately four themes. The themes are:

1. The concentration of energy
2. An irradiation of the environment
3. Untrammelled movement and communication
4. Feeling natural and bound to the earth.

Focusing on the most "elevated" and dynamically charged positive moods: the subjects all experienced concentration of energy, dilated fullness, they themselves became an irradiating source. This concentration of energy may operate as wilful determination, proud self-sufficiency, liberating self-acceptance, or as an intransitive union in consciousness with an ideal object, without the intercession of mind or brain. The irradiation comes from within as a renaissance of life, a genesis of creative force, a spiral ascent between the poles of exaltation and rootedness in the earth. This basic expansive movement, which is like an energy seeking to spread out and overflow boundaries, is transformed into interpersonal sympathy, energetic kindness and appreciation. Its social aspect is a natural voluble communication.

A slight faltering and subliminal disharmony are the first intimation that the mood carries within itself its own destruction. Dissolution is inevitable, for the mood is internally mediated and sustained only by its unique intensity--actions are performed because of, on the occasion of, the intensity manifesting. And that which emanates and forges an external relationship, no matter the degree of inherent purity, creates qualitative division. As a result, there can be a dramatic self-immolation in the rift of division before fulfilment is achieved, or a more subtle leakage of energy in the production of

*Note: In these sections the properties of language as an expressive medium are utilized. Facts are presented and the language quality "echoes" the mood quality.

doubt; a doubt which is a necessary self-constrictive check arising from the knowledge of having over-extended oneself. Hence the final tentative quality of these moods, the confusion, hesitancy and uncertainty that follows in their wake.

Expressed in grammatical imagery, what was prepositional and conjunctive becomes an adverbial relation--suddenly there is a "when", a "whilst", a sundering "whereas". The unity of the mood is lost, blown past its peak, and the saffron-scented magical world collapses. The vitality and bright illumination are seen to have been obversely--the vanguard, herald and corona of disillusionment. Still in the mood's passing something was achieved and one particular role in the overall system was enacted, the lineaments of a particular type of understanding were drawn.

The achievement can be gauged from the subjects' own considerations concerning the mood's functioning. The major functions were found to be classifiable in this way:

1. promotes growth, openness and integration
2. permits self-expression
3. provides a sense of worth and self-confidence
4. facilitates positive qualities in personal relationships
5. gives relaxation; revitalizes.

The moments of expansion do bring a new percipience--like a fire in the dry leaves of everyday life, the limitations and confinements of suspicion, indolence and lethargy are consumed; the retarding moisture of all things trivial is volatilized to produce transiently a sense of suspension which is freedom and non-attachment. But it is not primarily a particular content of experience that predominates, as it is the superorganic process of dimensions melding, sources interflowing, and elements being released. The mundane ego temporarily dissolves into a pure accelerated consciousness, the time line of cumulative duration bursts outward, the curvature of space arcs exponentially, the matrix of localized objects and events is absorbed (or immersed) in a greater context. This is the "knowledge" of growth, openness and integration. Bodily, it is as if the dull machinery of the body had droned itself

into oblivion, to be replaced by minutely interwoven sentient fibres, the entire body becoming a homogeneous organ of perception; parenthetically this is what the classical Greeks called the "augoeides" or radiant body.

In its deeper structure the mood is an annihilating appropriation of some value or exalted flavour of life--a node of seemingly permanent value, or a gravid stasis between the antipodes of unrestricted excitement and personal security. While these moods last they permit a joyful acceptance of facts and events that ordinarily would appear foreign or incongruous, and they may condone actions that would otherwise be considered excessive or even abhorrent. There is a release from the self, a going over to others, but it often occurs in a basically impersonal way. In these cases the social environment serves as receptacle to the mood's turgid dynamism, for the sociable self is often merely the veneer of intensity. Should the individual's gift of sharing be rebuffed, the generosity transforms into an unpleasant desire for retribution. This is the sometimes conditional broadening of qualities in inter-personal relationships, given under this condition.

Yet the mood intermittently shows a milder facet, an interfolded mysterious silence that bridges turbulent emotion to achieve a fulfilment where the irradiating source is itself irradiated. Here the mood rests on or overshadows the subject in a warm tranquility, a mellowness and nurturant interchange. At its best the mood becomes a compassion of justice and mercy, the strength of receptivity, intuition and creativity--the choice to flow with natural process. However, its lower form is a sentimental outpouring unalloyed by resolve or determination.

There can be a playful exuberance in personal relationships, a teasing bantering give and take, or a more serious transvaluation of people and activities. Here a sense of worth and self-confidence accrues from both self-expression and the reflected warmth of others. However, when the subject learns that openness brings its own kind of pain and vulnerability, that strife and change are the pre-condition of achieved stability, a new inflection may occur. With time there comes a congealing hardness, a protective chitinous shell

formed from the insufficiency and disappointment of prior effusions. This may be accompanied by a stoic pessimism that labours narrowly but diligently "building walls around its own garden", or the bitterness of deflated hope leading to a nettled complacency that has abdicated from its appointed task--realizing the potential to contain all things and create beyond them.

In the later phases of the experience, fear almost invariably sweats to the surface, the mood is almost literally a pressing out of fear. As one subject phrased it: 'It enables you to get rid of everything within you, anything that has been worrying you, can be expressed. I hold nothing back, all my secrets and fears come out.' Figuratively, the fear is the concrecence, the bringing to concreteness exteriorly of the immaterially compacted collection of threats and anxieties acquired over a lifetime. What is the connection between the revitalizing function of the mood and fear? I would speculate that assuredly the mood revitalizes, it infuses where something has been lost--the inner conviction of the supportive quality of life. What is the fear? There is a fore-knowledge of the mood's collapse, the approaching divestment of strength. The vitality of the mood is in part the negativity of fear, a fear feeding off the psychological forcefield of "death". This "death" exists on several levels and is not so much physical dissolution, as the symbol of all absences, abandonments, and disabilities. On the most concrete level it is a fear of failure in emotional relationships, financial insecurity, social disapproval, growing old and losing physical attractiveness or desirability, having no one to lean on, or conversely losing one's individuality. More abstractly it is a fear of "corruption"* , "world pollution", "evil", "the untrustworthiness of the world", "the condition that things often are not what they appear to be" and "a small inner door opening on the abyss of eternity".

*Note: Inverted commas indicate that these are provisional contents of the fear. They are not necessarily a full description of the source or objects of the fear; they are more forms the fear takes as it traverses its own development.

I have chosen to call them fears rather than anxieties because of their defined (though unstable) content, and their directionality.

Causal Factors

The majority of the subjects were of the opinion that their positive mood resulted from the interaction between internal potentials and external factors. The subjects often stressed the primary role of internal potentials:

'I feel the potential is there inside me and it just needs something to bring it out.'

Here the state of affairs is clear-cut, there is an internal potential that can be elicited under the proper conditions; for this subject, it was almost as if she were waiting for the correct conjunction of conditions in order to express the potential. In this case, as in many others, there was a basic need to release and liberate energy, and in some way to complete the mood.

'....the energy is more directed, I know what I want to do with it.'

This subject had a generally high energy level and strong self-expressive needs. For her, it was not so much that the mood was evoked in her by environmental stimuli, but rather that she was constantly seeking to find adequate objects to express the energy towards. In her case, she was "absorbing" (her word) environmental stimuli, being activated by and drawing vitality from this act of absorption; she was then able to reciprocate with her own inherent energy.*

*Note: This pattern of response has been observed in other individuals of a similar personality type. The independent, creative, high energy individual utilizes the environment as a source of energy and stimulation. She processes all stimulation in an expressive way, giving back, ultimately, some product (energy or construction) that bears her individual stamp. For these subjects to attribute the mood directly to social or physiological factors is inadequate, the mood is more a way of living, a "form of life".

'It comes from within with the help of other people and situations.'

Again, the subject sensed the internal origin of her energy, whose appropriate "objective correlates" were individuals and social situations.

'I think it comes from within me regardless of the situation....Of all my moods this is the one which is least directly linked to specific situations.'

Here, the mood was primarily generated from within, but was most likely to be expressed in response to the needs of other people.

The general picture that emerges is the existence of internal potentials which can be stimulated, triggered, activated, or drawn into manifestation (the word we use will be determined by the theoretical orientation that most closely matches the subject's experience) by either one small event (occasionally it is a cumulative effect) or larger events. This occurs against a background of positive social relationships (especially those that give a feeling of in-depth communication), and this may result in an evaluation that all is going well, which will then augment the original energy level. This line of reasoning emphasizes the possibility that it is the personal value of environmental factors aligning with or gearing into internal potentials and rhythms, which is responsible for the positive moods.

How do these causal factors modify the composite representation given above? Firstly, they support the contention that the energetic quality stems from internal potentials. Secondly, they also suggest that the energetic quality has a range of pre-conditions, which include social and evaluative factors--the energetic quality occurs within a matrix of other relevant factors. It is most likely that the impetus of the mood arises internally, the form it takes, how it is manifested, is influenced by a wider matrix. The composite representation has indicated some of the major variations on this theme. It should be pointed out that we have not been able to demonstrate a necessary causal sequence for these moods, however we have presented the major causal elements and indicated some of their interconnections.

Neutral Moods

Descriptive elements and metaphorical portrayals*

In this section attention is devoted to one type of neutral mood, i.e. detached passivity, it is a mood of common occurrence that has received relatively little clinical attention in comparison with elated and depressed moods. Evidence is provided to suggest that "detached passivity" is a class composed of more than one type, each type however is integrated around one or more of these themes:

1. A suspension of affect which represents a balancing of forces

e.g. 'I feel calm, but it's a tense sort of calm. I feel relaxed and have no need to do anything active. I lie relaxed like a piece of foam rubber and watch the trees and grass and water. Thoughts pass through my head like butterflies. Somehow this calm doesn't feel so natural. Maybe it's a deliberate effort. I suspect that it is.'

While on the surface the subject's mood is passive, impartible, vapidly impoverished, inwardly her thoughts and deeper feelings are in conflict, energetically opposed; the surface balance is momentary, a balance point of minutely adjusted tensions.

2. A saturation of affect following over-stimulation

e.g. 'I see grey clouds and all shades of grey shadows. I feel indifferent and anaesthetised. I feel like being completely alone and unproductive, and I wish I could go away some place where there were no people for a while. I feel the need to recuperate.'

This muzzy, muggy, grey saturation is a uniform quality that dominates the sensorium, inhibiting any interests, strivings, or motor tendencies. The subject is unable to escape the event-horizon of her own lavish inertia. Her resources have been exhausted--bleached, benumbed,

*Note: Again, the language employed will attempt to reflect the quality of the moods themselves--repetitive, contingent, slightly disconnected, yet with occasional flashes of energy.

becalmmed, she is separated from vitality by the measureless distance of indifference. The only solution appears to be retreat for the sake of recuperation.

3. A detached clarity

e.g. 'I am relaxed and detached, as a body I seem to float away from people and things. But my awareness deepens, things look clearer and sharper. It tends to happen when I am with people who annoy or irritate me, or it can occur in natural surroundings. I think this detachment helps me to see and understand all the things that are happening around me. It's a mood I value because I am there and clear, not clouded by distracting thoughts and feelings.'

The subject disengages from her habitual pattern of awareness, personal concerns are calcined into a subtle vehicle for vigilant attention. She is not body, not object, not quite pure awareness --yet the ego stands down, stands aside, relinquishes its control to a silent passivity. She becomes an emptiness that watches but does not judge, touches but does not enclose, receives but does not possess, gives but will not be abused. Desires, expectations, all instrumental strivings are abandoned, and the environment is permitted to shine forth in its "original" qualities.

4. A lethargy which is the beginning of depression

e.g. 'This mood is a sort of blanking out of everything so I don't even have to think. That would be too much effort and the actual thoughts would be depressing they'd be so negative. Also, everything seems so still like there's no movement. The air around me feels heavy just as I feel heavy with negative dull emotion. My heart hardly beats like even that's too much effort. There is a dull core inside me compelling me to inaction. I feel compelled to stay still as though I were made of stone.'

This mood combines an element of saturation (theme 2 above) with a lethargy drifting toward depression. There is a core of dull emotion--monotonous, monopolar, mononucleated; gradually encroaching upon and enveloping the subject, the mood becomes an overriding modulation of all major organismic factors. The subject's additional comment gives further insight into the mood: 'It originates from being disturbed of peace, by being disrupted of

peace. From frustrations, irritations, aggravations, insecurity and a sense of unhappiness, discontent and instability. My not having the ability to cope with bad situations and overlook or surpass them.'

These detached passive moods sometimes follow a prescribed sequence, with an initial phase, an intermediate phase, and a terminal phase. An overview suggests that initially there can be a detached sensitivity, this may be followed by an intermediate phase of indifference, confusion, or fragility, which has the power to pass over into a terminal phase comprising a depression streaked with anxiety, or on the other hand, it may result in the beginning of a positive mood. In many cases (though not all) the detached passivity is a transition mood between elation and depression. This is, however, only a general trend, there are many exceptions and no invariant sequence.

The onset of the passive detached mood is usually gradual, the individual may feel drowsy and uncertain about what is going on around her. Typically, there is enervation and sensations of "floating". As the mood progresses and assumes a definite quality and character, the individual develops a heightened awareness of environmental detail, the perception of form, texture, and density is differentiated (though colour perception is usually inhibited). One subject described her heightened awareness as: '....like an insect with little antennae flickering all over'. The body as a kinesthetic field is experienced as a 'floating non-descriptive mass' whose importance recedes into the background. The ordinary concrete schéma of mental functioning is absorbed by the evanescent quality of the sense data received and projected. The sense of material properties is replaced by patterns of form and quality held in existence by particular prominent details. The individual is not aware of herself, but rather of subtleties and nuances in objects around her. She moves and behaves without conscious will --drifting, floating, she is silent and calm, enclosed in the diaphanous gauze of muted thoughts and feelings. The mood is vulnerable to disruption and termination at this point by any strong external stimulation.

From this initial state several different transformations are possible, the detachment may devolve into a kind of indifference, confusion may set in, or the original sensitivity may develop into fragility--a condition where the individual feels open and vulnerable, incapable of meeting the demands of her environment. In the case of indifference, there is a blank feeling, a recycling dull apathy, a motionless lethargy which recalls and amplifies past happiness, views the future with uncertainty and trepidation, and abides with an increasing tension, futility, and a sense of bitterness. In the case of confusion, the individual is unable to work problems out in her mind, difficulties and complications loom large, there may be a sense of deflation from unfulfilled ideals and expectations. There is a sense of being overpowered by everything. This often combines with an awareness of personal failures and shortcomings, which solidifies into an unmitigated self-criticism. Generally, the individual feels confined within her thoughts, unable to break out--limited, restricted and stifled. The mood may terminate at this point should problems begin to work out, or if the possibility of a clear solution opens up the way.

In the fragile inflection, the individual feels like cringing back, creeping away into a protective shell, but she knows the fear that the shell may crack. She experiences a desire to escape but is unable to do so, the mood itself prohibits it. The individual may feel awkward, clumsy, restless, but she is afraid to move to act. A balance point is established where she can be pushed any way by external events; she needs to remain still, she needs something to happen, but her brittle condition is threatened by the disorganizing power of external stimulation. Bodily perception is relatively heightened in this inflection, but it has a negative quality. As one subject put it: 'If my mood had a body to suit it, the body would be a glass egg-shaped one, completely transparent and empty.'

These different variations tend to converge on a uniform terminal state, an anxious emptiness on the borderline of depression. Here, both reliable aspects of the environment and determinate aspects of the self-concept are lost. Consequently there may be a need to collect objects around one for the reassurance of their palpability, or a need to "ingest" food, ideas, personal relationships, to feel

solid and corporeal. Yet there is a fear of multiplicity - of people, of objects, none offering the required intimacy, the concrete rootedness, the density of security. Lethargy, confusion, fragility, have passed over into a tense void, the sense of fragmented darkness, enveloping darkness, a burgeoning darkness, and immanent personal collapse. Again, there is often the sense of interior movements, primitive atavistic swirlings, the correlative need to grasp onto something, the need to be accepted, reassured, embraced and guided by something more powerful than the self. In this state the bodily perception is given by organic sensations which suggest compression and standing waves within a hollow darkness. As one subject phrased it: 'I am most aware of all inside my body in this mood, it feels empty but tight....I feel mixed up inside. I feel as though something is moving inside me but I don't know where to.'

The structure of these detached passive moods, their qualitative uniformity supported by inward planes of feeling, capable of a series of transformations and thematic inflections, invites the linguistic comparison to a language whose idiographic roots can be brought together to form meaning clusters and permutations with either harmonious or disharmonious results. If we consider the passive detached moods from this perspective two roots would be discerned--a root of "stagnation" united to a root of "interior movements" to produce an entity suggesting the general condition of motion bounded by insufficient means, i.e. motion arrested through lack of a proper vehicle.

The mood itself as a "language" or "system of discourse" would employ verbs of action tending towards a desired end, but with action aborted, retroverted, or restrained from within. There would be a high frequency for the prepositive "or", the conditionals "if", "depending upon", and "in conjunction with". General relations would be commonly framed, but of a tenuous nature, always qualified by the particular (as the grey of the sensorium was orientated around prominent details). The greatest deficiency of this "language" would be the overall lack of assimilation of its component grammatical parts, its insufficient syntax, i.e. the terminal phase of the mood which may be an anxious vacuity--a fulfilment of the

mood's threat, and the denial of its promise.

Causal Factors

One key to the presence and operation of causal factors for this mood is indicated by the gradual build-up of the mood. This suggests a series of external events interacting with internal potentials and culminating in the passive detached type of mood. Subjects most frequently affirmed that the onset appeared to be the end point of a step-wise progression, rather than an acute precipitation. The environmental input or triggers most often cited were psycho-social situations where the individual found herself in uncongenial company--with the anticipation of it being a "no-exit" type of situation. However, it should also be noted that the occurrence of almost any sudden and unexpected stimulation that affects the individual's sensibility may produce a similar detached, depersonalised reaction. In addition it was not unusual for the individual to find herself in such a mood upon waking--suggesting the role of dream activity as a causal factor. It may be that vivid dream imagery makes the transition to normal waking consciousness especially difficult.

The general picture that emerges is that of an open, sensitive, susceptible individual coping with a range and variety of intense stimulation--interpersonal situations, work demands, and the rush of daily activity. She is required to divide and parcel her time, to distribute herself perspicaciously between interests, responsibilities, and commitments. At the same time she is possessed of ideals and expectations for the future, which may be discrepant with her actual activities. She senses a mounting tension, engendered conjointly by pressures, an impinging environment (or the mood may make the environment appear impinging), and strong emotions, all occurring amidst her own natural cycle of emotion, her fluctuating self-concept--a self-concept that is attenuated, buffeted and shaped, divided from its original unity by the environment. In the midst of this complex state of affairs, triggered by a cumulative overload of stimulation (or a single event profoundly affecting her sensibility), she consciously or unconsciously closes herself off, partially shuts down, and englobes herself in the protective covering of the mood. She becomes absorbed in its

inward orientated quality, and the external appreciation of minute and aesthetic detail. In this state her different potentials for feeling are muted (in some cases entirely blanked out), but their vaporous shadows continue to recycle through her mind.

How do the causal factors modify the composite representation given above? Firstly they support the contention that in many cases there exists a microstructure (which is a collection of individually divergent feelings) underlying and contributing to the mood's uniform quality. Again, as in the case of the positive moods, the neutral moods occur within a matrix of other relevant factors. Secondly, the gradual onset of the mood suggests that the mood may represent a cumulative effect. There may be a critical point beyond which the degree of intensity and complexity of stimulation consciously or unconsciously induces the mood. The mood then becomes an affective "emergency reaction" serving an adaptational function.

We have perhaps understressed the role of personal disappointment and its accompanying sadness, certainly in some cases it is an important aspect. The overall evidence suggests that the mood is determined both by internal conditions--individual needs, the cyclical flux of affect, the priming of different facets of the self-concept, and environmental stimulation.

Negative Moods

Descriptive elements and metaphorical portrayals

In this section subjects' depressed moods will be considered. They represented a spectrum ranging from what by standard classification would be termed: endogenous depressions (depression arising from within, having a sudden onset, and not obviously correlated with environmental circumstances) through agitated depressions, to reactive depressions (depression externally precipitated, with often a more gradual onset, and correlated with known environmental circumstances). In terms of qualitative descriptions and portrayals, there appeared to be relatively little differentiation between the endogenous and reactive types. However, the agitated depressions

were distinguished by strong elements of tension, restlessness and anxiety.

Subjects reported that their depressions were lead-weighted, without light, airless, dense, a series of clumsy and restricted motions. In many cases the depression could be assigned a general bodily locus with a definite pattern of progression, i.e. for some it often began as a weight in the head or throat area, gradually "dragging itself" down and through the entire body. For others it was a hurt and hollow feeling in the body cavity, radiating outward to be terminated in exhausted ineffective limbs. Cognitively, the result is a pessimistic outlook and a type of tunnel vision. As one subject metaphorically expressed it: 'I see green grass, thick bush, but there are enormous dark trees restricting my vision, they are forming a canopy and obstructing a wider view.' Perception and interpretation are altered so that commonplace objects take on a new penumbra of meaning; distorted by the mood quality, they are seen out of perspective, displaced, dislocated and dispossessed.

Particularly in the cases of more endogenous depressions, there may be the feeling of stimulus abundance and overflow, of being unable to act efficiently and adjust adequately in the face of disorganization and an increasing heaviness and lethargy. In the words of one subject: 'You try to stop it and can't. You can only stop it by ceasing to exist. Not because you don't care, but because it is too overwhelming, you are dragged down and quartered by the feeling.' Acutely stressful to the subjects is the painful self-awareness of not being able to adjust, to adapt, or to accommodate--the imperatives of the mood being beyond rational, wilful, or affective control. The environment is encountered as an inescapable reflection of the depression: dark shadows, suspended animation, disorder, disarray, disarrangement, and active hostility. This reduplication of negative qualities produces feelings and attitudes of self-pity, self-indulgence, self-centredness and despair. Physically, there is an inability to stir or respond, a loss of all elasticity.

Subjects often express the mood's negativity to the people closest to them. They become hostile, critical, irritably destructive, yet

there is often an inner voice saying: 'This is not me', 'This is my chemistry', 'It is my mood speaking not me', 'You don't understand how bad it is inside'. As one subject said: 'You are willing to take responsibility for your words and actions but somehow it isn't what you wanted to say, it's too negative, critical, offensive. Others resent it, and a vicious circle is established.' The subject may see calm composed people around her and try to emulate them, to be lightly rhythmical with a facade of self-control, but the attempt fails, nothing happens, body and mind refuse to ease off--the desire for oblivion returns triumphant. The subject may then wait for the process to run its course, but the ponderous density becomes too much to bear. Then suddenly as quickly as it appeared, the mood lifts, and the subject is feeling energised and active.

In the more reactive type depressions the subject typically feels deflated, discouraged and fatigued. She feels like sitting alone and thinking, everything appears inertial and devitalised, nothing worthwhile ever seems to happen. The subject is often confused, feels she is a failure both socially and academically. She commonly reports she is "trying to find herself", to comprehend what she is doing in these circumstances, what meaning her activities have, where the larger perspective is, how to obtain a clear view of herself and those around her. In the background of the mood is often a potential for happiness that seeks fulfilment, to break the surface and overflow her life. As one subject put it: 'The mood is reaching out at someone whom I can't find. I desire to be independent and free to search, at times to drift peacefully, I'm looking for something--peace, happiness, intimacy, maybe it's a way of life.'

The agitated depressions are characterised by high levels of anxiety, tension and restlessness. The body may be perceived as giving rise to contradictory sensations and feelings, e.g. 'My body is uncomfortable, restless, and lethargic. Ideally, it would sleep first, then go flying above the whole world surveying the mess.' The subject typically feels very jittery, extremely restless, and prognosticates that the whole world is going to fall down and collapse on her. Irritability, annoyance and a general

intolerance may come to the fore, in one subject's view: 'I tend to get annoyed at everything and anything. I snap back at anything, lack a lot of confidence and also hate being alone doing anything in a crowd of people, yet can't stand having anyone around me when alone. I feel like shutting myself off from anything that might annoy or upset me, living in a dream world. A desire to be completely inanimate and feelingless.'

Subjects tend to feel hopeless about their ability to change, and can feel the mood becoming what seems like a permanent part of them. However, this may alternate with periods of weeping and hysteria--the subject coming to the conclusion that she's made a big mistake in everything she's ever done or decided to do. She develops a great distrust in everything, a sense of inferiority in comparison with everything and everyone. In the terminal phase she is indifferent, exhausted and everything appears unreal. (The emphasis on the words "anything", "everything", "everyone", "nothing" in subjects' descriptions indicate the global pervasive influence of these moods.)

The mood may produce a desire for an empty void of blackness where there is absolute quiet, yet the hope persists for some type of alleviation from the dark flux of feelings. In one subject's words: 'I feel dark and would like to be quiet. I feel hollow and empty, I have a need to touch and feel the warmth and contact of a living thing. I am depressed, tense, sad, tired, vague and disquieted.' In its extreme form the mood may combine exceptionally high levels of tension with the heaviness, confusion, and self-depreciation of other forms of depression, e.g. 'There is a terrible tension around my neck area--I feel like screaming, my whole body aches with tension. I feel in a mess. I don't know where to go or where I'm going. I feel so helpless and stupid.'

In the most extreme form, the subject may be filled with disgust, rage, and phantasies of mutilation. The more typical depressive aspects recede into the background and an intense loathing emerges:

I'm so full of fury and disgust, I don't know where to begin. I'm tongue-tied with disgusted feelings. People are the most loathesome creatures, I wish I was out of

this dirty world or a cat or dog. Nothing misses out on my repulsion for the world. A bad spirit has jinxed my day and is on my trail hijacking all the moves I try to make. I feel like spitting out my hatred to everyone. I feel I just want to get out of this terrible world and escape all repulsive situations. I feel so helpless, depressed and sad. I feel so polluted by the world, what's in it, and my anti-feelings. I'm so trapped I feel like crying and swearing, and destroying. I'd love to get a loathesome person and torture them and tear them slowly into tiny pieces and make a pattern out of their mutilated bodies, teeth, hair, blood, bones, skin, internal organs, etc. I want to rot away and be completely depraved so I can fit safely into this world.

The factors responsible for this energetic rage and loathing within the context of depression were disappointment and a loss of confidence in interpersonal relationships where the subject had entrusted her feelings, sensitivity, and emotional dependency. She had permitted herself to rely upon the strength and integrity of others, only to find them deficient and inconsistent. Yet at the same time the mood was an exemplar of a series of such moods that had a pattern of cyclical recurrence. That is to say, internal conditions of bodily weakness, tension, anxiety, and emotional instability when coupled with the subject's idealistic value system predetermined the necessary occurrence of this type of mood. The collapse of hope and idealism (as well as their resurgence) was guaranteed by the very psycho-physiological structures that promulgated them in the first place. Thus the mood was hope disappointed, confidence betrayed, an energetic catharsis, and a type of adaptation to a more fundamental psycho-physiological constitution and personality structure.

It should also be noted that some subjects, over a given period of time, may experience all three types of standard depression. The following example is data for a single subject collected over a one month period. The first report indicates a reactive depression (of comparatively short duration) occurring in response to environmental pressures, the second report suggests a relatively endogenous depression, and the last report portrays an agitated depression.

First Report:

I had all different feelings today. Firstly, I was pressurized and tense, but it levelled off, then a bit

undecided, uncertain, confused, then everything was alright. And I'm just feeling hot and sweaty but quite happy and relaxed. Afterwards I felt depressed and unhappy and wandered about sort of demented. Then I heard uplifting music and it lifted me out of my trance and depression.

(Incidentally, this is also a good example of "mood" as variability in feeling.)

Second Report:

There's no reason I just feel depressed and disorientated. I'm tired of not doing anything productive. I'm too lethargic to make a real effort to get out of this rut.

Third Report:

I have this hard core of agony inside myself. My problems seem so trivial but I'm helpless as though some terrible parasite has attacked me. I feel I'm bleeding from within. I feel on the verge of nausea, great insecurity and fear. I feel so small and helpless and soft and aching, a painful gnawing of my insides. I'm tense and getting all in a panic, I'm nervous and jittery, it's got to the stage where I wish I could run away from all people and situations and do nothing.

Although as in the case of the data just presented depression may be heavy, oppressive, 'a hard core of agony' without remittal, it can also be the vehicle for cognitive and emotional change. Depression can be the beginning of understanding and a new self-development. It may incite a comprehension that can accept the separation between individual desires and the norms or trends sponsored by wider social, biological and environmental realms. It may show the individual that what is desired or deemed important will always be tested by the biological mechanics of her own body, the collective pathways offered by society, and the natural laws of the environment; that the best solutions must harmonize these three realms. From another perspective depression may permit the struggle for change and the voyage of self-discovery--a night passage over bitter-sweet waters which laves mind and body abrasively clean. It may illuminate the gulf and secure the perennial tension between "ideals" and "concrete givens", an

irremediable tension that is the prerequisite for assimilation and forward motion. It may create and open up the wound of all differences, failures, and insufficiencies, but it also instills the dynamic stress felt before all thresholds or new beginnings. It may show the individual that discouragement, loss, disappointment, emotional decay--each catabolic process is tangible and given with the world, yet constituted by subjectivity as a value and meaning structure.

Through depression, the individual may "see" her own tendencies to misperceive and misconceive; may "see" the instability and unreliability of any single world-view or value, the distortions established by her own limited experience, particular physiology, and personal history. It may suggest to the individual that "reality" is brought from the indeterminate to the determinate whenever any choice is made, value invested, or action performed; that these "elements" are given validity by the consistency with which they are lived. It may provide an insight that clarity and harmony are simple openness, even within the internal opposition of depression. It may suggest that to lose what she cherishes most (at the moment) is also to relinquish a sentimental clinging, to slough off one pattern for a new energy and continuing growth.

Considering the depressive moods from the perspective of an idio-graphic language two roots would be discerned--a root of "tense compression" united to a root of "impeded motion" to produce an entity suggesting the condition of being extended but not established, constituted but not supported or strengthened, being inflexible and refractory as well as adverse and rebellious; an entity tending towards emptiness, but contained by density and oppression.

Causal Factors

Some subjects reported that they were not aware of reasons for their depressed moods, which is consonant with the classification of endogenous depression--a mood produced by internal, biochemical, often cyclically organized factors. These moods were often characterized by the subjects as "physical moods" with qualitative attributes of "ponderous density" and general bodily discomfort.

Despite the physiological contributions, in almost all cases, psycho-social conditions and the individual's personality structure were either primary or contributing factors. As shown in section 4.9 the psycho-social factors most frequently cited were: losing trust and confidence in others, being confronted by problems that appear to have no solution, uncertainty and confusion concerning work and friends, dissatisfaction with one's own social skills and responsiveness, and monotony or tedium in daily routine. The quality, depth, and integrity of personal relationships is one of the most common and important factors. One subject expressed this is a particularly clear, insightful, and ingenuous way:

The mood occurs when I've been hurt in some way by other people and there are things I can't escape from. In this mood, when you've been hurt by someone you lose the pain in nature, somehow to hurt is okay, you become bigger than it is, and you are filled with everything - hurt, happiness and sadness. Then I can see all the good in people even though they have hurt me in some way. And yet the mood seeks a happiness without people, because you don't want to see through people to know what's going on. It sickens me that people deceive. The mood has latent phases, when there is a collection of moods all together at once. The production of a mood depends upon the dominant mood previously there.

The major theme of causal significance is an injured sensitivity from interpersonal relationships, but it is supported and shaped into the quality of the mood by the subject's own personality. She is able to surmount the personal injury and transmute the pain into a sharper perception and a deeper understanding. The presence of different affects, intense, poignant, penetrating, combined with a degree of optimism, enable her to distinguish and accept the co-existence of positive and negative qualities in other people. Happiness becomes something that is created by the self independently of personal contact, not that it excludes personal intimacy, but rather refuses to make it instrumental to happiness. An interesting aspect (expressed with some frequency) contributing to the qualitative character of the mood, is not wanting to see through other people or strip their masks from them, recognising their inability to withstand their own individual "truth".

The general picture of causal factors that emerges is one of a complex interaction between internal biochemical factors, hier-

archically ordered personality factors, cognitive and affective factors, and environmental input especially psycho-social factors. The relative contribution of each type of factor will vary from individual to individual and from mood to mood for a particular individual. It is not possible at this juncture to establish (isolate and measure) the vectorial effect in each case. However, as an overall schema, it may be said that there is a physiological base, often functioning cyclically, that provides the impetus and the preconditions for the felt quality of the mood. Closely associated with this physiological substrate is the personality structure, the total collection and predominant subsets of dispositions to act, feel, and respond. Refining this generalisation somewhat, the dimensions of personality structure and physiological substrate are in interaction with each other. Conceptually, they are independent, but most likely mutually influencing on levels of lower-order abstraction. The personality structure in particular may be a reaction to, or in some cases a defence against, an unstable or vacillating physiology.

The physiological substrate (with its possibly cyclical alterations) tends to promulgate a sequence of qualitative feelings and an impetus, e.g. dynamic qualities experienced as "bad", "good", "neutral"... etc. The personality structure mediates between this domain and the environmental domain. It is important to see that the environmental domain also manifests conditions sequentially (though not usually cyclically) that are favourable or unfavourable to facilitating or inhibiting particular phases of the physiological domain. Thus environmental conditions that may appear generally "positive" to the average person, may not be consonant with a particular phase of the physiological substrate for another individual. There can be a summation effect where the quality and intensity of environmental events combine with the quality and intensity of the mood cycle phase. In other cases environmental events may be interpreted in terms of the physiological phase that predominates. This is the converse of the principle that physiological arousal may be interpreted in terms of environmental stimulation and the cognitions available to the individual. It is my experience that in some cases this interaction between physiological phases and personality structure is what gives the mood its

pervasive quality and influence.

The individual who is "moody" in this way will have needs, goals, and a multi-faceted self-concept determined by prior learning and situated within the matrix of physiological and personality factors. She will learn, mature, and progress and meet with the same developmental crises as anyone else, however, all events will turn through the poles of her qualitative mood cycle precipitating psychological structures with just this polar foundation. For example, a crisis experienced when in a good mood (energetic, optimistic, outwardly orientated) will be interpreted, responded to, and accommodated differently than it would be in a more negative mood, and in the absence of salient environmental events, the mood cycle may "create" events and circumstances to match the particular mood.

How do the causal factors modify the composite representations given above? Firstly, they support the contention that psycho-social factors play either an important secondary role, or a primary role in the production and maintenance of the depressive mood. Secondly, for some subjects there is a definite often cyclically operating physiological contribution. The subjects who experience these rhythmical alterations in feeling tone may exhibit all three types of depression--endogenous, agitated and reactive. In the "neutral phase" of the cycle psycho-social conditions may precipitate a reactive depression, while the "negative phase" may bring the heavy endogenous type depression and/or an agitated depression. Thirdly, it is important to stress that in some cases environmental and cognitive factors may determine the type of interpretation placed on the physiological arousal, while in other cases the physiological activation will determine the interpretation and evaluation of environmental and cognitive conditions.

CONCLUSIONS

Mood as Concept and Experience

The Concept

"Mood" is not exclusively a logical form (as a logical form applied, it is the most general affective parameter); "mood" is not completely reducible to grammatical vectors and restraints (as a vector it functions prepositionally and connectively, lodged in the "gap" between personality and behaviour, or between "self" and "world"); mood is not exclusively a boundary form of affective discourse (as a boundary form it is capable of positing both individual qualitative experience and social intentions); "mood" is not exclusively a class of functions and behaviours (as such a class it is highly elastic, defined by a range of idiosyncratic functions and behaviours). "Mood" refers to a type of organized inflection in the subtle or mundane current of affective life. Mood is (and may denote) not only a personal liability, but also a sensitivity, an appropriation of individuality and a self-revealing in an inimical or nurturant world. Metaphysically, this points to the partial "truth" and "error" of mood. The world is perhaps humanistically neutral, but capable of receiving and corroborating (for a time) any value consistently projected.

It is important to take cognizance of the oscillation in reference peculiar to the concept of mood. "Mood" operating in a discriminate or indiscriminate mode may sequentially, simultaneously, or cyclically, refer to any of these conceptions:

1. protracted feeling states of moderate or high intensity
2. quickly changing or vacillating elements of affect
3. general feeling tone
4. susceptibility to spells of irritability and bad temper
5. peripheral affective shadings, background elements and structures of potential affect
6. basic desires or inclinations
7. some combination of affect, attitude, self-concept and perceptual set
8. a collection of behaviours, or higher order organizations of affect and behaviour
9. a synthetic unit of "seeing", "feeling" and "being"; a sensitivity and resonance uniting consciousness with the environment and

revealing aspects of the self structure.

An analysis of the concept mood has suggested these elements as conceptually necessary: "state of mind", "feeling", "inclination", "disposition" and "pervasiveness".

An analysis of the concept "mood" based on empirical data provided by this study has suggested these elements as conceptually necessary: "mood" should be viewed as: a state of mind or feeling, pervasive in nature, having a causal effect, resulting from both internal and external factors, and bearing some similarities to the concept "attitude".

The psycho-linguistic approach via language acts has established "mood" as referring both to feeling qualities and acts of social-evaluative judgement.

The Experience

(enumeration and linguistic portrayal)

The author is aware of the inadequacy of definition by enumeration--its arbitrariness, its disunity and potential capitulation to emotional dictates; nevertheless having "listened" to many moods, and to speak them in a language more symbolic than standard scientific discourse, in a language as densely compact as some moods themselves, I would say:

mood can be an enthusiasm, a filling in or up, a pouring out, or a quick evaporation; can be the scent of old secrets, stillborn hopes and vengeful needs; can be a clanging, clashing, clamouring will to strife; can be a play, rhythm, and commingling of light, or a leaden haze of guilt, self-pity, and estrangement; can be a stubborn self-serving pride of life, a shallow narcissism, and cloying illusions parading as strength; can be a slow wayward return to commitment, or a glimpse of harmony--rootless, open and self-shining; can be emotion recklessly in advance of itself, impatient, intolerant, not-knowing, or a warm blending, a weaving, an elemental interlacing; can be despair spilling over, cosseted in languor, or moulded into passionless intimacy; can be dissatisfaction, disillusion, a mezzotint of indolent grey, or a stark insufficiency; can be a shrinking, a cowering, or a soft sacramental yielding; can be conciliation, an absolving, or a bitter vermiculated

understanding; can be energy sparkling, glittering, and dazzling, or retroverted into fear, absence, and abandonment; can be a flush of ecstasy, an exaltation, gall-splattering darkness, or simple trust.

The clinical data of this study when taken in conjunction with the theoretical analyses of Chapter 1 suggest conclusions that can best be formulated as the "attributes" of mood. The general attributes to be offered are formulations proceeding directly from the clinical data with a minimum of theoretical processing and interference. The perspectival attributes are features of mood established from the perspective of special models and metaphors of "mood". Following this presentation, a clinical construction of the structure and functioning of mood is set out. It is important to note that as a system the construction combines logically incongruous elements, in this sense it is not a unified system, but rather a collection of clinically useful principles and markings.

Mood Attributes

General Attributes

1. Global modulation

- (a) mood influences all major psychological variables, i.e. cognitive, affective, conative and physiological variables; the individual is constrained to feel, think, speak, and act in characteristic ways.
- (b) this modulation sensitizes, attunes, projects values, and establishes a matrix of probabilistic interactions with the environment.

2. Organismic arousal

- (a) mood represents an activation of the individual's physiological, instinctual, and motivational subsystems.
- (b) mood generates the need for discharge or energy or a particular quality.

3. Perception and environmental interactions

- (a) mood alters perception and interactions with the environment in systematic ways; e.g. in an elated mood the subject perceives positive, energetic and beneficent qualities of the environment,

expands her circle of relationships, may seek out other similarly affected individuals.

- (b) mood produces a selective perception to maintain, confirm, augment, or to upset, disconfirm and cancel its existence; e.g. accelerating self-depreciation in depression; elation may operate to upset its own energetic quality.

4. Self-concept

- (a) mood primes particular aspects of the self-concept; e.g. neutral moods may activate a series of "dependent", "indifferent", "fragile" self-concept components.
- (b) mood expresses a particular unit of the self-concept; e.g. neutral moods may (depending on the environment situation and motivational needs) combine several aspects of the self-concept into determinate units, e.g. 'I am a person who is searching for something, a way of life.'

Perspectival Attributes

(attributes articulated by different theoretical perspectives)

1. From a teleological viewpoint: mood tends to move towards a specific logical or ideal fulfilment, e.g. the terminal point of depression is often exhaustion and depersonalization--followed subsequently by an energized anticipation.
2. From a process viewpoint (which often incorporates a teleology): mood has determinate stages and required balance points which it traverses over time, e.g. detached passivity may have a gradual onset, pass through a phase of confusion, a phase of lethargy, indifference, or fragility, before reaching a terminal phase bordering on depression.
3. From a state viewpoint (which may or may not incorporate features of the process viewpoint): mood constitutes a psychological centre that is a collection of feelings, thoughts, impulses, etc. with a degree of organization and interaction between elements; it may be associated with the deployment of energy that has a characteristic intensity, direction, and quality; e.g. a mood of sadness may comprise regret, sorrow, and recriminations, organized around attempts at restitution, replacement and the enshrining in memory of lost or damaged "objects" in a tender and idealized way. It may deploy energy of moderate intensity directed toward past events.

4. From a structural viewpoint: mood is a hierarchically organized set of elements, often operating through a feedback mechanism, and having an historically determined "form" and mode of operation; e.g. some types of elation may have historically been generated in response to contact with natural surroundings and interpersonal relationships, but from a present time perspective they may represent an immediate fusion with an independent centre of energy (although the centre is predetermined at subliminal levels by past events); at the most fundamental structural level, elation may be an organized reaction to threats of debility, collapse and threatened vitality; through an inherent negative feedback effect elation can operate to reduce or cancel its own intensity.
5. From a functional viewpoint (usually resting on state and structural assumptions): mood operates under specific external and internal stimulation to achieve a state or condition of the individual such that a particular equilibrium is established, or result achieved (here the equilibrium is the consequence of external stimulation and internal factors, but no teleological goals are assumed). The equilibrium or result is a psycho-social resolution of factors; e.g. under specifiable environmental conditions, a sad mood may be defined by a combination of elements of regret, sorrow, and self-recrimination, resulting in a sense of shame and personal devaluation which produces a modification of various behaviours and attitudes.
6. From a disposition viewpoint (which typically combines some features of the state, structural and functional viewpoints with a behavioural emphasis): mood is a tendency towards items of behaviour and experience elicited under specific environmental conditions; mood as "disposition" represents a summary statement standing for a synthesis of constancies in behaviour and experience over a given unit of time; e.g. to be in a depressed mood is to be disinclined to speak volubly, and to be inclined to move slowly and lethargically, to have dull and heavy, or hurt and hollow feelings, to think negatively and in repetitive cycles.
7. From a relational viewpoint: mood brings into existence a relationship between the individual and his environment in which the signification of situations is discovered; the individual knows and understands qualities, essential structures, and modes of involvement sustained by herself and the environment; e.g. a mood of anger may project an attitude towards a particular situation, reveal the

personal qualities that underwrite such a projection, single out distressing and irritating facets of the environment, and establish a mediated relationship in which a desire to change the situation is formulated along with the impulse that seeks destructive activity; there may be the emergence of a desired ideal constituted by or within the destructive relationship.

8. From a cognitive viewpoint: mood establishes a cognitive-perceptual stance towards the environment; to be in a mood is to be aware of the self and the environment in one or a variety of ways; the experience of mood is the experience of objects and events under salient descriptions; in particular to be aware of stability and permanence, or conversely change and impermanence; e.g. to be in an anxious mood, is to be aware of the contingency of objects, the disharmony and antagonism of the environment, to perceive the self as unimportant and feeble, to anticipate personal collapse and psychological dissolution.

The Structure and Functioning of Mood

(a psycho-dynamic construction--it combines elements from diverse models; clinically useful but systemically incongruous)

The qualitative data of this study suggest that although moods may exhibit an original and prevailing feeling tone of singular quality, nevertheless there is often an internal complexity of various elements and processes. Any particular mood will be either a homogeneous qualitative field, or a dynamic equilibrium of its components. This dynamic equilibrium, where it exists, will have a greater or lesser degree of stability. It may oscillate, show several homologous configurations or conformations, and exercise various constraints upon the individual--imperatives that may collectively be complementary or dissonant.

A mood has its own characteristic rate of change, its required phases and balance points. It tends to be the "image", "reduplication", "completion", or "compensation" for several developmentally articulated proto-moods. In each case, from a present time perspective, the dynamic equilibrium, or singular felt quality (transitive or intransitive) is a response to a stimulus (or challenge in molar terms) arising from the body and the environment.

Moods tend to have dual roots, they are anchored in childhood experiences and needs, and in subliminal physiological processes. Intensive study often reveals time-specific layers of need and defence, as well as a representative mode of current adaptation. Hence moods in their affective density may be a recollection, a catharsis, an arousal, a sensitivity, a general modulation, and a type of equilibrium. There is a sense in which each developmental stage is present simultaneously, clamouring as it were, for expression; moods tend also to imaginatively postulate a future (the conditions of their ideal or logical fulfilment), they retain a past (as a matrix for the historical confluence of generating factors), while they vivify the present in a unique qualitative mode.

Their evolution is primarily a cognitive differentiation (though there can be a monotonous non-progressive cyclical repetition), which remains attuned to basic physiological rhythms. Their physiological arousal promulgates interpretations by the individual in terms of the range of cognitions (including phantasies, beliefs, and values) available to the individual. Moods may arise fundamentally from within, or from internal potentials triggered by a variety of stimuli. One important class of triggers is psycho-social stimuli, and in this case (but not in all cases) the individual herself may play a relatively active role in facilitating, inhibiting, or suppressing the mood. The basic mood potential involves a sensitization to a range of factors, and the individual typically will be constrained to feel, perceive, evaluate and behave in characteristic ways. There may or may not be a second-order awareness of this overall modulation. The mood itself may operate to produce a feedback effect which maintains, supports and augments the original state (positive feedback), or expends, discharges, reduces, even cancels the original state (negative feedback). Mood may serve a gamut of functions. The present mood study has suggested that the function varies with the mood quality.

The Mood Analysis Technique (MAT)

The Mood Analysis Technique, which was designed as a facilitator of mood change and as an instrument to probe the different levels of mood in order to bring new elements of affect into awareness, has been shown to have a determinate and specifiable effect on mood. Confidence in its empirical effect comes from statistical analyses that indicate the MAT has a global effect across several mood dimensions, influences mood in ways different

from the other experimental sessions, may influence mood irrespective of whether or not the individual can be considered a "moody" person, and brings about intensity and quality modifications in mood states. Especially noteworthy, is the ability of the MAT to influence "negative" moods in predominantly positive ways, i.e. to reduce the intensity or meliorate the quality of negative moods.

The magnitude of change scores (discrete change) for Session 2, the experimenter administered Mood Analysis Technique (MAT), suggest that the mood dimensions Aggression, Social Affection, Sadness and Egotism can be significantly increased by the MAT. In addition the MAT shows a lesser decrease in Surgency and Scepticism than the other experimental sessions. These results are most adequately explained in terms of the design and format of the MAT: its tendency to locate present feeling in the context of past feeling, the latent and shadow aspects of present feeling, and the tendency to facilitate the projection of future feeling--all experiential aspects being made immanent through the search for expressive metaphors.

The component change scores (internal change) for Session 2, the experimenter administered Mood Analysis Technique (MAT), suggest that the MAT has a complex and in-depth effect on major dimensions of mood. Focusing on the most salient component change scores for Session 2, it was found: for the factor Aggression Session 2 had the ability to generate new components; for the factor Anxiety Session 2 had the ability both to generate new components and to make components disappear; for the factor Social Affection Session 2 had the ability to generate more new components than any of the other experimental sessions; for the factor Sadness Session 2 showed more total change and more new components. These findings suggest the conclusion that the MAT can function to bring new feeling elements into awareness and to reveal potentials for feeling.

When subjects' moods were divided into three groups: positive, neutral and negative moods, Session 2, the experimenter administered Mood Analysis Technique (MAT), was found to either improve the quality or reduce the intensity of negative moods. The two sub-categories of negative moods, "Frustrated Moods" and "Sceptical Moods" which appeared to deteriorate, were found on closer examination to have resulted in a better understanding of the external sources, the presence and operation of different affect

components, and the range of feeling. Session 2 was also beneficial in permitting the expression of different units of the self-concept. This way of viewing the effect of the MAT is consonant with subjects' comments upon completion of Session 2, the experimenter administered Mood Analysis Technique (MAT). The statistically significant response categories "Changed Mood" and "Increased Awareness" suggest the conclusion that even when subjects were unaware of improvements in their mood, they benefited from an increased understanding of the generative conditions, the general trend, and possible conditions for termination of the mood.

Session 4, the self-administered MAT, which was designed as a control for possible experimenter effect on Session 2, was not statistically distinguished from Session 2, in terms of magnitude of change scores. However, the absolute magnitude of change score (global mood change) for Session 2 was greater than Session 4. In addition there were some differences between Sessions 2 and 4 in terms of component change scores (internal change). The most supportable conclusion here is that the differences that do exist can be attributed to the experimenter's verbal involvement on Session 2 and to experimental order and repetition effects.

Personality Variables that Significantly Distinguish "Moody" from "Non-Moody" Subjects

It has been established that "moody" subjects can be distinguished from "non-moody" subjects in terms of personality variables revealed by standard tests and that different criteria of "moodiness" corresponding to different conceptions of "moody" are each correlated with unique sets of personality variables. However, ten personality variables were found to be common to the two criteria and conceptions of "moodiness".

The two criteria employed were a self-opinion criterion, corresponding to "moody" in the sense of having protracted feeling states of moderate intensity and/or having a susceptibility to irritability and spells of bad temper. The second criterion was a statistical criterion of high and low mean variability on the 12 Nowlis Mood Factors across the four experimental sessions, corresponding to "moody" in the sense of variability of feeling.

The ten personality variables common to the two criteria of moodiness were:

the 16PF - scored high on Trusting vs. Suspicious; scored high on Relaxed vs. Tense; the EPPS - scored higher on Exhibition and Heterosexuality; scored lower on Deference and Nurturance; ACL - scored high on Counselling Readiness; scored low on Defensiveness, the Ratio of Favourable to Unfavourable Adjectives (saw themselves in a less favourable light), and Personal Adjustment.

The four personality variables unique to the self-opinion criterion were: the 16PF - scored high on Placid vs. Apprehensive; scored low on Affected by Feelings vs. Emotionally Stable; the EPPS - scored higher on Autonomy; scored lower on Affiliation.

The four personality variables unique to the statistical criterion were: the 16PF - scored high on Humble vs. Assertive, and Sober vs. Happy-go-lucky; scored low on Undisciplined Self-Conflict vs. Controlled; the ACL - scored low on Self-Control.

The personality data suggests the general conclusion that moody subjects can be distinguished from non-moody subjects in terms of personality variables revealed by standard tests. "Moody" subjects may be different from their "non-moody" counterparts in terms of their needs, values, actions, and modes of responding. There may also be a reliable pattern of personality variables associated with the different types of "moody" individual.

There is also sufficient evidence to conclude, conceptually, that the concepts of moodiness associated with the two different criteria should be given a degree of logical independence, and empirically, that the unique variables enclose different segments of personality dispositions.

However, the existence of a core set of variables common to both criteria requires the conclusion that conceptually, the two concepts of moodiness investigated may span a more fundamental logical entity; and empirically, there may be a more basic entity, pattern, or factor underlying the revealed variables.

Suggestions for Future Research

The effect of the MAT on mood

This study could be carried several steps further by applying the same

treatments (Session 1 through 4) to samples from more general populations (males and females with a wider range of age and occupation) and other specifically chosen subpopulations. A defensible confidence in the MAT as an effective instrument for mood change might be achieved, if the present results were confirmed for both males and females in each of these categories: students vs. non-students (is the MAT only effective because of students' verbal facility?); students vs. a clinical sample, especially manic depressives and unipolar depressives (is the MAT effective with a diagnosed and treated sample?). It is possible that the non-remunerative condition of the study resulted in a disproportionately high percentage of "moody" subjects in the sample, i.e. subjects may have volunteered in order to obtain information about their mood states. While this was desirable for the purposes of the study, in future studies it would be important to have a remuneration vs. a non-remuneration condition.

The MAT has not been compared with other clinical treatments; it would be informative and useful to compare the individual MAT effect with, for example, a general discussion session, a session employing imagery techniques, a session utilizing a psychoanalytical approach, and a session devoted to behavioural management.

Personality Variables

In order to determine a series of "mood profiles" for the different types of "moody" individual, it would be important to utilize the same criteria of identification and the same personality tests across different populations. Additional cognitive, affective, and behavioural measures could be added in order to build up the correlated elements and to refine the overall picture. The ten common personality variables may constitute a "mood syndrome" for female university students but are not necessarily valid for other populations; this "commonality" should be tested across other populations, and if possible integrated in terms of higher-order personality or temperamental patterns.

The periodicity of mood

With respect to a female sample, it would be a contribution to our understanding of mood if the degree of correlation between mood states and phases of the menstrual cycle could be firmly established. It is possible that the interaction effect varies from individual to individual, and

perhaps even with some variation from menstrual cycle to menstrual cycle for the same individual. Some estimate of the general correlation could be determined by employing a large sample of subjects making a daily rating of mood level, completing the Mood Analysis Questionnaire, and recording the day of the menstrual cycle. Additional information that could relatively easily be obtained through the same design would be a record of dream content and its possible effect on subsequent mood state, and the effect of diet on mood state, especially times of eating, frequency of eating and types of food consumed.

Where it was possible to establish a definite periodicity, it would be important to determine whether having conscious knowledge of the approximate phases would enable the subject to pace herself, anticipate, and take measures to reduce the intensity of the negative phase; for example, would planning for a reduced work load, increasing positive and energetic activities and avoiding known exacerbating environmental situations result in smoother functioning and more adaptive and satisfying interactions?

Further insight into the role of the menstrual cycle might be forthcoming from a comparison of mood changes in a female psychiatric population with mood changes in a female non-psychiatric population where the subjects suffered from a loss of periods, difficult or painful periods, and irregularly occurring periods. A control would be a female non-psychiatric sample with no menstrual disturbances.

There is some evidence that lithium carbonate may meliorate premenstrual depression, and negative mood states in "emotionally unstable" adolescents (Fieve, 1976); the lithium carbonate treatment could be compared with a treatment programme that incorporated knowledge of the menstrual cycle phases with behavioural planning and environmental manipulation (as indicated above). The most powerful treatment might be a combination of these two types of treatment. However, it should be noted that lithium carbonate is contraindicated in cases of heart and kidney disorder (Fieve, 1976; Parish, 1977). For these individuals and perhaps for many others, advanced planning and supportive therapy may be the best treatment.

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