An investigation of the relationship between the psychological needs, values and elements of personal adjustment of a group of male juvenile delinquents in a reformatory and its usefulness in a dimensional framework as a basis for a differential rehabilitation programme

by

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This study was undertaken after several years of experience working with the pupils of the Constantia Reformatory. The treatment of juvenile delinquents presents many problems. The dedication and enthusiasm of the educators who are responsible for the rehabilitation of these young people are often inadequately rewarded in terms of the success of their efforts.

This study attempts to make a contribution to the development of an effective treatment programme for juvenile delinquents.

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CHAPTER 1

INTRODUCTION

1 Some problems relating to juvenile delinquent treatment programmes

A considerable mass of knowledge about the etiology, prevention and treatment of juvenile delinquency has given rise to a variety of treatment programmes over the two decades since 1960. These treatment approaches range from the community-oriented, non-restrictive methods to the strict incarceration of juvenile offenders. Rather than having solved the problems relating to the treatment of delinquents, the knowledge and efforts have created more questions than answers as to what the best approaches should be.

In spite of all the efforts by correctional institutions to "reform" the young people placed in their care, Wilson (1975) states that these institutions are not effective in reducing recidivism whatever else they may accomplish. The treatment success rate, usually based only on recidivism statistics, shows a steady decline to below thirty per cent in some American programmes (Lipton 1975). Dinitz et al (1980) found the effectiveness of correctional programmes to be "ineffective at best and devastatingly negative at worst" (p149).

Controversy and scepticism have arisen over correctional methods due to the gap between aspirations of programmes aimed at coping with juvenile delinquency and the actual accomplishments. Present treatment programmes have come under close scrutiny in recent years (Beker 1972; Coffrey 1975; Durkin 1975; Hackensack 1978; Lipton 1975; Siegel 1973; Schichor 1980; Vinter 1976; Wilson 1975; Wood 1974). Everyone appears to agree that there is a need for the re-assessment of programme structures and their treatment procedures.

Spencer (1973) states pessimistically that our research knowledge is barely good enough to provide even a crude answer to the question of what is the right form of treatment of delinquent youth. Even within particular programmes there exists little consensus as to what specific interventions or changes brought about in the behaviour of delinquents are most likely to reduce their delinquency. Elliot (1980) advocates that for this reason one should formulate specific requirements for any programme and these requirements must be met for the programme to be successful.

The most basic requirement is that the underlying theory on which the programme is based must be sound. It is furthermore essential to specify the practical programme implications of the theory, that is, to

translate the theory of delinquency into operational concepts. This is not an easy task and Coffrey (1975) notes that it is because of the lack of operational concepts that existing treatment programmes seldom lend themselves to proper evaluation. The result is that the only outcome criterion generally employed is that of recidivism.

Prins (1977) contends that there is no clear rationale for the particular programmes now employed and the failure to operate from an explicit theoretical model creates the biggest problem in programme evaluation. Unless such a rationale exists no conclusions can properly be drawn as to what the real impact of the programme is.

No programme can be improved unless its actual accomplishments are known and can be evaluated. Two aspects must be considered when evaluating any delinquency treatment programme. First, the treatment process needs to be evaluated. Those immediate objectives which aim at changing certain behaviour aspects of the delinquent pupil must be assessed. The pedagogical neglect which characterises the juvenile delinquent requires educational objectives which aim at both the general scholastic advancement of the child and the clarification of his values, beliefs, attitudes, feelings

and personal relationships. It is easy to evaluate the more concrete psychomotor behavioural changes such as improved skills. However it is much more difficult to assess the change in other aspects of cognitive growth or inner changes (Hackensack 1978). Proper psychometric techniques must be employed for this process of assessment. This involves the pre-treatment and post-treatment testing of the affective psychological variables before any claim can be made that the programme has any short term effect on the child.

Second, the impact of the treatment needs evaluation. This relates to the long term effect which the programme has on the child i.e. whether he becomes a recidivist or not. Programme evaluation in this respect tests the validity of the underlying theory. Proper follow-up studies of individual cases after release are needed.

Fishman (1974) found that the only two factors which had any bearing on post release outcome were prior criminality and prior involvement with the law. Whatever had occurred during the treatment period could not be related to the outcome. To arrive at objective standards by which to judge the outcome of the treatment it is necessary to specify the intervening theoretical variables which link the treatment objectives to a reduction in the subsequent delinquency of the child.

A clear rationale or conceptual framework should influence the programme in several ways. It should

(i) influence the manner in which the immediate programme objectives are implemented,

(ii) facilitate the evaluation of the treatment process itself by measuring the attainment of these short term objectives,

(iii) provide criteria whereby the programme success in terms of impact can properly be measured instead of using recidivism statistics.

Only if the above mentioned process has been applied to a programme can it be justifiably ascertained whether the programme has been a success or a failure. In effect it requires a programme of management by objectives. Douds et al (1978) found that such management by objectives resulted in a 10% recidivism compared with 42% for those young people not included in the programme.

The treatment of the juvenile delinquent should not necessarily be considered to be synonymous with the control being exercised upon him. The question which arises is whether the delinquent person should be detained, that is incarcerated, or whether he should be treated outside an institutional setting through an integrated community based approach. Spencer (1973)

argues that it is sometimes necessary to control the child by some means or other before submitting him to any treatment procedure.

Wilson (1975) also argues in favour of deterrent incarceration since it must be accepted that some "offenders" by nature of their uncontrollable behaviour, which is sometimes also criminal, need to be restrained. However the critics of the institutionalisation approach claim that rehabilitation is usually subverted through an over emphasis on security. Bakal et al (1979) mention as their chief objection to institutional detention the incompatability of secure custody with therapeutic treatment. The punishment aspect of detention must necessarily affect the therapeutic process negatively. Bakal also mentions the dependency upon the institution produced in the inmates as a second failure factor in detention treatment. It has however been reported that incarceration does at least tend to slow down the criminal activity of the juvenile offender (Dinitz et al 1980). Thus Coffrey (1975) maintains that any incarcerated juvenile delinquent is being treated - but one may well ask how sucessful is such treatment?

The criticisms of institutional treatment and the failure of such programmes have prompted a move towards de-institutionalisation (Bakal et al 1979). In a

drastic approach it was decided that the disadvantages of institutional treatment and the inept manner in which these centres were administered outweighed any other reasons to maintain these centres. They were subsequently closed in the State of Massachusetts and alternative community based centres were set up to accommodate juvenile delinquents. These centres consist of homes which house a small number of youngsters in a family setting. They are not isolated from the community in that they attend local schools and take part in community activities. The effects of this drastic approach are still being assessed but first indications are that the community centre approach cannot cope with a small group of youth who need stricter control.

It is reasonable to assume that present programmes which aim at prevention and treatment of juvenile delinquency will be ineffective in eliminating delinquency completely. It will not simply disappear by improving the sociological settings which are presently producing these behaviour problems in children. Maladaptive behaviour in children is still produced in capitalistic as well as socialistic societies (Coffrey 1975). Societies virtually by definition exhibit behavioural norms and these norms will be violated by deviant youth.

There will always be a small group of young people who

will require a special kind of educational treatment due to their deviant behaviour. Much of this behaviour is due to emotional shortcomings of the parents. Indications in South Africa are that stress factors in the family are causing a greater number of children to be removed from parental care. Institutional care for children by the state must have adequate programmes so as not to result in financial and sociological failure. A more scientific and efficient approach to programme development for institutionalised young offenders is required. Such programmes will also demand adequately trained staff and the financial resources to make them optimally successful.

2 Purpose of this study

The purpose of this study is to conduct an investigation into the psychological needs, values and personal relations of a group of white male juvenile delinquents in one particular correctional institution. An attempt will be made to determine what the needs, values and personal relations of these delinquents are and the interrelationships between these psychological variables. A differential treatment programme will be established which takes cognizance of the above mentioned psychological constructs and their interrelationships.

In terms of Elliot's proposal referred to earlier certain steps are needed in devising a treatment programme with specific objectives:

(i) Knowledge of the juvenile delinquent group is necessary with respect to the present state of their needs, values and personal relations.

(ii) This knowledge must be used to devise a programme with the specific objectives of impinging upon the needs, values and personal relations of the pupils, that is, to influence their values through satisfaction of their needs and improvement of their personal relations.

(iii) A classification of the pupils must be made on the basis of their needs, values and personal relations in order to devise a differential treatment programme more specifically tailored to the requirements of the individual.

The aim of the programme must ultimately be to effect a measurable change in the pupils. To effect such a change one must consider those motivational factors which are basic to their behaviour. The rationale is that for a person to change his behaviour, he has to alter his values or goals in life. Since these values are only secondary aspects in relation to his needs, one must also cater for those needs which are related to his values in order to effect a value change. A third aspect

which is related to needs and values concerns the person's interpersonal relations. The individual can only find need satisfaction and strive towards his goals within his social milieu. This milieu includes his family, peers, teachers and other adults. A good knowledge of a pupil's needs, values and personal relations is thus a prerequisite for establishing a set of conditions within which active growth towards self-realisation can occur.

Such a multifactor approach to the needs, values and personal adjustment aspects could be broad enough for a treatment of the total person and yet specific enough to take cognisance of the individual's characteristics. Dinitz (1980) maintains that one reason why correctional programmes fail is because they do not distinguish between different types of juvenile delinquents or young offenders. For this reason it is necessary to make a classification of the pupils, in this case based on differences in the needs, values and personal relations in order to make possible a differential treatment approach.

Juvenile delinquents are committed to a treatment institution for a variety of reasons and by means of different commitment procedures. The result is that

even though the pupils of the institution are generally termed "delinquents" one must assume that individual or even group differences exist. Where an institution has to cater for a relatively large number of pupils (in excess of 100) it will be necessary to employ a variety of methods with specific approaches so as to have maximum effect on as many pupils as possible (Eldefonso 1976).

A large proportion of the pupil population to be investigated has been in institutional care for a considerable period of their lives prior to admission to this school. An initial part of this study will comprise a comparison of the institutionalised and the non-institutionalised pupils. It could be argued that the group of institutionals would need a different treatment approach from the non-institutionals because of the "deprivation" factor relating to the first group. To justify a differentiation on this basis it is necessary to compare these two groups with respect to their needs, values and personal relations. Should they be found to be essentially similar with respect to these variables, a different basis for a classification into groups with similar characteristics is needed.

It is expected that these two groups of pupils will not differ all that much with respect to the variables

mentioned. One needs to guard against an approach which overemphasises the etiology of the delinquency. It should not matter how the differences in characteristics of the different subgroups arose. The previous life experiences of the pupils may or may not have differed. What is of importance is that the present state of each individual should be defined and these findings incorporated in a dynamic treatment programme which takes into account his present needs, values and personal relations.

In terms of the etiology of the delinquency this is a post-hoc study. No claims as to the cause and effect relationship in the delinquent behaviour may justifiably be made. Neither are conclusions possible as to the effect which institutionalisation has had on some pupils. Several factors act selectively to predispose certain children to be removed from parental care. The placement of a child in institutional care is related to intelligence, social morality and economic factors within the family as well as the inconsistent application of judicial criteria.

It is accepted that institutional care does not always succeed in providing optimum facilities for the adequate psychological-emotional development of the child. However the elements of emotional neglect which are usually

ascribed to institutions can be present in family settings of pupils who do not get referred to institutions at an early age. To ascribe any differences between the institutionalised and non-institutionalised pupils as due to the former having been institutionalised, proper control of all the variables involved is needed. Since this is not done in this study the only conclusions possible are with respect to present state differences in needs, values and personal relations.

One further aspect which relates to juvenile delinquency which will be included in this study is that of intelligence. Specifically verbal intelligence has been found to be either a cause of the delinquent behaviour or at least a contributing factor towards maladaptive behaviour (Cowie et al 1968, Glueck et al 1968, Hirschi 1977, Woodward 1955). It has been found that delinquents are deficient in those aspects of intelligence which relate to the mental abilities which are likely to be involved in the general processes of socialisation and adjustment to the realistic demands of life. Since these are the aspects reflected in the verbal I.Q. score, this factor will be included in the investigation of the needs, values and personal relations of the pupils. A poor verbal ability not only prevents the child from expressing his needs adequately, but also places a

constraint on his ability to cognitively establish his goals or values and to adequately relate to other people.

It should be noted that the pupils used in this investigation do not necessarily represent the delinquent population as a whole. Cohen (1971) and Gold (1970) state that one cannot justifiably assume that the delinquents in any one institution are representative of delinquents in general. Quay (1965) gives the definition of a delinquent as "a person whose misbehaviour is a relatively serious offence which is inappropriate to his level of development, is not committed as a result of extreme low intellect, intracranial organic pathology or severe mental metabolic dysfunction, and is alien to the culture in which he has been reared. Whether or not he is apprehended or legally adjudicated is not crucial" (p23).

A large number of delinquent youth whose descriptions fit the above definition are never caught and referred to court. Those who do appear in court and are incarcerated are sent for corrective training in terms of court decisions which reflect criteria which are not always consistently applied. It is a fact that delinquents who find themselves in a corrective institution are committed for many different reasons. Hence an institution's population is indeed heterogeneous

with respect to their degree of delinquency. It is therefore essential that some well defined criteria be used to classify them into meaningful groups for treatment purposes.

3 The specific goals of this study are

3.1 to devise a differential treatment programme for juvenile delinquents in a corrective institution

3.2 to determine whether the needs, values and personal relations of juvenile delinquents can be used as a basis for devising such a differential treatment programme

3.3 to investigate whether the length of institutionalisation has an effect upon a juvenile delinquent's needs, values and personal relations. This is done because children who have been institutionalised for a considerable length of time may be detrimentally affected and need a different treatment programme from those who were not institutionalised

3.4 to make an in-depth analysis of the needs, values and personal relations of the juvenile delinquents of a particular institution and to determine the

structure of these three psychological domains

3.5 to investigate the interrelationship of the needs, values and personal relations of juvenile delinquents

3.6 to devise a procedure for the classification of juvenile delinquents into subgroups based on differences in their needs, values and personal relations.

CHAPTER 2

THEORETICAL ASPECTS OF NEEDS, VALUES AND PERSONAL ADJUSTMENT

1 The relationship between needs and values

Human behaviour and more specifically moral behaviour is usually described by relating such behaviour to the psychological needs and values of people. An overview of the considerable mass of literature on human needs and values reveals a common theme which suggests the existence of a relationship between these two aspects of personality. This relationship appears to be very unclear and in some instances writers and theorists even use the terms 'needs' and 'values' interchangeably as if no distinction exists.

Needs are considered to be primary motivational factors in theories of human behaviour (Alport 1955, Maslow 1954, Murray 1938). A similar centrality in the motivation of action is ascribed to values (T.G. Alport 1960, Bandura 1963, Eysenck 1960, Havighurst 1953, Johnson 1979, Maslow 1959, Morris 1956, Rokeach 1973).

Murray (1938) describes a need as "a construct ..... which stands for a force ..... in the brain region, a force which organises perception, apperception,

intellection, conation and action in such a way as to transform in a certain direction an existing unsatisfying condition" (p123).

Adams-Webber (1979) uses the ideas of the personal construct theory of Kelly (1969) to define a need. In terms of this theory a need is a construct or a convenient hypothetical concept which is useful for purposes of describing and explaining what may underlie or direct a person's activities. A need is thus an instigator of motivation and it organises the way in which a person perceives, thinks, feels or acts.

Murray maintains that a dynamic theory of personality must accept the fundamental goal-directed character of behaviour. It should attempt to discover and formulate the internal as well as the external factors which determine such behaviour. Thus a person's values must be included in any analysis of needs.

He differentiates between needs and values by describing a need as "a push from the rear" and a value as a "pull from the future". He further defines a need as "the initiating apperception of an obstruction which leads to a desire ..... and in a quiescent state the value is the cognative correlate" (p75).

Thus an increase in need activity leads to an intention, that is, the decision to perform a certain act, and then to the experience of striving towards a more desirable state. Murray defined thirty six needs as being representative of the total domain of human motivation.

Maslow (1954) defines needs as both physiological and psychological aspects of a person's being. Unsatisfied needs cause a disequilibrium of the organism which stimulates certain goal-directed activities. He calls these goals values and thus does not properly distinguish between what is a need and what is a value. In later writings (Maslow 1964) values and needs are even equated.

Whatever distinction is drawn between values and needs by the theorists, values are said to be as important as needs as determinants of a person's behaviour. Dewey emphasises the centrality of values as determinants of behaviour by stating that the field of values is the field of concrete behaviour. Morris (1956) similarly assigns a central place to values in his theory of human behaviour.

It is necessary to define what is meant by values to distinguish the concept from that of needs and goals. Tisdale (1961) groups the various definitions of values

according to the different theories and methods of research employed. These different theories give rise to five different approaches to the definition of values:

(i) those who define values as needs or need manifestations;

(ii) those who admit to a biological basis of values and prefer only to stress their motivational nature as being predispositions which operate prior to behaviour;

(iii) those who believe that values arise when situations demand behavioural choices, thus emphasising the external nature of values;

(iv) those who ignore the organism and equate values with intellectually held concepts and beliefs;

(v) those who see values as situational relationships as yet unsupported by research.

Tisdale has formulated a useful summary that "values are inferred motivational constructs associated with perceived differences in goal-directed behaviour and indicated by the selection of action alternatives within social situations" (p1244).

Values, like needs, are thus hypothetical constructs whereas goals are the more concrete "objects and activities with respect to those objects which fulfil

or satisfy a want" (need) (Krech et al 1962; p101). It is in the sense that values and needs are both hypothetical constructs that Murray uses the two terms interchangeably.

The confusion which seems to arise through the unspecified use of the two terms could be due to a close association between the two constructs.

Values should be further distinguished from attitudes. Fishbein (1967) distinguishes between them as being two separate cognitive elements of behaviour. An attitude is defined as a learned (conditioned), affective response towards an object which a person "believes in" or "values". Fishbein states that an attitude is a response to a definable stimulus whereas a value is the stimulus.

Attitude is a term used more in a sociological setting. It is a culturally based mental disposition representing a motivational factor which is linked to a concrete external object. This distinguishes an attitude which motivates a person "to have" or "to do" something concrete from a value which motivates the person "to be". This latter goal relates to the internal state of the person.

Rokeach (1973) in his theory of values combines the theory of needs with that of values in an operationally

useful way. He defines values as "the cognitive representations and transformation of needs" (p19) and as also representing the demands of society and social institutions.

He considers values to be the joint result of psychological as well as sociological forces acting upon the individual. A value is a person's conception of something that is personally or socially preferable to him. It is a preference for a desired end state of his existence, together with a desirable mode of conduct to reach that particular end state.

In this sense a value refers to a single belief of a specific kind which has associated with it a desirable mode of conduct guiding the individual's actions, attitudes and judgements.

Rokeach also postulates that values and needs are specifically related and that a person's important values may indicate which needs are compelling to him. This relationship implies that a person reveals his needs when he expresses his values. However this need-value relationship is not isomorphic and a particular need could be transformed into one or more values.

In further research carried out by Rokeach he found that value measures can indeed be taken as measures of needs but that the relationship is complex. It requires caution and a thorough knowledge of both a person's needs and his values before relationships can be inferred. The basic tenet is that a need always operates in the service of some value.

Maslow (1954) proposed a theoretical hierarchy of needs which he later also associated with a hierarchy of values (Maslow 1959). This hierarchy of needs represents the sequential order in which a person's history of need satisfaction develops from the "lower" physiological to the "higher" psychological ones:-

(i) physiological needs, e.g. hunger, thirst
(ii) safety needs, e.g. security, order
(iii) belonging and love needs, e.g. affection, identification
(iv) esteem needs, e.g. prestige, success, self-respect
(v) need for self-actualisation, i.e. the desire for self-fulfilment.

This hierarchy has proved difficult to measure in practice (Liebrand 1977). It nevertheless remains likely that some values are more desirable and of a higher order of psychological fulfilment than others (Maslow).

Rokeach also proposed that a person's values are not all of equal importance to him at any particular stage and may thus be hierarchically arranged. The difference between Maslow's and Rokeach's concept of values seems to be that Maslow deals more with the end states of the individual whereas Rokeach's concept also relates to the modes of behaviour in reaching towards these end states. Rokeach's interpretation represents the dynamic relationship between a need and the associated values.

The transformation of a need into values takes account of social desirability. Hence the need for aggression is transformed into the values of ambition and an exciting life. Values in the Rokeach sense represent societal demands.The manner in which a person applies himself or behaves thus depends on his interpretation of the demands of society. This he can only achieve through experience by learning which modes of behaviour are open to him in his striving towards a desirable end state.

Needs and values are thus aspects of personality which must be analysed and related if we want to know what the individual's conception of his environment is. The third factor in this trilogy of a person's motivation is his personal relations. The relationship of needs and values to personal relations will be surveyed in the section that follows.

2 Relationship of needs and values to personal relations

The degree to which a person's personal relations are good or bad determine the extent to which he is capable of satisfying his needs or striving towards his goals. It is thus essential to include personal relations as an element in behaviour motivation in a study of the needs and values of juvenile delinquents. By doing this a more holistic view of a person's behaviour can be arrived at through an integrated approach to research on behaviour as advocated by Bannister (1977).

This plural aspect of needs and values which focuses on the individual in his social context forms the basis of much of the theory and research on juvenile delinquency (Feather 1971 a; Feather and Cross 1975; Gleuck and Gleuck 1968,1970; Inkeles 1970; Johnson 1976; Kulka et al 1978).

Research on the interrelationship of needs, values and personal relations is central to the idea that theories of behaviour must be developed within the context of environment since it provides both the stimulus and the response (Petrinovitch 1979).

In a study of the needs and values of a juvenile delinquent it is essential to establish what the status

of the individual is with respect to his personal relations with his family, other adults and his peers. The problems which he experiences in the realisation of his needs and the achievement of his goals involve problems of personal relationships. Conflict arises when value differences exist between the juvenile delinquent and those people with whom he has to associate in his daily social interaction. Deviance is largely a product of the moral boundaries, i.e. the limits which the social system places on any person (Lauderdale 1976). In a total treatment approach to the juvenile delinquent one must accept that personality growth is largely dependent on the aggregate quality of the social relations of the individual with his peers, teachers, care staff and parents. Such an approach will stress the transactional nature of human behaviour which involves the reciprocity of human beings shaping their environment and being shaped by it.

3 Value formation

The question which arises is how needs and values came to be related. For an answer to this we must consider the learning process which is basic to the development of cognitive mental structures such as we have defined needs and values to be.

In this respect Piaget (1966) refers to the social factor as being crucial to the development of cognitive structures. He states that those influences on the individual which provide the stimulus for development are "maturation of the nervous system, experience acquired in the interaction with the physical environment and the influence of the social milieu" (p293).

The dependence of the process of value formation on the social factor is discussed by Vernon (1973) in terms of symbolic interaction. The behaviour which is of concern to Vernon is not internally biologically determined but that which results from social and group interactional experiences.

According to Morris (1956) the determinants of values are

(i) social in that they are the learned, cultural antecedents of behaviour

(ii) psychological in that values are part of a person's character and temperament

(iii) physiological in the sense that persons of different age and even physique may have different values. However a person's age or physical characteristics can only be seen to be determinants of values in the sense that such differences are due to different learning experiences.

Havighurst (1953) distinguishes between inner (neurological) and outer (social) forces which determine the developmental tasks to be mastered by the individual to become a successful human being. These tasks arise from the values of the emerging personality. Thus a person has no values at birth but acquires them through a process of learning and identification.

Rokeach (1973) and Feather (1971 a) state that a person's abstract value structure is formed as the individual copes with the influx of information from both his physical and his social worlds. Rokeach's view of the developmental aspect of value formation conforms to Piaget's scheme of development of cognitive structures. This means that the development of a person's value structure will be affected by his interaction with other people in his social milieu.

During a person's development abstract structures or general schemata are formed as he copes with the influx of social, physical and environmental information. These schemata serve as reference standards against which new information is tested or as rules by which he tests reality. In this way a person constructs his own personal theory of life based on his past encounters (learning) which tend to be normative to his particular culture.

Rokeach maintains that a person's value structure is relatively stable. However it also forms a necessary part of his adaptation and is thus susceptible to change. It is possible to bring about such change through education to provide the individual with continuity and meaning in a changing environment. A person achieves satisfaction of his needs through social interaction. Since the values are the cognitive concomitants of the needs, a person acquires and adapts his value system in his social relationships with other significant persons in his social milieu. In terms of construct theory Adams-Webber (1979) puts it that "as children gain experience in interpreting their social environment, systematic changes occur in the content as well as structure of their personal construct systems" (p203).

In spite of the differences which exist in the manner in which different theorists view a person's needs and his values, the general contention is that both these elements of personality are major determinants of a person's behaviour. However, a person is not born with a set of values - it is necessary to establish by what process he acquires his set of values.

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4 Value formation and the learning process

Value formation is a concomitant of the learning process. Hackensack (1978) states that affective education focuses on people's feelings, beliefs, attitudes, relationships and values. Havighurst (1953) maintains that there are inner (neurological) forces and outer (social) forces which cause a set of developmental tasks to be mastered by the individual to become a successful human being. These tasks, which involve learning to choose between alternative ways of finding satisfaction for his needs, arise from the emerging values of the individual. Pugh (1978) even maintains that the development of values is an ontologically ingrained learning quality of the human species. A child must develop, through learning, a system of values which enables him to survive. If this value system is maladaptive, the values must be changed to enable him to survive within his social milieu.

According to Havighurst living requires the choosing between values. The growing child must develop his own set of values by means of which he must adapt himself to the group to which he belongs and come to terms with his peers. Havighurst contends that the isolated child fails to internalise a set of values of his own. A child who does not at some stage identify with his peers but only

with adults is similarly at a disadvantage as he does not learn to make choices and when left on his own goes "adrift". The significance of this is very relevant to the institutionalised child who, through loss of a meaningful relationship with adults, could suffer a retardation in the development of standards of behaviour.

Havighurst's contention that value formation involves learning how to choose between alternatives, has formed the basis of research on sociological judgement. Cerino (1976) developed a scale to assess the ability which an individual has to evaluate the social and legal consequences of various choices of action. He found that some offenders committed crimes because of poor sociological judgement, whereas others understood the consequences of their actions but chose to act illegally despite their knowledge. The cognitive structures of those who exhibited poor judgement were thus immature whereas the others had well developed structures which gave rise to conscious deviant behaviour.

This relates to the different levels of moral reasoning which Köhlberg (1964) claims to exist. The relationship between moral reasoning, which involves the choice of alternatives of social responses, and terminal and instrumental values has been investigated. Lockley (1976)

found that the level of moral reasoning is related to the choice of terminal and instrumental values and that educational level also relates to the choice of values. Education thus affects the manner in which a person chooses his values.

Value formation appears to be part of a general learning process which determines how values are incorporated into the cognitive structure. Murray (1938) states that learning problems characterise all juvenile delinquents. He ascribes this to neurological deficits which are manifested in tasks of temporal sequencing and perceptual structuring. These children are thus deficient in general adaptive functioning.

Pooly (1978) states that the ability to learn is related to behaviour. Treating the juvenile delinquent also requires teaching him communication skills by concentrating on developing psycho-liguistic ability i.e. reading, listening and other language abilities.

The treatment of juvenile delinquency thus requires a total approach to the individual in all three domains of learning. Hackensack (1978) advocates that attention must be given to

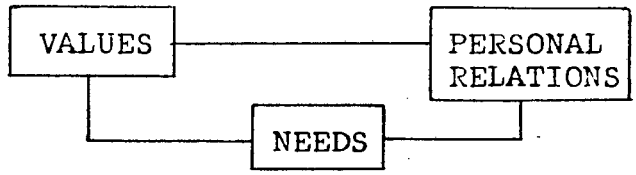
(i) the cognitive domain of intellectual or thinking activities

(ii) the affective domain of feelings and attitudes

(iii) the psychomotor domain or physical activities of the juvenile delinquent.

5 Implications for treatment

A relationship between needs, values and personal relations can serve as a basis for a treatment approach to juvenile delinquency by considering the following simplistic schematic interaction



(i) Need-value interaction

A person's needs can be considered to be the basic, ontological motivating forces for his behaviour. The manner in which these needs are to be satisfied relates to the values which are associated with each need. Maladaptive behaviour can be considered to be due to an inability to obtain proper need satisfaction because of improper values, which are the consequences of inadequate learning experiences. By learning new values which are appropriate for proper need satisfaction, the developmental process can be affected positively.

(ii) Need-personal relations interaction

The individual can only obtain need satisfaction in the social environment. Maladaptive personal relations can prevent this. By teaching the individual new modes of behaviour and improvement of his personal relations he will attain proper need satisfaction.

(iii) Values-personal relations interaction

Values are formed through learning experiences in the social environment. Poor or inadequate personal relations result in values which give rise to maladaptation and social conflict. The creation of healthy personal relations would facilitate the foundation of those values which ensure survival.

An analysis of the psychological status of the juvenile delinquent with respect to his needs, values and personal relations would provide an integrated picture of the person. An education programme which takes cognisance of the above theoretical relationships between these three psychological constructs would aim at a total approach to creating change in the individual. The overall goal of this transactional perspective of the behaviour of the juvenile delinquent will be to teach the individual to be a more effective functioning unit in society.

CHAPTER 3

METHODOLOGY

In order to investigate the nature and interrelationship of the needs, values and personal relations of juvenile delinquents it was decided to make an analysis of a group of 182 incarcerated boys in a treatment centre.

1 The sample

The sample comprised the total population of the Constantia Reform School. Only five pupils were excluded because they could not read sufficiently well to do the tests and questionnaires.

The 182 boys were divided into two groups: the institutionals (N=56) and the non-institutionals (N=126).

The institutionalised group comprised all those pupils who had been placed in institutional care away from their parents for a period of more than three years before the age of fourteen years. The non-institutionals comprised the rest of the school population and were boys who had been committed to the school directly from courts or who had been transferred to the school from Industrial

Schools. Thirty nine (69,6%) of the institutional group were removed from parental care before the age of ten. Those who were removed after the age of ten but before the age of fourteen years had been in institutions for periods ranging from 3,6 years to 7,8 years (mean 5,2 years).

The selection of the age of fourteen as the criterion for deciding that a boy should be classified as an institutional is based on Piaget's theory of development of cognitive structures (Piaget 1966). Those pupils who were removed from parental care before fourteen would have had different social factors influencing the development of their structures of psychological needs and values from the non-institutional pupils. This covers their developmental period before adolescence at which stage they should have reached the level of formal operational thought.

The second criterion of institutionalisation for a period of more than three years takes cognizance of the fact that these pupils were under peer group influence rather than under parental influence for a large part of their early adolescent years. This would have affected the development in their need and value structures differently as compared to the non-institutional pupils. The age distribution and period of institutionalisation is given in Table 3.1.

TABLE 3.1 Age distribution and period of institutionalisation of two groups of juvenile delinquents

	Age (yrs)			Period of institutionalisation (yrs)		
	range	mean	SD	min	max	mean
Institutionals	14,9 - 20,3	17,81	1,21	3,60	19,40	8,70
Non-institutionals	15,2 - 21,8	17,90	1,25	less than 3 yrs		

There is no significant difference between the mean ages of the two groups ($t=0,44$, $p=0,66$).

2 The variables

2.1 Needs

Fifteen of the need variables of Murray (1938) as measured by the Edwards Personal Preference Schedule were used. These personality variables purport to represent the manifest needs of the individual. The names assigned to the variables are those used by Murray.

1 n-achievement: to do one's best, accomplish tasks, do a job well, be successful in one's efforts.

2 n-deference: to accept the leadership of others, take suggestions, follow instructions, praise others and to do what is expected.

3 n-order: to have one's things neat, organised and in order, to have things in one's life arranged so that they run smoothly without change.

4 n-exhibition: to be the centre of attraction, to have others notice one's appearance, to attract the attention of others by one's speech and appearance and to be admired for one's cleverness.

5 n-autonomy: to have independence of movement, speech and generally be non-conformist; to avoid responsibilities and obligations and to criticise people in authority.

6 n-affiliation: to have many friends to whom one can have strong attachments, to be loyal to them, help them and share things with them.

7 n-intraception: to have insight into how other people feel about matters, what others think and to understand their thoughts and motives.

8 n-succourance: to have sympathy and understanding from others, to have their help, encouragement,

affection and to receive kindness from them when one needs encouragement.

9 n-dominance: to be regarded as a leader, to make group decisions, persuade and influence others, to supervise and direct others and tell them what to do.

10 n-abasement: to blame oneself for things that go wrong, to give in to others, feel inferior to them and to feel depressed by the inability to handle situations.

11 n-nurturance: to show affection for others, to help friends, assist and forgive others and generally be altruistic towards them.

12 n-change: to do new things, meet new people, go to new places and seek new experiences and changes.

13 n-endurance: to maintain an activity until the job is completed, to persevere at a problem, job or task until it is finished; generally to endure anything to experience a sense of having completed something.

14 n-heterosexuality: to engage in social activities with persons of the opposite sex, to be involved in discussing and reading about sex, to be sexually stimulated.

15 n-aggression: to become angry, blame and criticise others, to attack others' points of view, to take revenge on others and be interested in violently maintaining one's self.

2.2 Values

The eighteen terminal and eighteen instrumental values of Rokeach (1973) were used. The terminal value variables are those desired end states of existence or long term goals which are important to the individual and towards which he strives. Some of these values are intrapersonal representing self-centred personal aims. Others are social, interpersonal or society oriented representing relationships which one would like to have with members of the family, with other people and society in general.

These terminal values are as follows:

1 to have a comfortable and prosperous life

2 to have an exciting, stimulating and active life

3 to have a sense of accomplishment and make a lasting contribution

4 to have a world at peace free of conflict and war

5 to have a world of beauty of nature and the arts

6 to have equality and brotherhood with equal opportunities for all

7 to have family security and to take care of loved ones

8 to have freedom, independence and a free choice

9 to have happiness and contentedness

10 to have inner harmony, peace of mind without inner conflict

11 to have mature love and sexual and spiritual intimicy

12 to have national security and protection against outside attack

13 to have pleasure and an enjoyable and leisurely life

14 to have salvation, eternal life and to be saved

15 to have self-respect and good self-esteem

16 to have social recognition, the respect and admiration of others

17 to have true friendship and close companionship

18 to have wisdom and a mature understanding of life

The instrumental values represent the ways in which the individual will direct his immediate actions to achieve his terminal value states. This involves the type of activities and relationships with other people which the individual feels are desirable and of immediate importance to him.

These instrumental values can be described as follows:

1 to be ambitious, hardworking and to aspire to get somewhere

2 to be broadminded, unprejudiced and openminded

3 to be capable, competent and effective and to do tasks well

4 to be cheerful, joyful and light hearted

5 to be clean, tidy and neat

6 to be courageous and to stand up for one's beliefs and defend them

7 to be forgiving and willing to pardon and forgive others

8 to be helpful and work for the welfare of others

9 to be honest, sincere and truthful

10 to be imaginative, daring and create new things

11 to be independent, self-reliant and self-sufficient

12 to be intellectual, intelligent and clever

13 to be logical, consistent, rational and to have things in order

14 to be loving, affectionate and tender

15 to be obedient, dutiful and respectful

16 to be polite, courteous and well-mannered

17 to be responsible, dependable and reliable

18 to be self-controlled, self-disciplined and restrained

2.3 Personal relations

The twelve personal relations variables as measured by the Personal-Home-Social and Formal Relations Questionnaire of the Human Sciences Research Council of South Africa were used. Eleven of these variables are measures of the dynamic expressions of the person's relationships in four interpersonal fields. These components of personality refer to the individual's relation to the members of his family, his peers and other adults. The twelfth variable concerns the honesty with which the questionnaire is answered by the testee.

The twelve variables can be described as follows:

1 self-confidence refers to the confidence which the person has in his own ability to be successful. A high score indicates a high degree of self-confidence

2 self-esteem is the person's self-appraisal and how he evaluates his own abilities and defects. A high score indicates a high self-esteem

3 self-control refers to the person's ability to control and channel his emotions and expressions of his needs. A high score indicates good emotional self-control

4 nervousness is an expression of anxiousness, purposeless and repetitive behaviour. A high score indicates an absence of these symptoms of nervousness

5 health refers to the person's pre-occupation with his own physical condition. A high score indicates an absence of such pre-occupation

6 family influences indicates the degree to which the person is influenced by his position with respect to other family members, relationships between his parents and other aspects of family life such as togetherness and socio-economic conditions. A high score indicates that the person is highly influenced by these factors within his family

7 personal freedom represents the feeling of being restricted by his parents. A high score indicates that the person feels highly restricted by his parents

8 sociability - G is an extrovertion variable and refers to the person's need for spontaneous participation in

social group interaction. A high score indicates a high need for such group interaction

9 sociability - S refers to the need for sociable interaction specifically with members of the opposite sex. A high score indicates a high need for having such relationships

10 moral sense refers to the degree to which a person feels that his own behaviour corresponds to accepted norms of society. A high score implies that the person thinks his behaviour is acceptable to society

11 formal relations refers to the person's relationships between himself and adults in formal situations such as in the school or the work situation. A high score implies that the person is capable of successfully handling such relationships with figures of authority and with his superiors

12 desirability scale indicates the honesty with which the person answered the questionnaire. Only exceptional people can justly give favourable answers on these questions. A high score indicates that the testee was honest in his answers while a low score indicates that he wanted to present himself in a favourable light.

3 The measuring instruments

3.1 The Edwards Personal Preference Schedule (E.P.P.S.)

The original form of the E.P.P.S. was designed as a research instrument to provide a measure of fifteen personality variables based on a list of manifest needs of Murray (1938).

The E.P.P.S. has been extensively used in the research on human needs. Some studies concern the relationship between needs and social desirability (Edwards 1957, Silverman 1957), group differences with respect to needs (Allen 1957) and needs and behaviour (di Vesta 1960, Chance 1960, Gynther 1962). Bernberg (1960) used the E.P.P.S. to study the needs of an incarcerated group of prisoners while Bendig (1962) studied the stability of the need variables themselves. The relationship between needs and other personality variables have also been studied by using the E.P.P.S. (Cochrane 1977).

Validity: According to criterion related methods the validity of the E.P.P.S. has been found to be good (Bernardin 1957, Caputo 1965, Gisvold 1958, Stricker 1970). Ghei (1963) found the E.P.P.S. to differentiate effectively between different cultural groups whose needs would theoretically be expected to differ.

According to Stricker the construct validity seems to vary between different studies with respect to the individual need variables but overall the validity can be accepted as being good. Both Stricker and Radcliffe (1965) state that the ipsitive nature of the data and the forced choice of items in the usual form of the E.P.P.S. produce problems in answering questions about its validity. In general it can be accepted that the E.P.P.S. does give a valid measurement of the construct need and that it differentiates between persons with different need structures.

Reliability: Split-half reliability coefficients have been found to range from 0,60 to 0,87 for the fifteen variables while test - retest stability coefficients range from 0,74 to 0,80 (Anastasi 1976, Bendig 1958, Caputo 1965 and 1966). Bendig (1962) found the reliability to range from 0,13 to 0,75 for individual variables, obtaining low coefficients for abasement, autonomy and deference. Ghei (1963) found the E.P.P.S. to be less reliable when the samples were small. Stricker (1970) found reliability coefficients to range from 0,55 to 0,87 with a median of 0,73. On the basis of these findings the E.P.P.S. can be accepted to give consistent measures of a person's needs. Any variation in a person's scores over a period of time could thus be ascribed to changes that occur in that person's need structure.

Procedure: The original form of the E.P.P.S. consists of 225 paired statements randomly arranged to cover the variables (Edwards 1953). For each item the subject is required to choose the statement best applicable to himself. This procedure results in ipsitive scores since a high score on one variable necessarily reduces scores on one or more of the other variables. The results of this forced choice method of obtaining scores sets limits on the statistical procedures that can be employed on the data. Such data fail to satisfy the assumption of complete independence of the variable measures when statistical comparisons are made across individuals (Hicks 1970). It also raises validity questions (Radcliffe 1970) and does not make allowance for the level of a person's responses. A different procedure is necessary when the object of the testing is to determine the absolute strength of the measure of a particular variable and not the relative strength of that variable with respect to others. Knapp (1964) found that a normative rather than an ipsitive measure of interpersonal values of delinquents provides a higher validity in discriminating between offenders and non-offenders.

The original E.P.P.S. procedure was modified to obviate a forced choice response. The subject was required to judge each statement on a five point scale according to

its desirability or applicability to himself. Murray (1938) advocated this procedure as a means by which to measure the degree of strength of a need. The procedure has been found to be useful in the application of the E.P.P.S. (Steel 1979) and has the added advantage of producing better validity and reliability (Wright 1961).

The above procedure produces normative scores for the fifteen need variables. There are nine items in the questionnaire covering each variable. This gives a total score in the range of 0 to 45 for each variable.

The modified instructions which were used are given in Appendix A.

3.2 The Rokeach Value Survey (R.V.S.)

This measuring instrument is an outflow of the theory of human values of Rokeach (1973). It is easily understood by persons from eleven years upwards and has been extensively used in studies on values (Feather 1972 a, 1973 ; Feather and Cross 1975; Gallagher 1976; Houston 1975; Martin 1977). There have been certain criticisms of the theoretical aspects of Rokeach's approach to value measurement (Kitwood and Smithers 1974; Kitwood 1976). However in practice the method of value analysis has proved to be a good alternative to the Alport-Vernon

method (Alport 1951) and it gives a more detailed and wider measure of a person's value structure.

Validity studies by Rokeach (1973) show that the R.V.S. differentiates well between different student groups. Rokeach used aspects which are related to values such as race, sex, educational level, age and religious orientation to differentiate between groups and he quotes his findings as support of good criterion validity. Feather and Cross (1975) found that the R.V.S. produces the same factor dimensions of values when applied to two different student samples. This is an indication of good validity with respect to the construct of psychological values which the R.V.S. measures.

Reliability: By means of test - retest procedure (Feather 1971 b) the coefficients of reliability for the individual variables were found to range from 0,37 to 0,76 with a median of 0,56 for instrumental values and 0,40 to 0,87 with a median of 0,63 for the terminal values. These figures could also be interpreted as short term stability coefficients. These coefficients also reflect a constancy in the values which are measured. Feather and Cross (1975) also found the measurement of terminal values to be stable over a long period. According to these reliability coefficients given by Feather any variation in the measurements

over a period of time is a reliable indication of changes in that person's value system.

Procedure: The original measurement procedure on the R.V.S. requires the subject to rank the eighteen variables in each of the two series according to the importance which each value holds for him. A second method requires the subject to choose between pairs of values according to their importance. Both these methods provide ipsitive scores with the same limiting effects as those described for the E.P.P.S. above.

The procedure was modified so that the subject was required to judge each value on a five point scale. This produced a normative score in the range 0 to 5 for each of the thirty six value variables.

The modified instructions which were used are given in Appendix B.

3.3 The Personal-Home-Social-Formal Relations Questionnaire (P.H.S.F.)

This instrument was designed by the Human Sciences Research Council of South Africa to measure the personal, home, social and formal relations of high school pupils, students and adults. The score on each of the eleven

component aspects reflect the person's level of adjustment in each of these four areas of personal relations. Research application of the questionnaire seems limited at present although it is fairly widely used in schools in the Republic. The questionnaire is standardised for English and Afrikaans speaking pupils and the experimental application included schools for behaviourally deviate boys.

Validity studies (Fouche 1971) claim a high degree of construct validity. A factor analytical comparison with the 1951 Adjustment Questionnaire of the National Bureau of Educational and Social Research, now the Human Sciences Research Council, reflects a high degree of concept validity. The P.H.S.F. also discriminates relatively consistently between normal groups and behaviourally deviant boys on all the sub-scales except for the sociability - S variable. For the purpose of this study it can be accepted that the P.H.S.F. provides a valid measure of the construct of personal relations and that it discriminates adequately between subgroups that have basic differences in their personal relations structures.

Reliability coefficients obtained by means of the split-half method (Fouche 1971) range from 0,63 for self-control to 0,94 for sociability - S with a median of 0,79 for boys. Standard error of measurement given in terms of stanine scores range from 0,48 for sociability -S

to 1,19 for self-control. The mean standard error for the twelve variables is 0,89. The random fluctuation of scores is thus small and for the purposes of this study the consistency of the test is considered to be acceptable.

Procedure: The P.H.S.F. was applied in its published form and administered according to prescribed directions. This provided normative scores in the range 0 to 45 on each of the twelve variables.

4 Method of data collection

All three measuring instruments were applied over a period of four weeks during August 1980. This short period ensured that the responses on the three different aspects of needs, values and personal relations were sufficiently close in time to minimise the possibility of any shift occurring in the variables under measurement. The scores obtained on these variables can thus be taken to be representative of the state of the individual at a particular time.

The subjects were tested in small groups of not more than fifteen per session. The test administrator was known to the subjects and rapport and co-operation were good.

The testees were told what the aim of the research was and that the data for each individual would also be used by his therapist to assist him in his personal therapy sessions.

The I.Q. scores were obtained by means of the New South African Individual Scale (1964). These measurements had all been done in the preceding eighteen months as part of each pupil's assessment at the time of his admission to the school.

The period of institutionalisation for each pupil was determined by scrutinising the official documents relating to the statutory removal of the pupil from parental care. These dates were compared with the information in the relevant social welfare reports to ascertain the actual date of removal of the pupil and his admission to an institution.

5 Characteristics of the data

Preliminary data screening revealed normal distribution of scores on the need and personal relations variables for both the institutional and the non-institutional groups. The scores for both revealed equal variances on all the need and personal relations variables except

for sociability - G and n-heterosexuality. The data for the needs and personal relations thus conformed to the requirements needed for analysis by means of parametric tests, provided that the data can be assumed to be measured on an equal-interval scale.

The scores for both groups on the values did not reveal normal distributions on all the variables. The scores for more than half of the thiry six variables were skew and also revealed unequal variances. A strong arc sine transformation reduced the skewness only on some of the variables. Consequently non-parametric methods of analysis were used for comparing the institutional and non-institutional groups with respect to their values.

Raw scores were used in all the analyses except in the factor analyses in chapters 5 and 6 where all the scores were standardised. Individual subjects were not to be compared and no reference to norms was necessary. Thus scores were not standardised for the comparison of the two groups. Helmstader (1970) points out the usefulness of using raw scores especially from a research point of view as they allow for more valid comparisons between different research findings on the same subject.

The tendency shown by the pupils to use the upper end of the five point scale on values underlines the difficulty which a person experiences in attempting to

assess his own values. Kitwood et al (1974) mention this difficulty to be more evident in the measurement of adolescent values. According to Zellermayer (1976) the adolescent finds himself in a moral turmoil due to a clash between the strong need of self-assertion and an equally strong commitment to values.

Kitwood concludes that the adolescent's values are not integrated into a coherent whole. In the case of the juvenile delinquent this uncertainty as to what his own values are, which Frankenstein (1970) calls a "value vacuum", makes the act of objectively assessing his own values all the more difficult.

CHAPTER 4

COMPARISON OF INSTITUTIONAL AND NON-INSTITUTIONAL JUVENILE DELINQUENTS WITH RESPECT TO NEEDS, VALUES AND PERSONAL RELATIONS

In this section a comparison is made between institutionalised and non-institutionalised juvenile delinquents in order to establish whether the period of institutionalisation has any effect upon their needs, values and personal relations. Should these two groups differ significantly with respect to these personality variables, it would be feasible to devise a differential treatment programme on the basis of the length of time that a pupil has spent in an institution.

1 Needs

The two groups were compared on the fifteen need variables by determining the difference between the mean scores of the groups on each of the variables. The t-test was used for this comparison since the data conformed to the requirements for analysis by means of a parametric test. The results are given in table 4.1 on page 59.

TABLE 4.1 A comparison of the scores on fifteen needs of institutionalised and non-institutionalised male delinquents

Variable	Institution-alised		Non-institutionalised		t	p
	Mean	SD	Mean	SD		(2-tailed)
achievement	32,50	5,42	33,09	5,46	0,67	0,502
deference	32,41	5,36	32,60	5,02	0,22	0,828
order	35,52	5,28	34,90	5,01	0,73	0,464
exhibition	26,80	6,12	26,09	6,20	0,73	0,470
autonomy	29,59	4,88	29,18	4,60	0,53	0,599
affiliation	31,68	6,51	31,97	5,68	0,29	0,774
intraception	28,38	5,68	30,23	5,96	2,00	0,048+
succourance	29,05	6,10	27,66	6,73	1,38	0,171
dominance	27,66	6,03	28,16	5,93	0,52	0,606
abasement	30,63	4,86	31,50	4,74	1,13	0,261
nurturance	34,09	5,20	33,84	5,45	0,29	0,770
change	31,48	5,30	31,91	4,95	0,52	0,607
endurance	35,46	5,07	35,71	4,08	0,30	0,767
heterosexuality	31,09	8,28	30,84	6,78	0,20	0,844
aggression	24,29	5,63	23,84	5,54	0,49	0,623
	N1 = 56		N2 = 126		df=180	

+ signifies $p<0,05$

The hypothesis that there is no significant difference between the mean scores of the two groups cannot be rejected for eleven of the twelve need variables. Only on the need intraception do the institutionals score significantly lower than the non-institutionals ($p<0,05$). There is a tendency ($p=0,17$) for the institutionals to score higher on the need succourance.

The pupils who have been institutionalised for a considerable period of their lives have a greater need for understanding how other people think and what their motives are than the non-institutionals. The institutionals also show a tendency to a greater need for showing affection to others and a need to forgive or help other people especially their friends. It appears that the institutionalised pupil lacks the experience of a close relationship with other people.

Order of importance of the needs: The assumption is made that should the mean group score on one variable be higher than the mean score of that group on another variable, then the higher mean indicates a higher need. The ranking of the needs of each group in order of importance according to mean scores is given in table 4.2. Taking the mean deviation of the scores into consideration, those needs which appear in the upper four and lower four rank positions can be accepted to represent the extreme positions in the ranking according to the means.

TABLE 4.2 The order of importance of the needs of institutionalised and non-institutionalised juvenile delinquents according to mean scores

Institutionals				Non-institutionals			
Rank	Need	Mean	MD	Rank	Need	Mean	MD
1	order	35,52	4,22	1	endurance	35,71	3,26
2	endurance	35,46	4,06	2	order	34,90	4,01
3	nurturance	34,09	4,16	3	nurturance	33,84	4,36
4	achievement	32,50	4,34	4	achievement	33,09	4,37
5	deference	32,41	4,29	5	deference	32,60	4,02
6	affiliation	31,68	5,21	6	affiliation	31,97	4,54
7	change	31,48	4,24	7	change	31,91	3,96
8	hetero-sexuality	31,09	6,62	8	abasement	31,50	3,79
9	abasement	30,63	3,89	9	hetero-sexuality	30,84	5,42
10	autonomy	29,59	3,90	10	intraception	30,23	4,77
11	succourance	29,05	4,88	11	autonomy	29,18	3,68
12	intraception	28,38	4,54	12	dominance	28,16	4,74
13	dominance	27,66	4,82	13	succourance	27,66	5,38
14	exhibition	26,80	4,90	14	exhibition	26,09	4,96
15	aggression	24,29	4,50	15	aggression	23,81	4,43

Both the institutionals and the non-institutionals have a high need for order, endurance, nurturance and achievement. The institutionals show a low need for aggression, exhibitionism, dominance and intraception. The non-institutionals show a low need for aggression, exhibitionism and dominance and also for succourance.

The two groups are thus very similar with respect to their psychological needs. The rank order of their needs according to mean scores shows that they have the same dominant needs.

Some research findings regarding needs:

Gynther (1962) found that there is a direct relationship between the needs as measured by the E.P.P.S. and certain forms of behaviour. He concluded that the individual who has a high need to be aggressive will act aggressively. However one should not interpret the need as being synonymous with the action which Gynther maintains is a direct expression of that need. The need for order which juvenile delinquents have represents the presence of uncertainty in their lives and a need to have their lives ordered. It does not necessarily follow that their behaviour is orderly.

The need for endurance and for achievement could be an urge towards self-fulfilment rather than the exhibition

of endurance or the pupil's actual achievement in his endeavours. Failure at school or in personal relations at home is an important element in the past experiences of all juvenile delinquents and could account for their high need for achievement. The pupils of the Constantia School are often seen by the staff to be lacking in endurance. The need for endurance and the need for achievement might be seen as related aspects in the psychological need profile of the pupils. Only by enduring the frustrations of delayed satisfaction is it possible for them to reach any worthwhile achievement. Such a relationship however can only be speculation until it is proved that it exists.

Bernberg (1960) found that prisoners showed a significantly higher need for order and for endurance than non-prisoners. The question which Bernberg raised was to what extent the order which the detention system forced on the individual caused him to repress or hide these needs. It is doubtful whether this enforced order which a prisoner has to endure actually caters for these needs unless he has some active participation in creating that order for himself or in setting his own limits of endurance.

The high need for <u>nurturance</u> could be related to socialisation aspects of adolescence and it may be a

characteristic of non-delinquent adolescents as well. However, because of their unacceptable behaviour, juvenile delinquents experience much rejection and the need for nurturance could signify their need to be accepted by others. Unfortunately the rejection and censuring by parents force the delinquents to seek outside the family for friends who could satisfy this need. This search for friendship due to parental censorship is apparent from a study made recently on the pupils of the Constantia School by Ullmann (1981).

The low need for aggression which the delinquent group as a whole shows may also appear to contradict the view generally held by the public of these young people. However when aggressive behaviour is the outlet for frustration it must not be described as normal delinquent behaviour. The pupils of the Constantia School are described by the staff as apathetic and lacking in motivation. Very few incidents of aggressive behaviour occur between the pupils themselves and between the pupils and staff. The fact that aggression appears so low on their need hierarchy does not necessarily mean that these juvenile delinquents have a low need for aggression, but that it is relatively lower than their other needs.

The low need for exhibition characterises these pupils as being more inclined to be uninvolved than to be the centre of attraction. It could be related to their low self-esteem. Their lack of motivation to participate in corporate activities is also reflected in a low need for dominance or their disinclination towards leadership of any kind.

It is interesting to note that the need heterosexuality shows the greatest variance of all the needs in table 4.1 for both groups. A possible reason for this could be the age range of the pupils which varies from 14,9 years to 21,8 years.

Conclusion: The foregoing analysis has shown that the needs of the institutional and non-institutional groups are so similar that one cannot use the period of institutionalisation to differentiate adequately between juvenile delinquents with respect to their needs.

2 Values

The two groups were compared on each of the eighteen terminal and eighteen instrumental values by means of the Kruskal-Wallis one way analysis of variance. The results are represented in table 4.3 (page 67). The relative order of importance which the two groups attach to the values are represented in tables 4.4 (page 68) and 4.5 (page 69). As in the case of the needs, the assumption was made that the higher the mean group score on a variable, the higher the ranking of that variable in the value hierarchy.

The hypothesis that there is no significant difference between the mean scores of the different values of the two groups can be rejected with respect to three of the eighteen terminal values and two of the instrumental values.

The institutionals value wisdom ($p<0,01$) and inner harmony ($p<0,01$) significantly lower than the non-institutionals according to mean scores. The institutionals value pleasure ($p<0,05$) significantly higher than the non-institutionals. There is also a tendency for the institutionals to place a lower value on happiness ($p=0,119$), equality ($p=0,156$) and a sense of accomplishment ($p=0,160$) compared with the non-institutionals.

TABLE 4.3 A comparison of the scores on eighteen terminal and eighteen instrumental values of institutional and non-institutional juvenile delinquents (P values determined by the Kruskal-Wallis H statistic)

Terminal values	H	p df=1	Instrumental values	H	p df=1
comfortable life	0,75	0,387	ambitious	0,88	0,349
exciting life	0,87	0,351	broadminded	5,09	0,024
sense of accomplishment	1,79	0,160	capable	1,44	0,230
world at peace	0,32	0,573	cheerful	0,01	0,942
world of beauty	0,97	0,324	clean	0,07	0,789
equality	2,01	0,156	courageous	6,49	0,011
family security	3,38	0,066	forgiving	2,98	0,085
freedom	0,01	0,921	helpful	0,01	0,911
happiness	2,43	0,119	honest	0,75	0,385
inner harmony	6,78	0,009++	imaginative	0,19	0,659
mature love	1,16	0,281	independent	1,34	0,247
national security	0,46	0,497	intellectual	0,24	0,628
pleasure	4,76	0,029+	logical	1,37	0,242
salvation	0,42	0,518	loving	1,98	0,160
self-respect	0,78	0,376	obedient	1,59	0,207
social recognition	0,82	0,366	polite	1,72	0,190
true friendship	0,04	0,847	responsible	0,69	0,407
wisdom	7,11	0,008++	self-controlled	1,76	0,185

\+ signifies $p<0,01$

++ signifies $p<0,05$

TABLE 4.4 The rank order of terminal values according to mean scores of institutional and non-institutional juvenile delinquents

Institutionals (N=56)			Non-institutionals (N=126)		
Rank Value	Mean	SD	Rank Value	Mean	SD
1 family security	4,59	0,83	1 sense of accomplishment	4,55	0,65
2 freedom	4,34	1,01	2 happiness	4,50	0,78
3 mature love	4,34	0,90	3 self-respect	4,46	0,70
4 self-respect	4,34	0,79	4 family security	4,44	0,79
5 happiness	4,29	0,89	5 freedom	4,44	0,76
6 sense of accomplishment	4,25	1,07	6 wisdom	4,40	0,73
7 true friendship	4,23	0,97	7 true friendship	4,32	0,80
8 world of beauty	4,21	0,99	8 world at peace	4,23	0,90
9 pleasure	4,14	0,86	9 national security	4,23	0,96
10 comfortable life	4,09	1,01	10 mature love	4,22	0,88
11 national security	4,05	1,13	11 equality	4,09	0,96
12 world at peace	4,04	1,18	12 world of beauty	4,09	0,97
13 salvation	4,01	1,12	13 comfortable life	4,06	0,86
14 wisdom	3,98	1,05	14 exciting life	4,02	0,89
15 social recognition	3,91	0,79	15 inner harmony	4,00	0,90
16 exciting life	3,89	0,91	16 salvation	3,80	1,35
17 equality	3,84	1,09	17 pleasure	3,79	0,99
18 inner harmony	3,68	0,83	18 social recognition	3,74	1,01

TABLE 4.5 Rank order of instrumental values according to mean scores of institutional and non-institutional juvenile delinquents

Institutionals				Non-institutionals			
Rank	Value	Mean	SD	Rank	Value	Mean	SD
1	clean	4,71	0,62	1	clean	4,71	0,62
2	ambitious	4,50	0,91	2	ambitious	4,53	0,56
3	loving	4,45	0,87	3	responsible	4,47	0,73
4	responsible	4,25	1,03	4	self-controlled	4,44	0,73
5	honest	4,20	1,05	5	polite	4,43	0,66
6	self-controlled	4,20	1,00	6	honest	4,42	0,74
7	independent	4,14	1,03	7	independent	4,39	0,72
8	obedient	4,13	0,99	8	loving	4,36	0,71
9	cheerful	4,07	0,95	9	obedient	4,36	0,75
10	intellectual	4,07	0,99	10	capable	4,19	0,77
11	helpful	4,05	1,13	11	intellectual	4,17	0,86
12	polite	4,04	1,24	12	courageous	4,13	0,88
13	capable	3,98	0,96	13	helpful	4,13	0,87
14	logical	3,80	1,02	14	cheerful	4,11	0,87
15	courageous	3,73	1,02	15	forgiving	4,01	0,97
16	forgiving	3,68	1,15	16	logical	3,99	0,90
17	imaginative	3,66	1,25	17	imaginative	3,83	0,95
18	broadminded	3,34	1,05	18	broadminded	3,73	0,96

With respect to the instrumental values, the institutionals value courageous ($p<0,05$) and broadminded ($p<0,05$) significantly lower than the non-institutionals. There is a tendency for the institutionals to place a lower value on self-control ($p=0,185$) and polite ($p=0,190$) while they tend to place a higher value on loving ($p=0,160$) compared to the non-institutionals.

Order of importance of values: The rank order positions of the values according to mean scores show that the relative order of importance of both the terminal and the instrumental values is similar for the two groups. Both give high importance to the instrumental values clean, ambitious and responsible. The values broadminded, imaginative and forgiving appear low in rank order.

The rank order of the terminal values for the two groups are also similar. Both groups have family security, self-respect, happiness, freedom and sense of accomplishment high in rank order. A slight difference appears to exist at the lower end of the rank order. The institutionals attach less importance to inner harmony, equality, an exciting life, social recognition and wisdom. The non-institutionals regard social recognition, pleasure and salvation to be of low

importance to them.

The extreme rankings of the values are not clearly separated when the standard deviations of the scores are taken into consideration. A study of the differences between the institutionals and the non-institutionals regarding the manner in which they rank their instrumental values had been done by the writer eighteen months previously in a pilot study at the same school. In the direct ranking procedure the values clean, ambitious, responsible, honest and self-control appeared in the upper five rankings for the institutionals. They gave broadminded, imaginative, courageous and capable the lowest rankings. The extreme rankings which the non-institutionals gave to the instrumental values in that study also show a close resemblance to those found in this study. Consequently those values occupying the four extreme positions in the rank order tables 4.4 and 4.5 can be accepted to be the most dominant and least dominant values of the pupils in the school.

Discussion of the findings:

As for the needs, the differences which exist cannot justifiably be ascribed to the one group having been institutionalised. Nevertheless the five values on which they differ reflect a difference in the general disposition of the institutionalised pupils from that of the non-institutionalised pupils. It appears

that the institutionals are less concerned with being wise and clever or having a mature understanding of life. They regard inner harmony or having peace of mind as less important to them compared with the non-institutionals.

The fact that the institutionals place a higher value on pleasure than the non-institutionals suggests that there is a difference with respect to immediate gratification between the two groups. The high value placed on pleasure could be a concomitant of the lower intelligence of the institutional group. Mischel (1966) notes that the less intelligent person has a lower ego control which gives rise to a greater tendency to strive for immediate gratification and an inability to delay satisfaction.

The low value placed on broadminded by both groups reflects an element of prejudice and an inflexibility on the part of the juvenile delinquent to accommodate alternative points of view. The institutionals are significantly more prejudiced than the non-institutionals. Seen in conjunction with the low importance which they place on forgiving, this may indicate a resentment which they harbour for having been deprived of a normal home life.

Conclusion: Apart from the few specific differences which exist in the values of these two groups, their total value structure is very similar. The criterion of institutionalisation cannot be used to discriminate adequately between juvenile delinquents on the basis of their values.

3 Personal Relations

The two groups were compared on the twelve personal relations variables by determining the difference between the mean scores of the groups on each of the variables by means of a t test. The results are represented in table 4.6 (page 74).

The hypothesis that there is no difference in the mean scores of the personal relations variables of the two groups can be rejected with respect to three of the twelve variables.

The institutionals score significantly lower on self-control ($p<0,01$), health ($p<0,05$) and self-confidence ($p<0,05$). They also tend to have lower scores on nervousness ($p=0,083$), self-esteem ($p=0,136$) and moral sense ($p=0,163$) and a tendency to a higher score on the desirability scale.

TABLE 4.6 A comparison of the scores on the personal relations variables of institutional and non-institutional juvenile delinquents

Variable	Institutional		Non-institutional		t	p
	Mean	SD	Mean	SD		(2-tailed)
self confidence	25,46	4,94	27,25	5,26	2,21	0,029+
self esteem	21,07	5,79	22,48	5,91	1,50	0,136
self control	23,38	5,28	26,10	5,28	3,21	0,002++
nervousness	23,23	5,97	23,26	6,91	1,75	0,083
health	24,82	6,39	27,19	6,67	2,28	0,025
family influence	28,50	8,90	28,58	8,42	0,06	0,955
personal freedom	26,88	7,65	27,65	8,17	0,62	0,538
sociability - G	22,79	5,92	23,11	7,54	0,31	0,754
sociability - S	29,91	8,86	30,24	8,90	0,23	0,819
moral sense	26,18	5,90	27,58	6,89	1,40	0,163
formal relations	25,72	6,78	26,45	6,37	0,69	0,491
desirability scale	18,45	5,85	17,25	4,99	1,33	0,188
	N1 = 56		N2 = 126		df=180	

\+ signifies $p<0,05$

++ signifies $p<0,01$

The lower score on health which the institutionals have indicates a greater pre-occupation with their own physical condition. They have a tendency to be more nervous since a low score on this variable implies the presence of symptoms of nervousness.

The institutionals show a tendency to greater honesty in their responses to the personal relations questionnaire as they obtained a higher average score on the desirability scale. Conversely the non-institutionals appear to have been less honest in order to show themselves in a more favourable light.

Rank order of indices of personal relations: Table 4.7 (page 76) shows the relative order of magnitude of the group scores on the personal relations variables. The mean scores for a particular group do not differ much from the other. The rank order is therefore not a reliable indicator that a group's score on one variable is necessarily higher than its score on another variable. Nevertheless it indicates that both groups have high mean scores on some variables and low mean scores on others.

Both groups score high on sociability - S, family influence and personal freedom and low on the desirability scale, self-esteem and sociability - G.

TABLE 4.7 Rank order of mean scores of personal relations variables of institutional and non-institutional juvenile delinquents

Rank	Institutionals	Mean	Non-institutionals	Mean
1	sociability - S	29,91	sociability - S	30,24
2	family influence	28,50	family influence	28,58
3	personal freedom	26,88	personal freedom	27,65
4	moral sense	26,18	moral sense	27,58
5	formal relations	25,72	self-confidence	27,25
6	self-confidence	25,46	health	27,19
7	health	24,82	formal relations	26,45
8	self-control	23,38	self-control	26,10
9	nervousness	23,23	nervousness	23,26
10	sociability - G	22,79	sociability - G	23,11
11	self-esteem	21,07	self-esteem	22,48
12	desirability scale	18,45	desirability scale	17,25

Discussion: The low score on self-esteem indicates that both juvenile delinquent groups have a poor self-appraisal and are over-concerned with their own shortcomings and limitations and that they lack confidence in their own abilities. Their low score on sociability - G could be directly related to their low self-esteem. They have an aversion for group interaction and are reticent to participate in spontaneous group activities. They lack social initiative. This low sociability - G score and low self-esteem score seem to substantiate the low score on the need for exhibition which the pupils obtained on the E.P.P.S.

The high score which the pupils as a group have on sociability - S reveals an urgent need which they have for social interaction with persons of the opposite sex. This need for contact with girls, or an interest in sex, does not emerge as strongly when measured with the E.P.P.S. In table 4.2 in the previous section on needs heterosexuality appears as a less dominant need in relation to other needs such as order and endurance. However the scores on the personal relations questionnaire reveal that there is a great need for contact with persons of the opposite sex among the pupils of the school. Being incarcerated could have the effect of heightening this need or bringing it into prominence.

Several other aspects of the personal relations of both groups are evident from table 4.7. There is a tendency for family togetherness, relationships with parents and socio-economic conditions to be matters of high concern. Only 15% of the pupils have their families living close enough to retain regular direct contact. The rest have to rely on often infrequent postal communication.

It is significant to note that family influence and family relations are considered by both groups to be important. Those pupils who have had little family contact because of their institutionalisation regard family relations to be as important to them as those who have grown up in the family circle. Glueck and Glueck (1968) noted that evidence exists that the forces of disruption are excessive in the families of delinquents. These forces are greater and stronger than those making for cohesiveness and the resultant effect on family relations as experienced by the juvenile delinquent is as great whether he had close contact with the family or not.

Conclusion: The above comparison of the personal relations of institutional and non-institutional pupils shows that they differ on only three of the twelve variables. They are so similar that it is not possible to differentiate meaningfully between them on this basis.

4 Intelligence

The two groups were compared on verbal, non-verbal and total I.Q. scores. The nature of the scores was such that a t-test could be used to determine the difference between the mean scores. The results are presented in table 4.8.

TABLE 4.8 A comparison of I.Q. scores of institutional and non-institutional juvenile delinquents

Variable	Institutionals		Non-institutionals		t	p
	Mean	SD	Mean	SD	df=180	2 tail
verbal I.Q.	80,36	13,96	89,13	17,53	3,61	0,001
non-verbal I.Q.	97,14	15,44	102,03	17,08	1,91	0,059
total I.Q.	83,30	16,88	94,05	17,60	3,55	0,001
	N1=56		N2=126			

The hypothesis that there is no significant difference between the mean I.Q. scores of the two groups can be rejected with respect to verbal I.Q. ($p<0,01$) and total I.Q. ($p<0,01$).

The institutionals score significantly lower on verbal I.Q. and also have lower scores for non-verbal I.Q.

For both groups the verbal I.Q. score is lower than the non-verbal score. This has been found to be the case in several other delinquency studies (Woodward 1955, Hirshi 1977).

The lower score on verbal I.Q. achieved by the institutionals confirms Woodward's findings that institutionalised children score lower on verbal intelligence tests than non-institutionalised children. However to interpret this as the direct result of the institutional experience in the case of the group of juvenile delinquents used in this study is not necessarily valid in the light of what has been stated in chapter 1. There are predisposing factors which cause children from low intelligence families to be committed to institutional care.

What is of importance is the discrepancy between the verbal and non-verbal I.Q. scores. In subsequent analysis of the relationship between the needs, values and personal relations the verbal I.Q. variable will be included to ascertain how this aspect of intelligence enters into the global psychological profile of the delinquent.

5 Conclusions

The institutional and non-institutional groups were shown to differ significantly on only nine of the sixty three personality variables on which they were compared. The length of time for which some juvenile delinquents have been institutionalised does not appear to have produced many significant differences between their needs, values and personal relations and that of the delinquents who have not experienced institutional care. Thus the period of institutionalisation is not an adequate basis on which to differentiate between the pupils of the school.

However Patton (1978) states that it does not matter whether the evaluation of a certain aspect or an analysis such as this produces positive or negative findings, but whether the findings include useful information that can reduce uncertainty and provide direction for further analysis.

The analysis of the pupil population of the school up to this point has produced certain basic knowledge about the present state of their needs, values and personal relations. It is the writer's contention that sufficient differences exist to substantiate the use of these elements of personality as a basis on which to differentiate between the groups of juvenile delinquents. In the next sections an attempt will be made to establish a criterion with which to make this differentiation.

CHAPTER 5

FACTOR ANALYSIS OF THE NEEDS, VALUES AND PERSONAL RELATIONS OF JUVENILE DELINQUENTS

In this chapter the needs, values and personal relations of juvenile delinquents will be investigated in more detail. A factor structure of each of these three personality domains separately is undertaken.

Guildford (1952) mentions several problems and precautions which accompany any factor analytic study and even the most experienced analyst fails to understand and control all the complexities of such analyses. Two elements in the present study need to be commented on:

(i) Guildford warns against the amalgamation of populations for analysis when significant differences exist between the means of some variables. In this chapter the two groups of pupils are combined. As these two groups comprise the total pupil population of the school combining them is not the same as amalgamating populations. Also the differences which were found between these two groups were small enough so as not to invalidate the pooling of the data.

(ii) Any assymetry in the distribution of scores requires difficult methods of calculationg the inter-correlation of the variables. The distribution of the value scores of the two groups compared in chapter 4 were assymetrical which necessitated the use of non-parametric procedures. When the value data was pooled the skewness was less pronounced. The data was also transformed into standard scores. The distribution was not so skew as to justify a dichotemisation and calculation of biserial correlation coefficients with the other variables.

1 The factor model

A multifactor approach is used in the analysis of the needs, values and personal relations of the pupil group. The aim is to find the minimum number of factors needed to describe these juvenile delinquents in terms of the sixty four variables: fifteen needs, thirty six values, twelve personal relations as well as verbal I.Q.

Component analysis is best suited to a study which involves such a large number of variables. Rummel (1970) mentions that no assumptions are needed with respect to the unique or error variances in the data and that all

relevant data can be included. The result is that the factors which emerge represent basic dimensions of the vector space of the data.

According to Mulaik (1972) the factor pattern matrix of a component analysis is invariant under selection between different sub-populations. The factors which emerge in this chapter can thus serve as a basis for comparing the different subgroups of the pupils at a later stage (chapter 7).

It is possible that the relationship between some of the variables in this study is non-linear. Mulaik states that in the case of component factor analysis such non-linear relationships do not detract from the meaningfulness of the factors extracted.

2 The factor technique

R-technique analysis was used for the grouping of variables based on normative scores. Initial factor extraction was by the method of principal components. The resulting principal component factors were adequate for describing the pupils in terms of polar dimensions. However these factors were relatively complex and it was decided to rotate the principal components to simple

structure using the method of Kaiser (1958).

Harman (1976) maintains that orthogonal rotation makes it possible to discern the same clusters of variables regardless of the number of other variables in the analysis. This invariance makes correct inferences as regards domain factors possible.

Varimax orthogonal rotation still yielded factors which had a large number of variables with non-zero loadings in the factor pattern matrix. An oblique rotation by means of Carroll's (1953) direct oblimin procedure resulted in a better clustering of the variables. The oblique solutions preserved the basic simple structure of the orthogonal factors.

The same oblique rotation procedure was used throughout in all the analyses. This was necessary in order to compare the subgroups in chapter 7 on the basis of the factor structure obtained in this chapter. According to Mulaik (1972) only factors obtained by the same rotation procedure are invariant under selection and can be accepted to be descriptive of subgroups.

The analyses were made using the Biomedical Data Processing programmes by Dixon et al (1979).

3 Analysis of the needs of juvenile delinquents

3.1 Factor structure of needs

The fifteen need variables were subjected to a component factor analysis. Verbal I.Q. was included to establish how this variable related to needs.

Principal component factors were extracted as an initial step. Four factors emerged of which the first was a strong, general need factor with high loadings on most of the variables. The other three were bi-polar factors with high loadings on several variables.

Table 5.1 represents the factor structure of the principal components (page 87).

The first four factors had eigen values greater than one and accounted for 70,5% of the cumulative variance.

Factor 1 has the highest loadings on deference and achievement and can best be named need for self-actualisation.

Factor 2 is polarised with high positive loadings on aggression, exhibitionism and autonomy and high negative loadings on endurance and order. This factor represents

TABLE 5.1 Principal components of the need factor structure of juvenile delinquents

Factor	Highest positive loadings		Highest negative loadings		Per cent of Variance
1. General need factor need for self-actualisation	deference	82			42,4
	achievement	80			
	dominance	76			
	affiliation	74			
	nurturance	74			
	change	73			
	succourance	73			
	intraception	72			
	abasement	71			
2. Immature demands vs obsessive self-constriction	aggression	77	endurance	-64	14,9
	exhibitionism	52	order	-51	
	autonomy	52	nurturance	-30	
	heterosexuality	45	abasement	-30	
3. Intelligent understanding vs infantile regression	verbal I.Q.	92	succourance	-22	6,9
	intraception	31	exhibitionism	-19	
	change	19	aggression	-12	
4. Social dependency vs self-reliance	affiliation	47	achievement	-28	6,3
	heterosexuality	45	autonomy	-28	
	nurturance	32	dominance	-27	
			endurance	-27	

decimals omitted for loadings

the personality element of making immature demands on the one hand and being inhibited by obsessive self-constriction on the other.

Factor 3 has highest positive loadings on verbal I.Q. and intraception with negative loadings on succourance and exhibitionism. This dimension can be named intelligent understanding vs infantile regression.

Factor 4 has highest positive loadings on affiliation and heterosexuality and negative loadings on achievement and autonomy, representing a dimension of social dependency vs self-reliance.

The above four principal components were further subjected to an oblique rotation. The oblique simple structure is represented in tables 5.2 (page 89) and 5.3 (page 90).

The factors representing the simple structure do not differ substantially from the principal components. Referring to table 5.3 they can be described as follows:

Factor 1 has the highest loadings on endurance (0,87), order (0,81) and achievement (0,69). This factor can still be called need for self-actualisation.

TABLE 5.2 Primary factor pattern matrix for juvenile delinquent needs

Needs	Factors with loadings			
	1	2	3	4
endurance	87			
order	81			
achievement	69	35		
deference	65	26		
aggression	-28	85		
autonomy		79		
exhibitionism		78		
dominance	38	68		
affiliation			88	
nurturance	34		72	
heterosexuality	-42		71	
intraception			55	30
change			50	
abasement	48		46	
succourance		36	42	
(verbal I.Q.)				96
eigen value	6,79	2,38	1,10	1,00
% of total variance	42,4	14,9	6,9	6,3

loadings < 0,25 excluded
decimals omitted for loadings

Direct oblimin solution with gamma = zero.
Maximum iterations 50; convergence criterion of 0,00001;
simplicity criterion of 3,23471 reached after 20 cycles.

TABLE 5.3 Factor analytic structure of juvenile delinquent needs

Factor 1 (self-actualisation)	loading	Factor 3 (social dependency)	loading
endurance	87	affiliation	88
order	81	nurturance	72
achievement	69	heterosexuality	71
deference	65	intraception	55
abasement	48	change	50
heterosexuality	-42	abasement	46
dominance	38	succourance	42
nurturance	34		
aggression	-28		
Factor 2 (immature demands)		**Factor 4** (verbal I.Q.)	
aggression	85	verbal I.Q.	96
autonomy	79	intraception	30
exhibitionism	78		
dominance	68		
succourance	36		
achievement	35		
deference	26		

decimals omitted

Factor 2 has high loadings on aggression (0,85), autonomy (0,79) and exhibitionism (0,78) and retains the name of immature demands.

Factor 3 has the highest loadings on affiliation (0,88), nurturance (0,72) and heterosexuality (0,71) and retains the name of social dependency.

Factor 4 is in the form of a doublet with only the variables verbal I.Q. (0,96) and intraception (0,30) represented.

These four factors are relatively non-overlapping with respect to their component variables. Certainly those variables with the highest loadings are specific to the factors and can be seen to represent separate components of the need domain of juvenile delinquents.

Bendig (1962), using a sample of 328 students of education and psychology, found four factors very similar to those found in this study. His first factor with high loadings on achievement and autonomy was termed achievement via independence. In the present study these two variables represent the one pole of self-reliance in the principal component structure. However it does not emerge as a separate factor in the simple structure.

The other three factors which Bendig found he refers to as:

obessive-compulsive relating to the variables endurance and order, the same as factor 1 of this study,

immature demands relating to aggression and exhibition, the same as factor 2 of this study,

social dependency relating to affiliation and nurturance, the same as factor 3 of this study.

The possibility that the inclusion of verbal I.Q. could have caused the suppression of the achievement via independence factor of Bendig, was investigated. By excluding the verbal I.Q. variable the first three factors in table 5.2 emerged with only slight differences in the factor loadings. The conclusion which is made is that for this juvenile delinquent group achievement via independence does not emerge as a descriptive element in their need structure. The other three need dimensions of self-actualisation, immature demands and social dependency appear to be the most dominant aspects in their need structure.

Covariance of need factors: A non-zero correlation between two oblique factors implies that the data patterns have some variance in common (Rummel 1970),

where

degree of common variance = (correlation)^2

This can also be interpreted as the degree of relationship which one dimension has to another. It appears that immature demands is related to social dependency. From table 5.4 factors two and three have a correlation coefficient of 0,43 in terms of factor score coefficients. The same table reveals a relationship between the social dependency factor and the need for self-actualisation with a correlation coefficient of 0,40.

TABLE 5.4 Factor score covariance for need factors of juvenile delinquents

Factor	1	2	3	4
self-actualisation	1,00			
immature demands	0,10	1,00		
social dependency	0,40	0,43	1,00	
verbal I.Q.	-0,02	0,10	0,22	1,00

The factor score covariance is computed from the factor structure and factor score coefficients obtained from the factor scores.

It appears that those needs which form a subset of the total need structure and which relate to self-actualisation are not independent of other subsets of needs. It seems that in the case of juvenile delinquents self-actualisation is to be achieved by means of interacting with other people.

The same applies to the factor which represents immature demands: the higher an individual scores on this factor the higher will be his score on social dependency. Thus the higher an individual's needs for aggression, autonomy and exhibitionism, the higher his needs for affiliation, nurturance and heterosexuality are likely to be. Considering the number of variables involved, these correlations are significant only at the 5% level of confidence. There is a slight but insignificant negative correlation between verbal I.Q. and one of the need factors. A low verbal I.Q. could indicate a high score on self-actualisation but not necessarily so.

3.2 Interrelationship of needs

All the variables which appear in the same factor together are related to one another in the sense that they have high correlations with one another. Variables which do not appear in the same factor have low correlations with one another. A more explicit way of

finding what these relationships are, is to analyse the correlation matrix of the needs in table 5.5 (page 96).

A large number of the needs show high positive correlations with one another. The following needs have correlation coefficients greater than 0,60:

achievement	and	deference	(0,70)
achievement	and	order	(0,65)
achievement	and	dominance	(0,63)
deference	and	order	(0,63)
deference	and	dominance	(0,65)
deference	and	abasement	(0,61)
deference	and	nurturance	(0,61)
order	and	endurance	(0,66)
exhibitionism	and	dominance	(0,70)
affiliation	and	nurturance	(0,72)

Only one pair of needs shows a significant negative correlation namely endurance and aggression (-0,24).

Several of the needs are thus interrelated which emphasises the complexity of the need structure. In chapter 1 it was seen that the dominant needs of the pupils in the school are for achievement, order, endurance and nurturance. Should a treatment programme for these pupils focus, for example, on the need for

TABLE 5.5 Pearson Product-moment intercorrelations of needs of juvenile delinquents

Variable														
1 achievement	1,00													
2 deference	,70	1,00												
3 order	,65	,63	1,00											
4 exhibitionism	,47	,45	,22	1,00										
5 autonomy	,36	,32	,14	,56	1,00									
6 affiliation	,50	,55	,42	,41	,28	1,00								
7 intraception	,48	,52	,38	,47	,36	,57	1,00							
8 succourance	,52	,54	,42	,56	,35	,57	,46	1,00						
9 dominance	,63	,65	,38	,70	,48	,44	,48	,56	1,00					
10 abasement	,52	,61	,56	,37	,16	,50	,57	,42	,40	1,00				
11 nurturance	,56	,61	,56	,31	,20	,72	,48	,52	,39	,58	1,00			
12 change	,55	,50	,42	,43	,43	,54	,53	,47	,51	,43	,49	1,00		
13 endurance	,50	,52	,66	-,01	,10	,28	,26	,20	,23	,51	,46	,30	1,00	
14 heterosexuality	,20	,23	,07	,42	,34	,37	,29	,27	,34	,22	,26	,41	-,06	1,00
15 aggression	,12	,09	-,13	,56	,53	,03	,23	,24	,36	,02	-,02	,22	-,24	,36	1,00

significance levels: 1% : r>0,20
5% : r>0,15

order the effect on the pupil will be much wider in that the related needs for achievement and endurance are also likely to be affected.

3.3 Relationship between needs and verbal intelligence

In chapter 1 it was mentioned that verbal intelligence, represented here as the verbal I.Q., may bear some relationship to the needs of the juvenile delinquent. Table 5.6, given below, contains the correlations of verbal I.Q. with each of the other need variables.

TABLE 5.6 Pearson Product-moment correlations of verbal I.Q. scores and needs of juvenile delinquents

Needs	r	Needs	r
intraception	,14	endurance	-,15+
change	,07	order	-,14
aggression	,05	succourance	-,13
autonomy	,03	affiliation	-,08
dominance	,02	nurturance	-,07
heterosexuality	,01	abasement	-,07
achievement	,01	exhibitionism	-,05
		deference	-,04

+ significance levels: 5% : r>0,15

There is a positive relationship between verbal I.Q. and intraception ($r=0,14$). A high verbal I.Q. score signifies a high score on the need for intraception. Those pupils with a high verbal intelligence have a high need for understanding other people's motives and knowing how other people feel about problems. Contrary to this the pupil with a low verbal I.Q. appears to be less interested in what other people think.

This finding corroborates the finding in chapter 4 where the institutional pupils proved to have a significantly lower verbal I.Q. than the non-institutionals, and the former as a group scored significantly lower on the need for intraception.

There is a negative correlation between verbal I.Q. and order ($r=-0,14$) and a significant negative correlation between verbal I.Q. and endurance ($r=-0,15$; $p<0,05$). Thus the lower the verbal I.Q. the higher will be the need for order and endurance and also for succourance ($r=-0,13$).

In general the correlations between the needs are very low and in all but one of the fifteen variables could be due to chance. The conclusion is that the needs of the juvenile delinquents are not related to verbal I.Q. except possibly in the case of the need for endurance as it is defined in chapter 3 section 2.1 (page 39).

4 Analysis of the values of juvenile delinquents

4.1 Factor structure of values

The eighteen terminal and eighteen instrumental values were together subjected to a component factor analysis. Verbal I.Q. was included to establish how this variable relates to values.

Principal component factors were extracted as an initial step. Ten factors emerged with eigen values greater than one. The first factor contained only instrumental values with high positive loadings on most of the variables. The other nine factors were bi-polar with positive and negative loadings on several of the variables.

Table 5.7 represents the factor structure of the principal components (pages 100 and 101).

These ten factors accounted for 60,8% of the cumulative variance.

Factor 1 has the highest loadings on polite, helpful, responsible, obedient, capable, self-respect and imaginative. This will be named moral conformity.

Factor 2 is polarised with high positive loadings on

TABLE 5.7 Principal components of the value structure of juvenile delinquents

Factor	Highest positive loadings		Highest negative loadings		Per cent of Variance
1. Moral conformity	polite	67			21,7
	helpful	64			
	responsible	59			
	obedient	59			
	capable	59			
	self-respect	59			
	imaginative	59			
	self-control	58			
	forgiving	58			
2. Intellectual competence vs dependence	verbal I.Q.	53	world of beauty	-56	6,9
	independent	41	clean	-41	
	logical	38	obedient	-39	
	broadminded	32	helpful	-37	
	inner harmony	32	social recognition	-33	
3. self-indulgence vs altruism	comfortable life	57	cheerful	-32	5,5
	exciting life	52	forgiving	-32	
	mature love	40	verbal I.Q.	-28	
	pleasure	36	equality	-25	
4. hedonistic self-indulgence vs family responsibility	pleasure	54	family security	-49	4,8
	freedom	45	ambitious	-36	
	mature love	32	accomplishment	-28	
	equality	29	polite	-27	

TABLE 5.7 continued

Factor	Highest positive loadings		Highest negative loadings		Per cent of Variance
5. Religious security vs self-reliance	inner harmony	45	imaginative	-41	4,7
	world at peace	39	self-control	-38	
	happiness	35	loving	-33	
	world of beauty	32	obedient	-31	
	equality	31	freedom	-24	
6. Realism vs idealism	responsible	40	world at peace	-32	3,9
	equality	31	salvation	-32	
	mature love	26	pleasure	-28	
	capable	25	logical	-27	
	intellectual	24	loving	-27	
7. Inner security vs outer security	cheerful	40	national security	-38	3,6
	happiness	31			
	courageous	30	equality	-28	
			world of beauty	-26	
8. Intellectual restriction vs self-expansion	verbal I.Q.	51	broadminded	-34	3,5
	loving	38	ambitious	-34	
	self-respect	24	salvation	-25	
	family security	20	intellectual	-24	
9. self-indulgence vs freedom	exciting life	44	clean	-34	3,3
	honest	41	freedom	-32	
	self-control	28	comfortable life	-29	
	happiness	24	family security	-24	
10. achievement vs religious dependence	accomplishment	42	salvation	-32	2,9
	freedom	37	intellectual	-31	
	equality	29	mature love	-26	

decimals omitted for loadings

verbal I.Q. and competence, and negative loadings on a world of beauty and clean. This dimension can be called intellectual competence vs dependence.

Factor 3 has high positive loadings on a comfortable life and an exciting life and negative loadings on cheerful and forgiving. This dimension will be called self-indulgence vs altruism.

Factor 4 has high positive loadings on pleasure and freedom and negative loadings on family security and ambitious. This dimension will be called hedonistic self-indulgence vs family security.

Factor 5 has high positive loadings on inner harmony and a world at peace and negative loadings on imaginative and self-control. This dimension will be called religious security vs self-reliance.

Factor 6 has high positive loadings on responsible and equality and negative loadings on a world at peace and salvation. This dimension will be called realism vs idealism.

Factor 7 has high positive loadings on cheerful and happiness and negative loadings on national security and equality. This dimension will be called inner

security vs outer security.

Factor 8 has high positive loadings on verbal I.Q. and loving and negative loadings on broadminded and ambitious. This dimension will be called intellectual restriction vs self-expansion.

Factor 9 has high positive loadings on an exciting life and honest and negative loadings on clean and freedom. This dimension will be called self-constriction vs freedom.

Factor 10 has high positive loadings on a sense of accomplishment and freedom and negative loadings on salvation and intellectual. This dimension will be called achievement vs religious dependence.

Rokeach (1973) identified seven bi-polar factors for a sample of adult Americans using the varimax procedure. Five of the seven factors which Rokeach found correspond to those found in this study. There are no corresponding factors for this juvenile delinquent sample which relate to the variables social recognition, self-respect, mature love, loving, polite, courageous and independent which are contained in two of Rokeach's factors.

Feather and Peay (1975) found that the thirty six values of two samples of university students tend to cluster into only four or five polar dimensions. Their dimensions do not correspond to either the Rokeach dimensions or those found in this study, probably due to the different rotation procedure used.

It appears from the above results that the juvenile delinquent value structure, when viewed in terms of dimensions, according to the clustering of the values, differs slightly from that of adults. A specific dimension which is not found to be a characteristic of the juvenile delinquent structure is associated with social recognition, self-respect, mature love, polite, courageous and independent. These values do not emerge strong enough in this juvenile delinquent sample to produce a dimension in terms of which they can be adequately described.

The above principal component solution to the value structure was further subjected to an oblique rotation similar to that which was done for the needs in section 3.1. The resulting primary factor pattern is presented in tables 5.8 and 5.9.

TABLE 5.8 Primary factor pattern matrix for juvenile delinquent values

Values	Factors with loadings									
	1	2	3	4	5	6	7	8	9	10
self-control	69									
honest	68								30	
obedient	59							28	30	
family security		72						28		
sense of accomplishment		67					27			
clean		54					36			
intellectual			76							
independent			51							25
equality				83						
world of beauty				73						
self-respect					57					
loving	35				55					32
national security					52					
cheerful						75				
salvation						69				
broadminded							71			
logical							58			33
(verbal I.Q.)								80		
inner harmony				27				52		
an exciting life									79	
happiness								34	55	
freedom										82
pleasure								25		53
wisdom					33		34			
courageous			35		31	35				
forgiving	47					35				
helpful	35			35						
a comfortable life		47		34				31		
imaginative	45									38
a world at peace				41		29				
capable		33	45							
social recognition			28					29		
mature love			46						44	
ambitious		29					40	28		
polite	41	26								
responsible	40		44				29			
true friendship									28	
eigen value	8,0	2,6	2,0	1,8	1,7	1,4	1,4	1,3	1,2	1,1
% variance produced	21,7	6,9	5,5	4,8	4,7	3,9	3,6	3,5	3,3	2,9

factor loadings < 0,25 excluded
decimals omitted for loading

Direct oblimin solution with gamma = zero
Convergence criterion = 0,00001; simplicity criterion of 15,186 reached after 50 iterations

TABLE 5.9 Factor analytic structure of juvenile delinquent values

Factor 1 (self-constriction)	loading
self-control	69
honest	68
obedient	59
forgiving	47
imaginative	45
polite	41
responsible	40
helpful	35
loving	35
Factor 2 (family security)	
family security	72
sense of accomplishment	67
clean	54
comfortable life	47
ambitious	29
helpful	28
capable	33
polite	26
Factor 3 (competence)	
intellectual	76
independent	51
mature love	46
capable	45
responsible	44
courageous	35
social recognition	28
Factor 4 (social security)	
equality	83
world of beauty	73
world at peace	41
helpful	35
comfortable life	-34
inner harmony	27
Factor 5 (respect)	
self-respect	57
loving	55
national security	52
true friendship	43
polite	42
social recognition	35
wisdom	33
courageous	-31

Factor 6 (self-restriction)	loading
cheerful	75
salvation	69
courageous	35
forgiving	35
peace on earth	29
Factor 7 (self-expansion)	
broadminded	71
logical	58
ambitious	40
clean	-36
wisdom	34
responsible	-29
sense of accomplishment	27
Factor 8 (contentment)	
verbal I.Q.	80
inner harmony	52
happiness	34
comfortable life	-31
social recognition	-29
obedient	-28
ambitious	-28
pleasure	-25
Factor 9 (self-indulgence)	
exciting life	79
happiness	55
mature love	44
honest	30
true friendship	28
Factor 10 (hedonism)	
freedom	82
pleasure	53
imaginative	38
logical	33
loving	32
independent	25

decimals omitted

The simple structure of the value domain after oblique rotation retained the ten basic factors. Whereas these factors were described in terms of their polar dimensions in table 5.7 (page 100), they will now be described in terms of the variables represented in each of those factors as presented in table 5.9 (page 106).

Factor 1 has the highest loadings on self-control, honest and obedient. These values seem to relate to personal self-control and self-imposed orderliness. Consequently this factor will be called self-constriction.

Factor 2 has the highest loadings on family security, a sense of accomplishment, clean and a comfortable life. These values relate to aspirations related to a sense of security in the family. This factor will be called family security.

Factor 3 has the highest loadings on intellectual, independent, mature love and capable. These values relate to the person's strivings to be self-contained and this factor will be called competence.

Factor 4 has the highest loadings on equality, a world of beauty and a world at peace. It seems to be related to a person's aspirations to calm, secure relationships in a wide sense and this factor will be called social security.

Factor 5 has the highest loadings on self-respect, loving and national security. These values relate to respectful relationships with others and this factor will be called respect.

Factor 6 has the highest loadings on cheerful, salvation, courageous and forgiving. These values relate to a person's intentions not to be overcome by provocation. Consequently this factor will be called self-restriction with elements of religious morality associated with it.

Factor 7 has the highest loadings on broadminded, logical and ambitious with small negative loadings on clean and responsible. These values seem to relate to aspirations of self-progression and the purposeful acquisition of knowledge. This factor will be called self-expansion.

Factor 8 has the highest loadings on verbal I.Q. and inner harmony with low negative loadings on a comfortable life, social recognition, obedient, ambitious and pleasure. This factor will just be called contentment. It is the only factor in which verbal I.Q. enters at all and it seems quite prominently related to general feelings of contentment and peace of mind in the face of demands made upon the person.

Factor 9 has highest loadings on an exciting life,

happiness and mature love. These values relate to a striving after excitement and this factor will be called self-indulgence.

Factor 10 has the highest loadings on freedom, pleasure and imaginative. These values relate to the striving after enjoyment and new experiences without obligation to other people. This factor will be called hedonism. It is not quite the same type of indulgence as in factor 9.

The values of the pupils can thus be reduced to ten different dimensions. Certain of these factors are related to strivings which exist towards self-actualisation and the restrictions which are placed on the individual by family relationships. Some factors relate to self-actualisation in the social sphere and in relationships with other people. At least two factors relate to strivings towards self-indulgence and immediate gratification. These two factors could be a consequence of the emotional neglect which is usually associated with the juvenile delinquent.

Co-variance of value factors: These ten factors are not all completely independent of one another. From table 5.10 (page 110) which contains the factor score covariance coefficients, it can be seen that several factors show positive coefficients with one another.

TABLE 5.10 Factor score covariance for value factors of juvenile delinquents

Factors	1	2	3	4	5	6	7	8	9	10
1 self-constriction	1,00									
2 family security	,21	1,00								
3 competence	,24	,19	1,00							
4 social security	,14	,09	,09	1,00						
5 respect	,18	,19	,15	,13	1,00					
6 self-restriction	,19	,17	,10	,24	,16	1,00				
7 self-expansion	,14	,12	,21	,02	,13	,11	1,00			
8 contentment	,03	,01	,09	-,04	-,06	,02	,13	1,00		
9 immediate gratification	,03	,14	,11	,07	,13	,05	,10	-,01	1,00	
10 hedonism	,09	,02	,12	,06	,12	,10	,06	-,01	,13	1,00

Covariance computed from factor structure and factor score coefficients

Those that have significant covariance coefficients are:

factors 1 and 3	self-constriction and competence	(r=0,24)
1 and 2	self-constriction and family security	(r=0,21)
1 and 6	self-constriction and self-restriction	(r=0,19)
1 and 5	self-constriction and respect	(r=0,18)
2 and 3	family security and competence	(r=0,19)
2 and 5	family security and respect	(r=0,19)
2 and 6	family security and self-restriction	(r=0,17)
4 and 6	social security and self-restriction	(r=0,24)
5 and 6	respect and self-restriction	(r=0,16)

A pupil with a high score on self-constriction i.e. has a high score on the variables which have high loadings on that factor, is also likely to have high scores on the factors competence, family security, self-restriction and respect. The same applies to the other factors which have significant covariance coefficients.

4.2 Interrelationship of values

The complexity of the value factors is an indication of the large number of variables that have significantly large correlations with one another. Tables 5.11 to 5.13 contain the intercorrelations of all the value variables.

TABLE 5.11 Pearson Product-moment correlations for terminal values of juvenile delinquents

comfortable life	1,00																
exciting life	,22	1,00															
sense of accomplishment	,36	,20	1,00														
world at peace	,11	,09	,16	1,00													
world of beauty	-,01	,16	,09	,38	1,00												
equality	-,15	,03	,16	,21	,42	1,00											
family security	,20	,11	,36	,12	-,06	,03	1,00										
freedom	,16	,04	,10	,11	-,08	,11	-,01	1,00									
happiness	,23	,23	,24	,15	,05	,08	,24	,10	1,00								
inner harmony	,01	,09	,25	,22	,12	,27	,28	,11	,34	1,00							
mature love	,20	,31	,11	,03	,10	,15	,00	,20	,24	,19	1,00						
national security	,10	-,02	,25	,25	,16	,18	,27	-,06	,01	,17	,15	1,00					
pleasure	,21	,20	,03	,20	,14	,03	-,01	,23	,07	,07	,22	,05	1,00				
salvation	,07	-,02	,11	,22	,14	,16	,19	-,14	,11	,20	,07	,29	,06	1,00			
self-respect	,15	,01	,20	,14	,08	,17	,24	,07	,27	,29	,16	,38	,17	,29	1,00		
social recognition	,31	,16	,20	,22	,31	,25	,21	,07	,11	,10	,19	,27	,19	,22	,35	1,00	
true friendship	,12	,20	,11	,17	,19	,20	,14	,09	,14	,13	,16	,13	,14	,17	,27	,28	1,00
wisdom	,24	,18	,27	,22	,09	,10	,12	,03	,25	,27	,23	,26	,07	,18	,32	,17	,21	1,00

significance levels: 1% : r) 0,20
5% : r) 0,15

TABLE 5.12 Pearson Product-moment correlations for instrumental values of juvenile delinquents

ambitious	1,00																
broadminded	,19	1,00															
capable	,35	,26	1,00														
cheerful	-,03	,12	,24	1,00													
clean	,11	-,10	,20	,21	1,00												
courageous	,07	,37	,34	,28	,14	1,00											
forgiving	,06	,25	,21	,43	,15	,18	1,00										
helpful	,16	,16	,25	,30	,40	,18	,39	1,00									
honest	,12	,14	,26	,39	,22	,35	,35	,39	1,00								
imaginative	,16	,20	,25	,22	,13	,30	,13	,35	,30	1,00							
independent	,15	,24	,38	,20	,00	,29	,31	,13	,12	,38	1,00						
intellectual	,18	,23	,41	,27	,03	,33	,16	,31	,15	,35	,37	1,00					
logical	,28	,37	,31	,26	,02	,28	,32	,16	,15	,39	,38	,34	1,00				
loving	,12	-,01	,05	,22	,16	,02	,49	,32	,23	,34	,18	,01	,20	1,00			
obedient	,20	,15	,18	,32	,24	,20	,35	,49	,44	,38	,12	,25	,21	,37	1,00		
polite	,27	,20	,35	,29	,25	,18	,44	,35	,35	,37	,34	,17	,35	,42	,48	1,00	
responsible	,08	,10	,32	,34	,32	,38	,38	,44	,40	,37	,36	,38	,18	,24	,33	,32	1,00
self-control	,28	,13	,27	,15	,14	,30	-,01	,38	,48	,43	,24	,20	,22	,28	,44	,39	,35	1,00

significance levels: 1% : $r > 0,20$
5% : $r > 0,15$

TABLE 5.13 Pearson Product-moment intercorrelations for terminal and instrumental values

	INSTRUMENTAL VALUES								
TERMINAL VALUES	ambitious	broadminded	capable	cheerful	clean	courageous	forgiving	helpful	honest
comfortable life	,23	,14	,25	,01	-,07	-,07	,18	,01	,19
exciting life	,07	,03	,13	,17	,01	,17	,03	,09	,18
accomplishment	,22	,13	,40	,13	,08	,23	,23	,11	,33
world at peace	,03	,07	,08	,29	,15	,18	,21	,00	,24
world of beauty	,20	,05	,21	,20	,22	,21	,26	,08	,08
equality	,12	,12	,23	,16	-,04	,15	,09	,15	,26
family security	,07	,03	,23	,11	,14	,26	,11	,10	,14
freedom	,20	,08	,28	,18	,35	,39	,26	,11	,05
happiness	,05	,19	,25	,18	,19	,24	,10	,04	,18
inner harmony	,11	,13	,19	,13	,09	,12	,04	,30	,05
mature love	,14	-,07	,14	,06	-,06	,19	,07	,20	,07
national security	,19	,01	,18	,06	,07	,21	,03	,06	,15
pleasure	,25	,10	,30	,16	-,02	,07	,15	,24	,15
salvation	,17	,07	,16	,18	,19	-,01	,17	,18	,17
self-respect	,14	-,02	,15	,26	,29	,25	,08	,11	,10
social recognition	,23	,06	,41	,17	,13	,15	,24	-,01	,26
true friendship	,16	,04	,23	,10	,17	,22	,19	,11	,23
wisdom	,14	,10	,22	,01	,04	,19	,18	,14	,16

significance levels: 1% : r>0,20

5% : r>0,15

TABLE 5.13b Pearson Product-moment intercorrelations for terminal and instrumental values

	INSTRUMENTAL VALUES								
TERMINAL VALUES	ambitious	broadminded	capable	cheerful	clean	courageous	forgiving	helpful	honest
comfortable life	,07	,15	,15	-,10	,11	,20	,14	,10	,25
exciting life	,30	,07	,23	,14	,17	,26	,07	,11	,29
accomplishment	,31	,24	,27	-,03	,20	,33	,26	,19	,35
world at peace	,27	-,05	,19	,09	,40	,16	,23	,14	,15
world of beauty	,04	,07	,15	,02	,25	,21	,35	,14	,04
equality	,35	,14	,11	,05	,30	,20	,12	,05	,30
family security	,21	,04	,21	,06	,39	,32	,17	,13	,23
freedom	,23	,19	,36	,06	,25	,35	,39	,08	,24
happiness	,16	,11	,26	,04	,20	,19	,23	,22	,18
inner harmony	,19	,19	,24	,21	,18	,37	,20	,20	,26
mature love	,28	,24	,18	,07	,09	,22	,07	,14	,34
national security	,26	,24	,23	,06	,18	,25	,25	,09	,32
pleasure	,35	,21	,15	,15	,24	,23	,08	,21	,34
salvation	,06	,25	,24	,19	,17	,28	,26	,22	,21
self-respect	,03	-,02	,29	,08	,35	,29	,25	,19	,23
social recognition	,23	,15	,44	,03	,24	,43	,28	,22	,40
true friendship	,25	,20	,27	,03	,16	,24	,17	,08	,24
wisdom	,13	,21	,31	,06	-,15	,41	,22	,13	,29

significance levels: 1%: $r > 0,20$

5%: $r > 0,15$

Two aspects of the relationship of the values will be considered:

(i) the relationship of the values within each of the two sets of values

(ii) the relationship between the terminal and the instrumental values.

(i) Relationship between terminal values: Those terminal values with significant correlation coefficients at the 1 per cent level of confidence are as follows (from table 5.11):

sense of accomplishment	and a comfortable life	(0,36)
	and family security	(0,36)
	and wisdom	(0,27)
	and national security	(0,25)
	and inner harmony	(0,25)
self-respect	and national security	(0,38)
	and social recognition	(0,35)
	and wisdom	(0,32)
	and inner harmony	(0,29)
	and salvation	(0,29)
	and true friendship	(0,27)
	and happiness	(0,27)
social recognition	and a comfortable life	(0,31)
	and a world of beauty	(0,31)
	and true friendship	(0,28)
	and national security	(0,27)

social recognition	and equality	(0,25)
inner harmony	and happiness	(0,34)
	and family security	(0,28)
	and equality	(0,27)
wisdom	and inner harmony	(0,27)
	and happiness	(0,25)
national security	and family security	(0,27)
	and a world at peace	(0,25)
	and wisdom	(0,26)
a world of beauty	and equality	(0,42)
	and a world at peace	(0,38)
an exciting life	and mature love	(0,31)

Relationship between instrumental values: The inter-correlations for the instrumental values are very high. Those values with significant correlations greater than 0,40 are as follows (from table 5.12):

honest	and self-control	(0,48)
	and obedient	(0,44)
	and responsible	(0,40)
polite	and obedient	(0,48)
	and loving	(0,42)
	and forgiving	(0,44)
helpful	and obedient	(0,49)
	and responsible	(0,44)
	and clean	(0,40)
self-control	and obedient	(0,44)

self-control	and imaginative	(0,43)
forgiving	and loving	(0,49)
	and cheerful	(0,43)
capable	and intellectual	(0,41)

Rokeach (1973) in his studies on values found that a large number of the correlations between the values were statistically significant using ipsitive measures. In a sample of adult Americans he found correlation coefficients to range between 0,35 and -0,32 and claims a low mean intercorrelation of 0,06 for each of the two sets of values.

In the present study the mean correlation for the terminal values is 0,16 and 0,26 for the instrumental values. Rokeach claims that the values were so selected to maximise diversity and to minimise overlap within each of the two sets. From the present study it appears that there could be considerable overlap especially within the set of instrumental values.

(ii) Relationship between the terminal and the instrumental values: The intercorrelations for the two sets of values are very high. A summary of those terminal and instrumental values with correlations greater than 0,35 is as follows:

social recognition	and intellectual	(0,44)
	and obedient	(0,43)
	and capable	(0,41)
	and self-control	(0,40)
freedom	and polite	(0,39)
	and intellectual	(0,36)
	and obedient	(0,35)
	and clean	(0,35)
sense of accomplishment	and capable	(0,40)
	and self-control	(0,35)
wisdom	and obedient	(0,41)
a world at peace	and loving	(0,40)
family security	and loving	(0,39)
inner harmony	and obedient	(0,37)
pleasure	and imaginative	(0,35)
self-respect	and loving	(0,35)
equality	and imaginative	(0,35)

Rokeach found correlations between terminal and instrumental values as high as 0,31. In the present study the highest correlation is 0,44 and the mean correlation coefficient is 0,17. Although Rokeach states that no special effort was made to minimise the overlap between the two sets of values, some of the correlations can prove to be substantial on logical grounds. It may be expected that the "end states or goals" i.e. the terminal values towards which the

individual strives should bear some positive relationship to the methods which he employs, i.e. the instrumental values to reach those goals.

It appears that the relationships between the terminal and instrumental values for the juvenile delinquents differ from that of the adult sample used by Rokeach. The correlations for the adult sample were based on ipsitive data and thus cannot be compared directly with the above correlations for the delinquent group. However it appears that adults strive towards the terminal value social recognition by being ambitious while for the juvenile delinquent social recognition is attainable by being obedient, capable, self-controlled and intellectual (intelligent or clever). Other differences seem to exist between the manner in which juvenile delinquents strive towards terminal values and the manner in which adults do. The latter strive towards the terminal value pleasure by means of the instrumental values of cheerful, clean, independent and polite. For the juvenile delinquent the value pleasure is attainable by being imaginative, self-controlled, capable, helpful, loving and obedient.

Some similarity exists between the adult sample and the juvenile delinquents in the case of the terminal value a sense of accomplishment. The adults strive towards this through the instrumental values of imaginative, capable

and independent. For the juvenile delinquent the same terminal value is associated with being imaginative, capable, self-controlled, honest and obedient.

The differences in the value orientations between adults and the juvenile delinquents used in this study could be due to the age difference. Martin (1976) using the R.V.S. in a study of values of the sixth and eighth grade school pupils found an age difference in their values. The possibility that a person's values as measured by the R.V.S. change over a period of time was investigated by Feather (1971b). He found changes to occur in the value structure over a period of two years and postulated that these changes were ontogenetic for adolescents over the late adolescent period.

The value relationships of the juvenile delinquent in the present study appear to indicate more short term ideals than is the case for adults. Results suggest he is intent on finding social recognition, for example, in the more immediate school situation. By obedient, capable, self-controlled and polite behaviour he seeks this recognition with his teachers and peers. Feather and Cross (1975) found that delinquents assign greater importance to short term personal values than to long term social values. Relating this to Kohlberg's levels of moral development, it suggests that the juvenile

delinquent has not developed beyond the "conventional" level of moral thinking.

4.3 Relationship between values and verbal I.Q.

In chapter 1 the statement was made that low verbal intelligence places a restraint on a person's ability to make cognitive projections of his goals or values. Certain results in this study show that verbal I.Q. indeed appears to be related to a particular dimension of values. In table 5.7 verbal I.Q. emerges as a variable with high loading in one pole of the dimension intellectual restriction vs self-expansion. In table 5.9 verbal I.Q. appears in the factor which was called contentment.

Those values which are specifically related to verbal I.Q. are found in table 5.14. The terminal values which show a significant positive correlation with verbal I.Q. are inner harmony (0,27), wisdom (0,18) and happiness (0,16). The terminal values which show a significant negative correlation with verbal I.Q. are pleasure (-0,23), a world of beauty (-0,21) and social recognition (-0,16).

The juvenile delinquent with low verbal I.Q. will thus

TABLE 5.14 Pearson Product-moment correlations for verbal I.Q. and terminal and instrumental values of juvenile delinquents

terminal values		r	instrumental values		r
comfortable life		-,07	ambitious		-,10
exciting life		-,10	broadminded		,04
sense of accomplishment		-,02	capable		,09
world at peace		,01	cheerful		-,04
world of beauty	++	-,21	clean		-,19
equality		-,09	courageous	+	,16
family security		,07	forgiving		-,02
freedom		,01	helpful		-,14
happiness	+	,16	honest		-,10
inner harmony	++	,27	imaginative		,05
mature love		-,05	independent	+	,16
national security		,03	intellectual		,09
pleasure	++	-,23	logical		,08
salvation		-,07	loving		-,06
self-respect		,12	obedient	++	-,20
social recognition	+	-,16	polite		,02
true friendship		,02	responsible		,07
wisdom	+	,18	self-controlled		,05

significance levels: ++ 1% : r>0,20

\+ 5% : r>0,15

place a low value on inner harmony, happiness and wisdom and he is likely to place a high value on pleasure, a world of beauty and social recognition.

The instrumental values which show a significant positive correlation with verbal I.Q. are courageous (0,16) and independent (0,16). A significant negative correlation exists between verbal I.Q. and obedient (-0,20).

The juvenile delinquent with a low verbal I.Q. is thus likely to place a high value on being obedient and a low value on being independent and courageous with a tendency towards a high value on helpful (r=-0,14).

The correlations between verbal I.Q. and values are very low. Only in the case of four of the thirty six values are the correlations significant at the one per cent level of confidence. Thus the relationships between verbal I.Q. and most of the values could be due to chance. The relationship appears to be insignificant except in the case of pleasure, inner harmony, a world of beauty and obedient.

Verbal I.Q. appears to be related to values in the sense that it influences the individual's ability to set himself self-actualising goals. The pupil with a low verbal I.Q. has a diminished sense of ambition. His

self-expansion as a person is diminished to the extent that he values the immediate security within the family more than being independent.

The above findings indicate that a relationship exists between verbal I.Q. and some of the values. This supports the findings of Rim (1972)and van der Vyver (1969) that significant differences exist in the values of persons of low intelligence and those of high intelligence.

5 Analysis of the personal relations of juvenile delinquents

5.1 Factor structure of personal relations

The twelve personal relations variables were subjected to a component factor analysis. Verbal I.Q. was included to establish how this variable relates to personal relations.

Principal components were extracted as a first step in this analysis. Four factors emerged of which the first was a general factor with high loadings on several of the variables. The other three factors were bi-polar with high positive and negative loadings on several of the variables.

Table 5.15 on page 127 represents the factor structure of the principal components of the personal relations of juvenile delinquents.

The four factors with eigen values greater than one accounted for 66,4% of the cumulative variance.

Factor 1 has the highest positive loadings on self-control, formal relations and nervousness. It will be referred to as a general personal relations factor.

Factor 2 has high positive loadings on the desirability scale, verbal I.Q., self-confidence and sociability - S and negative loadings on moral sense, family influence and formal relations. This dimension will be referred to as social confidence vs moral restraint.

Factor 3 has the highest positive loadings on sociability-S, verbal I.Q. and moral sense and negative loadings on personal freedom, the desirability scale and family influence. This dimension will be referred to as social morality vs family constraint.

Factor 4 has the highest positive loadings on personal freedom, sociability - S and family influence and negative loadings on health, nervousness and personal relations. This dimension will be referred to as family

TABLE 5.15 Principal components of the personal relations factor structure of juvenile delinquents

Factor	Highest positive loadings		Highest negative loadings		Per cent of Variance
1. general personal relations factor	self-control	74			33,0
	formal relations	70			
	nervousness	69			
	self-esteem	67			
	sociability-G	66			
	health	64			
	self-confidence	61			
2. social confidence vs moral restraint	desirability scale	56	moral sense	-54	14,4
	verbal I.Q.	53	family influence	-42	
	self-confidence	45	formal relations	-27	
	sociability-S	43			
	self-esteem	36			
3. social morality vs family constraint	sociability-S	57	personal freedom	-35	10,9
	verbal I.Q.	49	desirability scale	-33	
	moral sense	38	family influence	-32	
	self-control	29	self-esteem	-29	
	self-confidence	24	nervousness	-28	
4. family restraint vs neurotic self-restriction	personal freedom	69	health	-28	8,1
	sociability-S	44	nervousness	-27	
	family influence	41	formal relations	-16	

decimals omitted for loadings

restraint vs neurotic self-restraint.

The above principal components were subjected to an oblique rotation. The resulting simple structure is presented in tables 5.16 and 5.17 on pages 129 and 130.

The four polar dimensions appear in the simple structure in the form of four strong factors with very high loadings on only two or three variables in each factor.

Factor 1 has the highest loadings on nervousness, health, self-esteem and sociability - G. These variables relate to a pre-occupation with the person's physical condition and confidence in social group interaction. This factor will be called neurotic self-restriction.

Factor 2 has the highest loadings on moral sense, formal relations and self-control and negative loading on the desirability scale. These variables relate to moral behaviour and this factor will be called moral restraint.

Factor 3 has the highest positive loadings on sociability - S, verbal I.Q. and self-confidence. These variables relate to confidence in social relations especially with persons of the opposite sex. This factor will be called social confidence. Verbal I.Q. appears to play a role in this factor.

TABLE 5.16 Primary factor pattern matrix of juvenile delinquent personal relations

Personal relations	Factors with loadings			
	1	2	3	4
nervousness	+85			
health	81			
self-esteem	79			
sociability - G	54			
moral sense		89		
desirability scale		-86		
formal relations	30	65		
self-control	33	62		
sociability - S			85	
self-confidence	43		55	
personal freedom				88
family influence		33	-25	68
(verbal I.Q.)			64	-28
eigen value	4,29	1,87	1,41	1,06
% of total variance	33,0	14,4	10,9	8,1

factor loadings < 0,25 excluded

+ decimals omitted for loadings

Direct oblimin solution with gamma = zero

Maximum iterations 50; convergence criterion = 0,00001; simplicity criterion of 2,11414 reached after 20 iterations.

TABLE 5.17 Factor structure of juvenile delinquent personal relations

Factor 1 (neurotic self-restriction)	loading	Factor 3 (social confidence)	loading
nervousness	85	sociability - S	85
health	81	verbal I.Q.	64
self-esteem	79	self-confidence	55
sociability - G	54	family influence	25
self-confidence	43		
self-control	33		
formal relations	30		
Factor 2 (moral restraint)		**Factor 4** (family restraint)	
moral sense	89	personal freedom	88
desirability scale	-86	family influence	68
formal relations	65	verbal I.Q.	-28
self-control	62		
family influence	33		

decimals omitted

Factor 4 has the highest positive loadings on personal freedom and family influence, with low negative loading on verbal I.Q. These variables relate to personal freedom within the family context. This factor will be called family restraint.

The four elements in the personal relations of juvenile delinquents which have a determining influence on their relationships with other people are clearly defined in this factor pattern. These elements are referred to as restraints which are placed upon the individual and which either facilitate or hamper his relationships with others.

Factor 1 relates to the introvertive concern with own physical well-being which could inhibit spontaneous and healthy relationships in interaction with other people.

Factor 2 concerns a moral aspect in relationships with adults. The desirability scale variable is an indication of the honesty with which the person presents himself in his relationships with other people in the more formal situations.

Factor 3 seems to emphasise the juvenile delinquent's and perhaps more generally the adolescent's pre-occupation with relationships with girls and the self-confidence, or lack thereof, associated with this.

Factor 4 emphasises the importance which the influences of the family and the constraint, or lack thereof, which family relationships hold for the juvenile delinquent.

The personal relations of the pupils are thus reducible to four dimensions. Three of these relate to relationship elements either within the individual (feelings towards the self) or within the family situation which place a restraint on the normal interpersonal relationships of the individual. The fourth dimension involves verbal intelligence as an element of family relationships.

Covariance of personal relations factors: The four factors are not all independent of one another. Table 5.18 (page 133) shows the covariance of the factors in terms of factor score coefficients. The following factors have positive covariance coefficients:

moral restraint	with neurotic self-restriction	(0,30)
moral restraint	with family restraint	(0,23)
family restraint	with neurotic self-restraint	(0,25)

These correlation coefficients are not significant. There is a tendency for pupils who score high on the moral restraint factor also to score high on neurotic self-restriction and family restraint.

TABLE 5.18 Factor score covariance for personal relations factors of juvenile delinquents

Factor	1	2	3	4
neurotic self-restriction	1,00			
moral restraint	,30	1,00		
social confidence	,16	,00	1,00	
family restraint	,25	,23	-,02	1,00

5.2 Interrelationships of personal relations

The interrelationship of the personal relations variables can be more explicitly seen in table 5.19 (page 134). The intercorrelations in this matrix are high reflecting the high degree of covariance in the factors. Those variables which show the highest significant positive correlations are:

self-confidence	and	self-esteem	(0,49)
self-confidence	and	self-control	(0,41)
self-confidence	and	nervousness	(0,42)
self-esteem	and	nervousness	(0,58)
self-esteem	and	health	(0,50)
self-esteem	and	sociability - G	(0,48)
self-control	and	nervousness	(0,48)
self-control	and	health	(0,40)

TABLE 5.19 Pearson Product-moment intercorrelations for the personal relations of juvenile delinquents

1 self-confidence	1,00										
2 self-esteem	,49	1,00									
3 self-control	,41	,34	1,00								
4 nervousness	,42	,56	,48	1,00							
5 health	,35	,50	,40	,57	1,00						
6 family influence	,13	,25	,32	,26	,26	1,00					
7 personal freedom	,27	,29	,22	,26	,23	,50	1,00				
8 sociability - G	,38	,48	,33	,45	,37	,29	,20	1,00			
9 sociability - S	,32	,03	,08	-,08	-,04	-,14	,04	,19	1,00		
10 moral sense	,23	,13	,47	,15	,10	,43	,08	,21	-,03	1,00	
11 formal relations	,29	,37	,46	,31	,34	,39	,12	,50	-,01	,58	1,00
12 desirability scale	-,13	-,05	-,56	-,16	-,17	-,35	-,09	-,17	,04	-,57	-,41	1,00

significance of levels: 1% : r>0,20

5% : r>0,15

self-control	and	moral sense	(0,47)
self-control	and	formal relations	(0,46)
nervousness	and	health	(0,57)
nervousness	and	sociability - G	(0,45)
family influence	and	personal freedom	(0,50)
family influence	and	moral sense	(0,43)
formal relations	and	moral sense	(0,58)
formal relations	and	sociability - G	(0,50)

The desirability scale has low correlations with several of the other variables viz. moral sense (-0,57), self-control (-0,56), formal relations (-0,41) and family influence (-0,35). This implies that a pupil who scores high on the desirability scale very likely has a low score on moral sense, lacks self-control, has poor formal relations and is not influenced by factors such as family togetherness or relationships between family members. It is interesting to note that a high score on the desirability scale indicates that the pupil was honest in his responses to the questionnaire. Although a pupil has low moral sense and would be expected to be dishonest in his responses, his poor self-control causes him to be incapable of presenting himself in a favourable light.

Of all the variables which have highly significant correlations with one another, self-confidence, self-

esteem and self-control seem to be related to most of the other variables.

A pupil with a low score on self-confidence is very likely to score low on self-esteem, self-control and nervousness.

Similarly a low score on self-esteem implies low scores on health and sociability - G, i.e. such a pupil will be pre-occupied with his own physical condition and be introvertive in his relationships with others.

A low score on self-control would be indicative of nervousness, a low moral sense, poor formal relations and a pre-occupation with own physical condition.

Those pupils who score low on family influence are likely to have a low moral sense and feel that their personal freedom is restricted by their parents.

5.3 Relationship between personal relations and verbal I.Q.

It was seen in section 5.1 that verbal I.Q. entered into the factor structure with the variables sociability - S and self-confidence. The relationship between verbal I.Q. and the variables of personal relations is presented in

table 5.20 in terms of correlation coefficients.

TABLE 5.20 Pearson Product-moment correlations of personal relations of juvenile delinquents with verbal I.Q.

Personal relations	r	Personal relations	r
self-confidence	,24	family influence	-,26
sociability - S	,24	formal relations	-,06
health	,15	moral sense	-,05
self-control	,13	sociability - G	-,05
desirability scale	,13	self-esteem	-,01
nervousness	,02		
personal freedom	,01		

significance levels: 1% : r>0,20

5% : r>0,15

It can be seen from table 5.20 that verbal I.Q. has significantly high positive correlation coefficients with self-confidence (0,24), sociability - S (0,24) and health (0,15). There is a significant negative correlation with family influence (-0,26).

These results indicate that a low verbal I.Q. is likely to be accompanied by low scores on self-confidence, sociability - S and health. On the other hand this low score will be likely to indicate a high score on family influence.

A juvenile delinquent with a low verbal I.Q. appears to be restricted in his personal relations. He is dependent on family factors such as togetherness, he lacks self-confidence and is concerned with his own physical well-being.

6 Summary remarks on chapter 5

The results obtained in this chapter reveal that the needs of the pupils of the school can be reduced to three components called self-actualisation, immature demands and social dependency.

The results also show that the values of the pupils can be reduced to ten components named self-constriction, family security, competence, social security, respect, self-restriction, self-expansion, contentment, self-indulgence and hedonism.

The personal relations are reducible to four components called neurotic self-restriction, moral restraint, social confidence and family restraint.

Verbal I.Q. emerges as a psychological construct separate from needs, values and personal relations. However it seems to be related to each of these three

domains in a particular way. Any differential treatment programme which aims to cater for specific needs and to influence specific values or improve personal relations, would have to take cognisance of verbal intelligence. Such treatment would have to allow for the slower process by means of which the dull pupil incorporates new knowledge.

The results obtained in this chapter provide more detailed information regarding the needs, values and personal relations of juvenile delinquents. This information will be used in chapter 8 to devise a differential treatment programme for different types of delinquents.

CHAPTER 6

THE RELATIONSHIP BETWEEN THE NEEDS, VALUES AND PERSONAL RELATIONS OF JUVENILE DELINQUENTS

This section deals with two aspects of the relationship between the needs, values and personal relations of the pupils of the school.

First, the need-value and the need-personal relations relationships are investigated. Second, the sixty four personality variables covering all three domains, including verbal intelligence, are combined and analysed in order to determine the factor structure of the total domain. Although it is expected that the factors in the total domain will be similar to those found in the separate domains in chapter 5, the method used to identify subgroups requires the factors to be derived in a single analysis of all sixty four variables.

The three questionnaires which were used in this study were devised to measure different constructs. It is expected that the factor structures which represent combinations of variables of more than one domain will contain factors which will be independent of the need, value and personal relations domains. The need factors are not expected to contain any value variables or personal relations variables. The same applies to the

value factors and personal relations factors.

1 The need-value relationship

1.1 Factor structure of the need-value domain

The fifteen need and thirty six value variables were together subjected to a component factor analysis. The same factoring procedure was used as in chapter 5 when each of the domains was analysed separately. Fourteen oblique factors emerged with eigen values greater than one. Ten of these factors were retained accounting for sixty per cent of the total variance.

The primary factor pattern is presented in table 6.1 and the factor structure in table 6.2.

From these tables it is clear that the factor structure of the need-value domain contains essentially the same factors as those obtained in the separate analysis of needs and values (see tables 5.3 and 5.9).

Factor 1 is a general need factor which in table 5.3 is called self-actualisation. The order of the need variables with high loadings is slightly different and comprises some of the variables of factor 3 in table 5.3.

TABLE 6.1 Primary factor pattern matrix of the need- value domain for juvenile delinquents

Variable	Factors with loadings									
	1	2	3	4	5	6	7	8	9	10
deference	79									
abasement	78									
nurturance	74									
achievement	71									
intraception	70									
order	68									
affiliation	68									
change	67									
endurance	63									
succourance	55									
dominance	53	53								
exhibitionism	42	71								
aggression		81								
autonomy		65								
intellectual			65							
independent			60							
broadminded			58							
capable			53							
inner harmony			46							
courageous			45							
wisdom			44							
logical			44							
self-control				64						
honest				62						
responsible				57						
imaginative				42						
world of beauty					81					
equality					69					
social recognition					45					
world at peace					42					
comfortable life						66				
clean						64				
family security						55				
accomplishment						52				
loving							54			
polite							54			
self-respect							51			
national security							48			
cheerful								70		
forgiving								47		
salvation								47		
mature love								-43		
freedom									74	
pleasure									58	
heterosexuality									42	
happiness										69
exciting life										67
eigen value	10,7	4,9	2,8	2,3	2,0	1,8	1,8	1,5	1,4	1,2
% variance produced	15,9	3,0	3,0	2,6	2,3	2,3	2,2	2,1	2,0	1,9

decimals omitted for loadings
factor loadings < 0,25 excluded

TABLE 6.2 Factor analytic structure of the need-value domain of juvenile delinquents

Factor 1 (social dependency)	loading
deference	79
abasement	78
nurturance	74
achievement	71
interest	70
order	68
affiliation	68
change	67
endurance	63
succourance	55
dominance	53
exhibitionism	42
Factor 2 (immature demands)	
aggression	81
exhibitionism	71
autonomy	65
dominance	53
Factor 3 (self-expansion)	
intellectual	65
independent	60
broadminded	58
capable	53
inner harmony	46
courageous	45
wisdom	44
logical	44
Factor 4 (self-constriction)	
self-control	64
honest	62
responsible	57
imaginative	42

Factor 5 (social security)	loading
a world of beauty	81
equality	69
social recognition	45
a world at peace	42
Factor 6 (family security)	
a comfortable life	66
clean	64
family security	55
sense of accomplishment	52
Factor 7 (respect)	
loving	54
polite	54
self-respect	51
national security	48
Factor 8 (self-restriction)	
cheerful	70
forgiving	47
salvation	47
mature love	-43
Factor 9 (hedonism)	
freedom	74
pleasure	58
heterosexuality	42
Factor 10 (immediate gratification)	
happiness	69
exciting life	67

decimals omitted

The variables with the highest loadings are deference, abasement, nurturance, achievement and interest which seem to represent a specific type of dependency on other people. This factor will retain the name of social dependency.

Factor 2 is the same immature demands factor as in table 5.3 containing the variables aggression, exhibitionism, autonomy and dominance.

Factor 3 is a value factor which represents a combination of factors 3 and 7 in table 5.9 and it retains the name of self-expansion.

Factor 10 represents a combination of factors 8 and 9 in table 5.9 which in combined form is renamed immediate gratification.

The remaining seven value factors are the same as those found in the separate analysis of the value domain.

There is no overlap of need variables and value variables. The need factors contain no value variables if loadings less than 0,25 are ignored. Neither do the value variables contain any need variables. Needs and values thus constitute two different psychological constructs. The E.P.P.S. and the R.V.S. questionnaires each measure a

different personality component. It does not seem to be appropriate to use the E.P.P.S. to measure values as some investigators have been inclined to do (Abate 1967, Berrien 1966, Danielson 1967, Smith 1964 and Steel 1979).

Rokeach (1973) also states that his findings on the relationship between needs and values suggests that "value measures can indeed be taken as measures of needs" (p 149). However it remains inappropriate to equate values with needs purely on the basis that some correlation exists between certain need measurements and certain value measurements. Rokeach does state that the relationship between needs and values is complex and he questions the validity of using the R.V.S. to measure needs compared with other procedures such as the Thematic Apperception Test of H.A. Murray.

1.2 Degree of association of needs and values

Although needs and values represent two separate aspects of the psychological domain, theory suggests that some relationship exists between them. The nature of this relationship may be investigated by considering the correlation of the need and value variables used in this study. Rokeach (1973) found that such a relationship exists and determined the value correlates

for the needs affiliation and achievement. These are referred to again below.

Tables 6.3 and 6.4 (pages 147 to 150) represent the correlation matrices of the needs with the terminal and the instrumental values.

All the need variables have high correlations with several value variables. However the correlations which Rokeach found for the adult sample of seventy four college students differs from those found in this study. In the adult sample the need for achievement correlated with the values independence (r=0,35) and intellectual (r=0,25). For the juvenile delinquents however the need for achievement not only has a high correlation with intellectual (r=0,26) but also with the values wisdom (r=0,36) and an exciting life (r=0,32). Several other values also have correlations greater than 0,20 with achievement.

Rokeach found the value correlate of the need affiliation to be true friendship (r=0,32). In the present study the latter correlates not only with affiliation (r=0,28) but also with the needs nurturance (r=0,29) and abasement (r=0,21).

TABLE 6.3a Pearson Product-moment intercorrelations for needs and terminal values of juvenile delinquents

	NEEDS							
TERMINAL VALUES	achievement	deference	order	exhibitionism	autonomy	affiliation	intraception	succourance
comfortable life	,26	,17	,24	,05	,10	,26	,10	,25
exciting life	,32	,20	,21	,29	,22	,23	,22	,29
accomplishment	,29	,20	,23	-,05	,08	,12	,13	,12
world at peace	,03	,12	,13	-,11	-,07	,21	,12	,12
world of beauty	,00	,09	,11	-,05	-,05	,06	-,01	,16
equality	-,01	,07	,11	-,03	,01	,08	,06	,02
family security	,21	,14	,14	,06	,11	,17	,11	,18
freedom	,01	,03	-,02	,07	,14	,15	,09	,02
happiness	,23	,01	,20	,01	-,03	,06	,10	,18
inner harmony	,28	,13	,13	,03	,16	,12	,19	,13
mature love	,20	,06	,14	,09	,19	,12	,06	,20
national security	,13	,23	,21	,00	-,01	,08	,02	,12
pleasure	,10	,07	,08	,16	,17	,17	,04	,16
salvation	,13	,18	,22	-,06	-,08	,13	,04	,10
self-respect	,17	,17	,30	-,01	-,01	,18	,10	,07
social recognition	,15	,12	,20	,02	,04	,10	-,05	,16
true friendship	,14	,10	,19	,11	,03	,28	,12	,15
wisdom	,36	,31	,30	-,01	,12	,22	,34	,21

significance levels: 1% : $r > 0,20$

5% : $r > 0,15$

TABLE 6.3b Pearson Product-moment intercorrelations for needs and terminal values of juvenile delinquents

	NEEDS						
TERMINAL VALUES	dominance	abasement	nurturance	change	endurance	heterosexuality	aggression
comfortable life	,21	,08	,26	,19	,11	,27	,01
exciting life	,29	,20	,18	,22	,13	,08	,08
accomplishment	,09	,12	,17	,03	,16	,01	-,04
world at peace	-,10	,08	,18	,02	,19	,00	-,14
world of beauty	-,08	,12	,15	-,02	,13	-,12	-,07
equality	-,02	,16	,12	-,05	,06	-,04	-,02
family security	,15	,07	,17	,01	,05	,06	,04
freedom	,05	-,01	,07	,04	,09	,28	,11
happiness	,03	-,02	,07	,07	,00	,03	,02
inner harmony	,11	,08	,09	,09	,05	,05	,01
mature love	,20	,06	,15	,10	,07	,28	,01
national security	,13	,18	,22	,00	,16	-,02	-,10
pleasure	,15	,08	,17	,25	,12	,20	,08
salvation	,04	,25	,19	,00	,18	-,08	-,22
self-respect	,15	,17	,22	,20	,21	,03	-,08
social recognition	,17	,10	,12	,04	,20	-,05	,01
true friendship	,09	,21	,29	,15	,14	,01	-,02
wisdom	,26	,27	,26	,22	,31	,08	-,14

significance levels: 1% : r>0,20

5% : r>0,15

TABLE 6.4a Pearson Product-moment intercorrelations for needs and instrumental values of juvenile delinquents

	NEEDS							
INSTRUMENTAL VALUES	achievement	deference	order	exhibitionism	autonomy	affiliation	intraception	succourance
ambitious	,19	,17	,23	-,12	-,12	,10	-,01	,14
broadminded	,20	,20	,17	-,10	-,10	,16	,20	,03
capable	,28	,14	,20	-,07	,09	,08	,08	,09
cheerful	,10	,16	,17	,02	,07	,16	,06	,13
clean	,10	,20	,24	,03	,07	,08	-,08	,11
courageous	,24	,19	,23	-,05	,13	,12	,19	-,01
forgiving	,24	,30	,29	,06	,08	,25	,18	,16
helpful	,27	,37	,38	,10	,14	,17	,09	,27
honest	,25	,26	,42	,03	,10	,11	,11	,12
imaginative	,27	,26	,29	,15	,16	,28	,16	,19
independent	,11	,14	,06	,01	,07	,12	,06	,06
intellectual	,26	,26	,25	,03	,11	,09	,14	,20
logical	,28	,24	,17	,02	,17	,21	,18	,10
loving	,26	,30	,30	,15	,07	,32	,17	,29
obedient	,18	,34	,40	-,03	-,13	,22	,10	,23
polite	,26	,28	,36	-,02	-,07	,24	,17	,21
responsible	,21	,27	,26	,01	,01	,12	,05	,13
self-control	,22	,29	,40	-,02	,02	,15	,14	,17

significance levels: 1% : r>0,20

5% : r>0,15

TABLE 6.4b Pearson Product-moment intercorrelations for needs and instrumental values of juvenile delinquents

	NEEDS						
INSTRUMENTAL VALUES	dominance	abasement	nurturance	change	endurance	heterosexuality	aggression
ambitious	,08	,06	,21	,03	,24	-,05	-,26
broadminded	,04	,21	,17	,24	,19	,07	-,14
capable	,04	,07	,08	-,01	,17	,03	-,05
cheerful	,08	,12	,08	,07	,11	-,09	-,03
clean	,05	,14	,16	-,01	,17	,03	,01
courageous	,09	,15	,10	,11	,26	,08	-,03
forgiving	,15	,32	,24	,12	,26	-,07	-,12
helpful	,18	,27	,32	,07	,39	-,02	-,02
honest	,11	,30	,22	,06	,39	-,11	-,12
imaginative	,22	,18	,30	,22	,25	,14	,04
independent	,16	,06	,13	,11	,04	,22	,05
intellectual	,23	,12	,06	,16	,18	,12	,07
logical	,14	,17	,20	,24	,23	,13	-,04
loving	,22	,28	,48	,18	,27	,09	-,07
obedient	,09	,31	,30	,12	,43	-,07	-,22
polite	,18	,28	,31	,13	,25	-,00	-,20
responsible	,15	,18	,10	,04	,24	-,01	-,01
self-control	,20	,23	,26	,10	,39	-,11	-,20

significance levels: 1% : $r > 0,20$

5% : $r > 0,15$

It is possible that other differences exist between the need-value correlates for adults and that for other age groups. Rokeach mentions that in the case of adults, people with a high need for achievement tend to transform it into the values independence and intellectual. In the case of the juvenile delinquent sample it appears that the need achievement is transformed into such terminal values as wisdom, exciting life and accomplishment and into the instrumental values logical, capable and helpful.

The relationship between needs and values has not received much attention in the case of juvenile delinquents or other adolescent groups. Feather and Cross (1975) found differences between the hierarchical value structure of juvenile delinquents and normal adolescents. It seems that further research is necessary to determine whether these need-value relationships are specific to certain age groups and whether differences in group value structures cause differences in the need-value correlates.

2 The degree of association of needs and personal relations

In chapter 2 the theoretical definitions of needs have a common element which cause a psychological need to have certain dynamic qualities. This common element in the various definitions is the goal-directedness of the motivating force which is associated with the need. Whatever these goals are, the manner in which they are attained requires the individual to select his actions within his social situation. The needs of the individual are closely related to his social relations and his efforts to satisfy these needs will either occur harmoniously or will bring him into social conflict with the people around him.

The reasons for conflict producing behaviour could better be understood by analysing the defective elements in the personal relations of the juvenile delinquent and how his needs relate to interpersonal maladjustments.

Table 6.5 (pages 154 and 155) represents the correlation of the fifteen needs with the personal relations variables.

From these correlations it appears that several of the needs have high correlations with certain of the personal relations variables.

The two personal relations variables moral sense and formal relations show significantly high positive correlations with seven needs namely achievement, deference, order, endurance, affiliation, abasement and nurturance.

Moral sense is interpreted to mean the degree to which the person feels that his behaviour corresponds to the accepted norms of society. Formal relations is interpreted to mean the degree to which the person is successful in his formal relations with his fellow pupils as well as with his superiors and figures of authority.

Other personal relations variables which show high positive correlations with certain needs are:

self-confidence and need for achievement (0,24)
sociability - G and need for affiliation (0,21)
sociability - G and need for dominance (0,22)
sociability - S and need for affiliation (0,23)
sociability - S and need for heterosexuality (0,47)

Several personal relations variables also show significantly high negative correlations with certain needs. These are:

self-esteem and need for nurturance (-0,17)
self-control and need for exhibitionism (-0,19)

TABLE 6.5a Pearson Product-moment intercorrelations for needs and personal relations of juvenile delinquents

	PERSONAL RELATIONS					
NEEDS	self-confidence	self-esteem	self-control	nervousness	health	family influence
achievement	,24	,15	,06	-,07	,08	,04
deference	,07	,05	,05	-,11	,03	,14
order	,07	,01	,04	-,10	-,06	,13
exhibitionism	-,04	-,01	-,19	-,11	,02	-,04
autonomy	-,02	,04	-,19	-,14	,02	-,17
affiliation	,10	,02	,03	-,09	-,03	,04
intraception	,02	-,04	,07	-,09	,07	-,00
succourance	-,10	-,03	-,13	-,17	-,09	-,05
dominance	,12	,15	-,02	-,10	,02	-,07
abasement	-,07	-,06	,03	-,11	,00	,11
nurturance	-,06	-,17	,00	-,24	-,12	,08
change	,06	-,02	-,09	-,19	-,02	-,12
endurance	,03	-,02	,07	-,03	-,10	,18
heterosexuality	,06	,00	-,08	-,11	,00	-,07
aggression	-,13	-,09	-,34	-,20	-,11	-,31

significance levels: 1% : r>0,20

5% : r>0,15

TABLE 6.5b Pearson Product-moment intercorrelations for needs personal relations of juvenile delinquents

	PERSONAL RELATIONS					
NEEDS	personal freedom	sociability - G	sociability - S	moral sense	formal relations	desirability
achievement	,02	,16	,07	,25	,30	,02
deference	-,03	,13	,06	,32	,26	-,10
order	-,00	,10	-,07	,41	,33	-,17
exhibitionism	-,06	,12	,15	-,07	,02	,21
autonomy	-,04	-,11	-,03	-,12	-,03	,26
affiliation	,05	,21	,23	,19	,23	-,11
intraception	,14	,03	,06	,12	,12	-,06
succourance	,03	,08	,02	,08	,15	,10
dominance	-,07	,22	,18	,05	,17	,12
abasement	,00	,06	,01	,26	,23	-,15
nurturance	,01	,01	,16	,26	,20	-,17
change	,04	,05	,15	,03	,00	,09
endurance	,01	,05	-,20	,48	,36	-,22
heterosexuality	,05	,08	,47	-,06	-,03	,10
aggression	-,01	-,10	,11	-,36	-,33	,35

significance levels: 1% : r>0,20

5% : r>0,15

self-control	and need for	autonomy	(-0,19)
self-control	and need for	aggression	(-0,34)
nervousness	and need for	succourance	(-0,17)
nervousness	and need for	nurturance	(-0,24)
nervousness	and need for	change	(-0,19)
nervousness	and need for	aggression	(-0,20)
family influence	and need for	autonomy	(-0,17)
family influence	and need for	aggression	(-0,31)
sociability - S	and need for	endurance	(-0,20)
moral sense	and need for	aggression	(-0,36)
formal relations	and need for	aggression	(-0,33)

The desirability scale shows a significant positive correlation with the needs autonomy (0,26), exhibitionism (0,21) and aggression (0,35) and negative correlations with endurance (-0,22), order (-0,17) and nurturance (-0,17).

The above relationship between the personal relations variables and the needs can be interpreted at two levels. On an empirical and statistical basis it would, for example, imply that a high score on moral sense (and on formal relations) signifies that high scores also exist for these pupils on associated needs such as achievement, deference and order.

However the relationship can be interpreted in a dynamic

sense in which the needs are considered primary psychological constructs and the personal relations are the secondary psycho-sociological counterparts. In this sense the above relationships can be interpreted to mean that by improving the individual's moral sense and formal relations one would directly be catering for his need for achievement, deference, order, etc. Stated differently, should the juvenile delinquent who shows positive behaviour be encouraged to feel that his behaviour corresponds to accepted norms, then his related needs such as his need for achievement, are being catered for. Similarly an improvement in his formal relations could have the positive effect of catering for his associated needs.

The converse can be stated in respect of each of these relationships between personal relations and needs. Improving or increasing the juvenile delinquent's self-control would have the effect of lowering his need for exhibitionism, autonomy and aggression.

The interpretation of the above relationships in a dynamic and operative manner would relate these personality aspects more directly to treatment and educational goals.

Having found that there is a significant relationship between needs and values and needs and personal relations, it should be possible to combine these three domains into a single personality structure.

In chapter 1 it was mentioned that the degree of adjustment which a person has in his personal relations determines how effectively he can strive towards his goals and satisfy his needs within his social milieu. For the sake of completeness all three aspects will be correlated with one another. A detailed analysis such as this could be useful in a treatment programme which embraces all three aspects for juvenile delinquents.

3 Factor structure of the total domain

The fifteen need variables, thirty six value variables and twelve personal relations variables and verbal I.Q. were together subjected to a component factor analysis. The primary structure was determined by means of an oblique rotation of the principal components. Only the primary factor patterns will be discussed since the eventual clustering of the pupils of the school into subgroups will be based on the factors in the simple structure.

According to Rummel (1979) a component factor analysis such as that employed in this study produces factors which represent psychological constructs. The three measuring instruments which were used each purport to measure a separate aspect of personality. If they do

measure separate constructs, the total factor structure should contain factors comprising need variables only, value variables only and personal relations variables only.

The combination of the sixty four variables resulted in seventeen factors with eigen values greater than one and accounting for sixty nine per cent of the cumulative variance. Of these seventeen factors only the first ten were retained for the following reasons:

(i) these ten factors accounted for 56,2 per cent of the total variance

(ii) applying the scree test of Cattell (1966) as well as considering a discontinuity in the eigen values, it was decided that factors with eigen values less than 1,5 produced variance largely due to random error

(iii) the first ten factors also included all the major factors which emerged previously in each of the separate analyses of the needs, values and personal relations in chapter 5.

The ten factors which were retained and are presented in tables 6.6 and 6.7 (pages 160 to 163) are fairly complex in terms of the number of variables with high loadings. However the factors are pure in the sense that they are non-overlapping with respect to the needs, values and

TABLE 6.6a Factor pattern matrix of the needs, values and personal relations of juvenile delinquents

Variables	Factors and loadings									
	1	2	3	4	5	6	7	8	9	1
n-deference	77									
n-intraception	77									
n-abasement	76									
n-nurturance	75									
n-affiliation	72								27	
n-achievement	71									
n-change	70									
n-order	64		32							
n-succourance	62			27						
n-dominance	60			47						
n-endurance	52		40	-33						
self-esteem		80								
nervousness		75								
sociability - G		74								
health		72								
formal relations		58								
self-control		56		-30						2
self-confidence		55					26		31	
v-responsible			68							
v-honest			61							
v-self-controlled			54							
n-aggression				77						
n-autonomy	33			65						
n-exhibitionism	55			62						
v-national security					61					
v-self-respect					59					
v-polite					55					
v-happiness						66				
v-accomplishment						61				
v-family security						59	-35			
v-broadminded							60			
v-intellectual			25				52			
v-world of beauty								62		-3
v-world of peace								61		
v-equality								57		
sociability - S									73	
v-freedom					-27				64	
n-heterosexuality	27			27					57	
(verbal I.Q.)										6
v-courageous			41				43			
v-forgiving			38							
v-helpful			48							
v-wisdom							42			
v-imaginative							25		40	
v-independent					26		37		42	

TABLE 6.6b Factor pattern matrix of the needs, values and personal relations of juvenile delinquents

Variables	Factors and loadings									
	1	2	3	4	5	6	7	8	9	10
v- social recognition					38					-41
v-logical							50			
v-loving					38				27	
v-obedient			40	-25	33					
v-mature love									30	-36
v-pleasure									27	-46
v-true friendship					28					
v-exciting life					-25	43				-29
v-salvation					42			29		
v-comfortable life						49				-28
v-capable						47	30			
v-cheerful			28					43		
family influence		48		-34						
personal freedom		41			-34					
v-clean			38			29	-41			
v-inner harmony						34	33	37		29
moral sense			45	-36				27		
v-ambitious				-29		38		-43		
desirability scale			-28	46				-33		
eigen value	11,3	5,7	4,1	3,4	2,2	2,2	2,1	1,8	1,7	1,5
% of total variance	17,7	8,9	6,4	5,3	3,4	3,4	3,3	2,8	2,7	2,3

decimals omitted

factor loadings < 0,25 excluded

TABLE 6.7 Factor structure of juvenile delinquent needs, values and personal relations

Factor 1		Factor 4	
(social dependency)	loading	(immature demands)	loading
n-deference	77	n-aggression	77
n-intraception	76	n-autonomy	65
n-abasement	76	n-exhibitionism	62
n-nurturance	75	n-dominance	47
n-affiliation	72	desirability scale	46
n-achievement	71	n-succourance	27
n-change	70	n-heterosexuality	27
n-order	64	v-obedient	-25
n-succourance	62	v-ambitious	-29
n-dominance	60	self-control	-30
n-exhibitionism	55	n-endurance	-33
n-endurance	52	family influence	-34
n-autonomy	33	moral sense	-36
n-heterosexuality	27		
Factor 2		**Factor 5**	
(neurotic self-restriction)		(respect)	
self-esteem	80	v-national security	61
nervousness	75	v-self-respect	59
sociability - G	74	v-polite	55
health	72	v-salvation	42
formal relations	58	social recognition	38
self-control	56	v-loving	38
self-confidence	55	v-obedient	33
family influence	48	v-true friendship	28
personal freedom	41	v-independent	26
		v-exciting life	-25
		v-freedom	-27
		personal freedom	-34
Factor 3		**Factor 6**	
(self-constriction)		(family security)	
v-responsible	68	v-happiness	66
v-honest	61	v-sense of accomplishment	61
v-self-controlled	54	v-family security	59
v-helpful	48	v-comfortable life	49
moral sense	45	v-capable	47
v-courageous	41	v-exciting life	43
v-obedient	40	v-ambitious	38
n-endurance	40	v-inner harmony	34
v-clean	38	v-clean	29
v-forgiving	38		
v-order	32		
v-cheerful	28		
v-intellectual	25		
desirability scale	-28		

TABLE 6.7b Factor structure of juvenile delinquent needs, values and personal relations

Factor 7		Factor 9	
(self-expansion)	loading	(hedonism)	loading
v-broadminded	60	sociability - S	73
v-intellectual	52	v-freedom	64
v-logical	50	n-heterosexuality	57
v-courageous	43	v-independent	42
v-wisdom	42	v-imaginative	40
v-clean	-41	self-confidence	31
v-independent	37	mature love	30
v-family security	-35	v-loving	27
v-inner harmony	33	n-affiliation	27
v-capable	30	v-pleasure	27
self-confidence	26		
v-imaginative	25		
Factor 8		**Factor 10**	
(social security)		(immediate gratification)	
v-world of beauty	62	verbal I.Q.	68
v-world at peace	61	v-inner harmony	29
v-equality	57	self-control	28
v-cheerful	43	v-comfortable life	-28
v-inner harmony	37	v-exciting life	-29
v-salvation	29	v-world of beauty	-33
moral sense	27	v-mature love	-36
desirability scale	-33	v-social recognition	-41
v-ambitious	-43	v-pleasure	-46

decimals omitted

personal relations variables which have high factor loadings. The two need factors contain no variables with high factor loadings from the other two domains. The personal relations factor also has no variables from the needs or values domains. The value factors contain very few variables from the other two domains. It is apparent that the three questionnaires which were used are very specific with respect to the dimensions of personality which they purport to measure.

Verbal I.Q. emerges as a strong element in a polar factor in association with several value variables. However it only accounts for 2,3% of the total variance. The predominance of value factors is to be expected since 56% of the variables are values.

The factors are basically the same as those which emerged in the separate analysis in chapter 5. Only minor differences exist in the loadings. Consequently the names of these factors were not changed.

Factor 1 is a general need factor with high loadings on twelve of the fifteen needs. The variables with the highest loadings are deference, intraception, abasement, nurturance, affiliation, achievement and change. This is basically factor 3 in the need-structure in table 5.3 and retains the name social dependency.

Factor 2 is a general factor relationg to social relations with the highest loadings on self-esteem, nervousness, sociability - G and health. It is very similar to factor 1 in table 5.18 and retains the name of neurotic self-restriction.

Factor 3 is an instrumental value factor with the highest loadings on responsible, honest, self-control, helpful and courageous. Moral sense also appears with a relatively high loading. This is similar to factor 1 in table 5.9 and retains the name of self-constriction.

Factor 4 is a need factor with the highest loadings on aggression, autonomy, exhibitionism and dominance. This factor also contains fairly high negative loadings on moral sense, family influence, endurance and self-control. It is similar to factor 2 in table 5.3 and retains the name immature demands.

Factor 5 is a mixed terminal and instrumental value factor with the highest loadings on national security, self-respect, polite and salvation. It is similar to factor 5 in table 5.9 and retains the name respect.

Factor 6 is a terminal value factor with highest loadings on happiness, a sense of accomplishment, family security, comfortable life and capable. It is similar to factor 2

in table 5.9 and retains the name family security.

Factor 7 is an instrumental value factor with highest loadings on broadminded, intellectual, logical, courageous and wisdom. It is similar to factor 7 in table 5.9 and retains the name self-expansion.

Factor 8 consists mainly of terminal values with the highest loadings on a world of beauty, a world of peace, equality and cheerful. It is similar to factor 4 in table 5.9 and retains the name social security.

Factor 9 contains terminal and instrumental values with the highest loadings on freedom, independent and imaginative. It also contains the need heterosexuality and personal relations variable sociability - S. This factor is similar to factor 10 in table 5.9 with the need for relationships with the opposite sex added. It retains the name hedonism.

Factor 10 has the highest positive loading on verbal I.Q. and high negative loadings on pleasure, social recognition, mature love and a world of beauty. It is a combination of factors 8 and 9 in table 5.9. In its new form it contains variables which indicate the need for a state of pleasurable self-indulgence and seems to be associated with verbal I.Q. It will thus be called immediate gratification.

Co-variance of the factors for needs, values and personal relations: The ten factors of the total structure show very little co-variance as seen in table 6.8. The factors which show the highest co-variance are

respect	and	self-constriction	(r=0,27)
family security	and	respect	(r=0,20)
family security	and	social dependency	(r=0,18)
family security	and	self-expansion	(r=0,18)
family security	and	self-constriction	(r=0,17)
social security	and	self-constriction	(r=0,18)
social security	and	respect	(r=0,16)
social dependency	and	self-constriction	(r=0,16)
social dependency	and	respect	(r=0,16)

There is a tendency for pupils who score high on the factor respect to score high on self-constriction. The family security factor has positive correlations with several of the other factors. A high score on this factor indicates a tendency towards high scores on respect, social dependency, self-expansion and self-constriction.

TABLE 6.8 Factor correlations for the need, value and personal relations factors of juvenile delinquents (total structure)

Factors	1	2	3	4	5	6	7	8	9	10
1 social dependency	1,00									
2 neurotic self-restriction	,05	1,00								
3 self-constriction	,16	,10	1,00							
4 immature demands	,05	-,12	-,10	1,00						
5 respect	,16	-,01	,27	-,06	1,00					
6 family security	,18	,09	,17	,00	,20	1,00				
7 self-expansion	,10	,06	,14	,01	,11	,18	1,00			
8 social security	,10	,05	,18	-,10	,16	,10	,05	1,00		
9 hedonism	,14	,02	-,01	,09	,04	,11	,14	,02	1,00	
10 immediate gratification	-,14	,08	-,06	,01	-,06	-,10	,04	-,05	-,03	1,00

significance levels: 1% : r>0,20
5% : r>0,15

4 Degree of association of needs, values and personal relations

For ease of interpretation an extract from the correlation matrixes in tables 6.3, 6.4 and 6.5 is represented in tables 6.9, 6.10 and 6.11 (pages 170 to 178).

Those variables which have a high correlation with each other are presented in these tables. In table 6.9 all fifteen need variables are listed. Next to each need appears the value and the personal relations variables which show either high positive or high negative correlations with that particular need. In tables 6.10 and 6.11 all the values are listed with those need and personal relations variables associated with a particular value.

These tables are self-explanatory but some comments are necessary as to the usefulness of these results. From these correlations certain conclusions can be made concerning the relationship between the needs and values of juvenile delinquents.

A person with a high score on the need for achievement is likely to place a high value on wisdom, an exciting life, a successful life, inner harmony and capable. A high score on achievement also indicates a high score on

TABLE 6.9a Correlations of the needs of juvenile delinquents with their values and personal relations

Need	Value	r	Personal relations	r
1. achievement	wisdom	,36	formal relations	,30
	exciting life	,32	moral sense	,25
	accomplishment	,29	self-confidence	,24
	inner harmony	,28	sociability - G	,16
	capable	,28	self-esteem	,15
	logical	,28		
	imaginative	,27		
	helpful	,27		
	intellectual	,26		
	polite	,26		
	loving	,26		
	honest	,25		
2. deference	helpful	,37	moral sense	,32
	obedient	,34	formal relations	,26
	wisdom	,31	family influence	,14
	loving	,30	sociability - S	,13
	forgiving	,30	(nervousness	-,11)
	self-controlled	,29		
	polite	,28		
	responsible	,27		
	honest	,26		
	imaginative	,26		
	intellectual	,26		
3. order	honest	,42	moral sense	,41
	obedient	,40	formal relations	,33
	self-controlled	,40	family influence	,14
	helpful	,38	desirability scale	-,17
	polite	,36		
	self-respect	,30		
	wisdom	,30		
	forgiving	,29		
	imaginative	,29		
4. exhibitionism	exciting life	,29	desirability scale	,21
	imaginative	-,15	sociability - S	,15
			(sociability - G	,12
			self-control	-,19
5. autonomy	exciting life	,22	desirability scale	,26
			self-control	-,19
			family influence	-,17
			nervousness	-,14
			(moral sense	-,12)

TABLE 6.9b Correlations of needs of juvenile delinquents with their values and personal relations

Need	Value	r	Personal relations	r
6. affiliation	loving	,32	sociability - S	,23
	imaginative	,28	formal relations	,23
	true friendship	,28	sociability - G	,21
	comfortable life	,26	moral sense	,19
	forgiving	,25	(desirability scale	-,11)
7. intraception	wisdom	,34	personal freedom	,14
			moral sense	,12
			formal relations	,12
8. succourance	exciting life	,29	formal relations	,15
	loving	,29	nervousness	-,17
	helpful	,27	(self-control	-,13)
	comfortable life	,25		
9. dominance	exciting life	,29	sociability - G	,22
	wisdom	,26	sociability - S	,18
			formal relations	,17
			self-esteem	,15
			(self-confidence	,12)
			(desirability scale	,12)
10. abasement	forgiving	,32	moral sense	,26
	obedient	,31	formal relations	,23
	honest	,30	desirability scale	-,15
	loving	,28	(nervousness	-,11)
	polite	,28		
	helpful	,27		
	wisdom	,27		
11. nurturance	loving	,47	moral sense	,26
	helpful	,32	formal relations	,20
	polite	,31	self-esteem	,17
	obedient	,30	sociability - S	,16
	imaginative	,30	nervousness	-,24
	true friendship	,29	desirability scale	-,17
	comfortable life	,26	(health	-,12)
	self-controlled	,26		

TABLE 6.9c Correlations of the needs of juvenile delinquents with their values and personal relations

Need	Value	r	Personal relations	r
12. change	pleasure	,25	sociability - S	,15
	broadminded	,24	nervousness	-,19
	logical	,24	(family influence	-,12
	exciting life	,22		
	wisdom	,22		
	self-respect	,19		
	comfortable life	,19		
13. endurance	obedient	,43	moral sense	,48
	honest	,39	formal relations	,36
	helpful	,39	family influence	,18
	self-controlled	,39	desirability	
	wisdom	,31	scale	-,22
	endurance	,25	sociability - S	-,20
	pleasure	,25	(health	-,10
	clean	,26		
	courageous	,26		
14. heterosexuality	mature love	,28	sociability - S	,47
	freedom	,28	(nervousness	-,12
	comfortable life	,27		
	independent	,22		
	pleasure	,20		
15. aggression	ambitious	-,26	desirability	
	obedient	-,22	scale	,35
	salvation	-,21	moral sense	-,36
	self-controlled	-,20	self-control	-,34
	polite	-,20	formal relations	-,33
	broadminded	-,14	family influence	-,31
	world at peace	-,14	self-confidence	-,25
			nervousness	-,20
			(sociability - S	-,11
			(sociability - G	-,10

TABLE 6.10a Correlations of the terminal values of juvenile delinquents with their needs and personal relatio

Terminal value	Need	r	Personal relations	r
1. a comfortable life	heterosexuality	,27	(formal relations	,11
	nurturance	,26	(self-confidence	,11
	affiliation	,26		
	achievement	,26		
	succourance	,25		
2. an exciting life	achievement	,32	formal relations	,16
	dominance	,29	self-control	-,15
	succourance	,29	(nervousness	-,12
	exhibitionism	,28	(health	-,11
3. sense of achievement	achievement	,29	moral sense	,21
	order	,23	self-control	,19
	deference	,20	formal relations	,19
	nurturance	,17	self-confidence	,17
	endurance	,16	family influence	,15
	(intraception	,13	desirability scale	-,18
4. a world at peace	affiliation	,21	moral sense	,34
	endurance	,19	formal relations	,21
	nurturance	,18	self-control	,18
	aggression	-,14	desirability scale	-,15
	(exhibitionism	-,11		
	(dominance	-,10		
5. a world of beauty	succourance	,16	moral sense	,24
	nurturance	,15	sociability - S	,20
	endurance	,13	formal relations	,20
	(heterosexuality	-,12	desirability scale	-,18
6. equality	abasement	,16	moral sense	,22
	(endurance	,13	formal relations	,17
	(nurturance	,12	desirability scale	-,23
7. family security	achievement	,21	formal relations	,21
	succourance	,18	moral sense	,17
	affiliation	,17	sociability - G	,15
	nurturance	,17	family influence	,14
8. freedom	heterosexuality	,28	sociability - S	,20
	affiliation	,15	self-confidence	,20
	autonomy	,14	personal freedom	,16
9. happiness	achievement	,23		
	order	,20		
	succourance	,18		

TABLE 6.10b Correlations of the terminal values of juvenile delinquents with their needs and personal relations

Terminal value	Need	r	Personal relations	r
10. inner harmony	achievement	,28	self-confidence	,28
	intraception	,19	moral sense	,23
	autonomy	,16	health	,22
	succourance	,13	formal relations	,17
	deference	,13	self-control	,17
11. mature love	heterosexuality	,28	sociability - S	,21
	dominance	,20	(formal relations	,13)
	achievement	,20	(nervousness	,13)
	succourance	,19		
	autonomy	,19		
12. national security	deference	,23	formal relations	,27
	nurturance	,22	moral sense	,19
	order	,21	family influence	,17
	abasement	,18	(self-control	,13)
	endurance	,16		
13. pleasure	change	,25	health	-,14
	heterosexuality	,20	(nervousness	-,13)
	affiliation	,17	(self-control	-,11)
	nurturance	,17		
	exhibitionism	,16		
	succourance	,16		
	dominance	,15		
14. salvation	abasement	,25	moral sense	,26
	order	,22	formal relations	,25
	nurturance	,20	self-control	,14
	deference	,18	desirability scale	,23
	endurance	,18	health	,14
	aggression	-,21		
15. self-respect	order	,30	moral sense	,18
	nurturance	,22	formal relations	,16
	endurance	,21	(sociability - G	,13)
	change	,20	(family influence	-,13)
	affiliation	,18		
	achievement	,17		
	deference	,17		
	abasement	,17		
	dominance	,15		

TABLE 6.10c Correlations of the terminal values of juvenile delinquents with their needs and personal relatio

Terminal value	Need	r	Personal relations	r
16. social recognition	endurance	,20	formal relations	,16
	order	,20	moral sense	,12
	dominance	,17		
	succourance	,16		
	achievement	,15		
17. true friendship	nurturance	,29	personal freedom	,11
	affiliation	,28	health	-,18
	abasement	,21	desirability scale	-,15
	order	,19	self-esteem	-,14
	succourance	,15		
	change	,15		
18. wisdom	achievement	,36	formal relations	,32
	intraception	,34	self-confidence	,25
	deference	,31	self-control	,22
	endurance	,31	moral sense	,21
	order	,30	sociability - G	,16
	abasement	,27		
	dominance	,26		
	nurturance	,26		
	affiliation	,22		
	change	,22		
	succourance	,21		

TABLE 6.11a Correlations of instrumental values of juvenile delinquents with their needs and personal relation

Instrumental value	Need	r	Personal relations	r
1. ambitious	endurance	,24	formal relations	,14
	order	,23	(family influence	,11)
	nurturance	,21		
	achievement	,19		
	deference	,17		
	aggression	-,26		
2. broadminded	change	,24	self-confidence	,18
	abasement	,21	desirability scale	,16
	intraception	,20	self-control	,14
	deference	,20	(formal relations	,13)
	achievement	,20	(moral sense	,12)
	endurance	,19		
3. capable	achievement	,28	formal relations	,26
	order	,20	moral sense	,18
	endurance	,17	health	,16
	deference	,14	self-control	,16
4. cheerful	order	,17	moral sense	,28
	affiliation	,16	formal relations	,24
	deference	,16	self-control	,19
	(succourance	,13	health	,17
			desirability scale	-,27
5. clean	order	,24	moral sense	,23
	deference	,20	desirability scale	-,22
	endurance	,17	(personal freedom	-,13)
	nurturance	,16	(self-confidence	-,12)
6. courageous	endurance	,26	moral sense	,27
	achievement	,24	self-confidence	,24
	order	,23	self-control	,18
	deference	,19	formal relations	,15
	intraception	,19	(self-esteem	,13)
7. forgiving	abasement	,32	moral sense	,32
	deference	,30	self-control	,32
	order	,29	formal relations	,30
	affiliation	,25	self-confidence	,13
	achievement	,24	desirability scale	-,34
	nurturance	,24		

TABLE 6.11b Correlations of instrumental values of juvenile delinquents with their needs and personal relatio

Instrumental value	Need	r	Personal relations	r
8. helpful	endurance	,39	moral sense	,34
	order	,38	formal relations	,32
	deference	,37	family influence	,16
	nurturance	,32	self-control	,12
	succourance	,27	desirability scale	-,17
	abasement	,27	sociability - S	-,16
	achievement	,27		
9. honest	order	,42	moral sense	,36
	endurance	,39	formal relations	,24
	abasement	,30	(sociability - S	,11
	deference	,26	desirability scale	-,19
	achievement	,25	personal freedom	-,17
10. imaginative	nurturance	,30	moral sense	,25
	order	,29	self-confidence	,20
	affiliation	,28	formal relations	,19
	achievement	,27	sociability - S	,19
	deference	,26	sociability - G	,14
	endurance	,25		
	dominance	,22		
	change	,22		
11. independent	heterosexuality	,22	sociability - S	,25
	dominance	,16	self-confidence	,21
	deference	,14	(self-control	,13
	nurturance	,13	(formal relations	,11
12. intellectual	achievement	,26	formal relations	,17
	deference	,26	self-confidence	,16
	order	,25	moral sense	,15
	dominance	,23		
	succourance	,20		
13. logical	achievement	,28	self-confidence	,24
	deference	,24	formal relations	,20
	change	,24	personal freedom	,14
	endurance	,23	(moral sense	,13
	affiliation	,21		
	nurturance	,20		

TABLE 6.11c Correlations of instrumental values of juvenile delinquents with their needs and personal relation

Instrumental values	Needs	r	Personal relations	r
14. loving	nurturance	,47	moral sense	,13
	affiliation	,32	self-esteem	-,20
	deference	,30	sociability - G	-,14
	order	,30	nervousness	-,14
	succourance	,29		
	abasement	,28		
	endurance	,27		
	achievement	,26		
	dominance	,22		
15. obedient	endurance	,43	moral sense	,36
	order	,40	formal relations	,31
	deference	,34	family influence	,23
	abasement	,31	self-control	,15
	nurturance	,30	desirability scale	-,29
	succourance	,23		
	affiliation	,22		
	aggression	-,22		
16. polite	order	,36	formal relations	,30
	nurturance	,31	moral sense	,24
	deference	,28	self-control	,20
	abasement	,28	sociability - G	,18
	achievement	,26	desirability scale	-,15
	affiliation	,24		
	endurance	,25		
	succourance	,21		
	aggression	-.20		
17. responsible	deference	,27	moral sense	,36
	order	,26	self-control	,20
	endurance	,25	formal relations	,17
	achievement	,21	self-confidence	,17
	abasement	,18	desirability scale	-,19
	dominance	,15	(personal freedom	-,12)
18. self-controlled	order	,40	moral sense	,33
	endurance	,39	formal relations	,26
	deference	,29	self-control	,19
	nurturance	,26	sociability - G	,13
	abasement	,23	desirability scale	-,17
	achievement	,22	(personal freedom	-,11)
	dominance	,20		
	aggression	-,20		

self-confidence, formal relations and moral sense.

In chapter 4,table 4.2 lists those needs that are dominant in the pupils of the school. These needs are order, endurance, nurturance and achievement. The value variables and the personal relations variables associated with each of the needs are revealed by the size of the correlations in the table.

For the need order, the three values with the highest correlates are honest (0,42), obedient (0,40) and self-control (0,40). The personal relations correlates are moral sense (0,41) and formal relations (0,33). The theoretical implications of the dynamics of the need-value relationship may be deduced form the above correlates. If the need is the basic motivating factor which operates through the related values, then teaching a person to be honest, obedient and self-controlled could have the effect of influencing his need for order. This would also mean that one would have to assist him to improve his formal relations as well as his moral sense. This reasoning could be extended to the application of value clarification or value modification programmes. In this sense it would imply that the value which a person places on obedience, honesty and self-control can only be affected by catering for his need for order.

5 Summary comments on chapter 6

The combined analysis of needs and values confirms the theoretical postulate that these two psychological constructs are not the same. More care should be exercised in interpreting needs and values as congruent elements of personality. The tests which are used to measure needs cannot be used to measure values as well.

The empirical interrelationship between needs and values seems to substantiate the theoretical relationship which was set out in chapter 2 in the case of juvenile delinquents. Significant correlations were found between each of the need variables and certain values.

Significant relationships were also found between needs and personal relations variables. It should be possible to establish a treatment programme which takes cognizance of these interrelationships. Such an attempt is made in chapter 8.

The total factor structure which comprises the ten factors relating to needs, values and personal relations represent the elements of personality in terms of which the pupil population of the school can be described. Hence use can be made of this factor structure to serve as a basis for the identification of subgroups of pupils with the same characteristics. The establishment of such a classification of subgroups is undertaken in the next chapter.

CHAPTER 7

SUBGROUPS OF JUVENILE DELINQUENTS

Very few research projects have been undertaken which permit the testing of hypotheses concerning the effects of juvenile treatment programmes (Hood and Sparks 1970). One reason for this is the failure of programme developers to base a programme on a sound theoretical rationale. According to Elliot (1980) another major difficulty lies in the construction of reliable typologies which have some theoretical relevance for treatment modes of juvenile delinquents or other offenders. Knowledge about existing typologies with theoretical or empirical relevance for different treatment is limited.

Most of the typologies which have been capable of proper evaluation in practice are based on the I-level (interpersonal maturity) index developed by Sullivan, Grant and Grant (1957). However Hood reports that these typologies have not proved to be sufficiently useful or reliable.

Quay (1975), using a behaviour problem checklist, classified juvenile delinquents into four groups:

(i) unsocialised psychopathic

(ii) neurotic disturbed

(iii) socialised - subcultural

(iv) inadequate - immature.

This dimensional framework is supported by Marriot (1977) in a classification made of 230 juvenile delinquents.

However the above classification based on behaviour does not relate the typical behaviour to the more basic motivating factors which underlie such behaviour. In the present study those dimensions which were found to exist which relate to the needs, values and personal relations of juvenile delinquents (see chapter 6) were used to produce a typology based on these personality elements.

1. Cluster analysis of juvenile delinquents

The clustering was based on the factors which were derived in chapter 6 of this study. Only the first seven factors of the total structure were used for the following reasons:

(i) The first seven factors were considered to be descriptive of the major dimensions and had eigen values greater than 2.

(ii) These factors represented all the major dimensions

of the separate need, value and personal relations domains and produced 48,4 per cent of the total variance. This was taken to be an acceptable lower limit for adequate factor representation of the original data. Overall and Klett (1972) maintain that data reduction is adequate if fifty to seventy per cent of the variance is accounted for.

(iii) Trial clustering on the basis of more than seven factors produced too many subgroups.

The seven factors which were described in chapter 6, section 3 are:

1. social dependency
2. neurotic self-restriction
3. self-constriction
4. immature demands
5. respect
6. family security
7. self-expansion

The clustering was performed on the basis of factor scores. The factor score of a subject is based on the composite score on all the variables which constitute that particular factor. These scores are standardised to allow comparisons to be made across subgroups. Factor scores were obtained by means of the Mahalanobis distance measurement from each case to the centroid of

the scores of all cases on that factor.

The clustering algorithm was based on the measure of similarity between the variables (factor scores) of each case. The clustering is initiated by grouping those two cases whose factor scores have the largest correlation. The subsequent amalgamation of other cases was based on the average linkage criterion in which scores for each group after an amalgamation step were averaged and amalgamated with other cases. The following formula was used in calculating the euclidian distance between the values of the variables for the two cases in the clustering procedure:

$$d^{(5)}_{jl} = \left[\sum_i (x_{ij} - x_{il})^5 \right]^{1/5}$$

where

j = case number

l = cluster number

x = value of the variable compared

i = variable number

d = euclidian distance representing the sum of the fifth power of the absolute euclidian distance between the value of the variables for the two cases

This clustering procedure resulted in 126 of the total number of 182 pupils being grouped into six clusters with

different and distinctive profiles. This represented 69 per cent of the total number of cases. The remaining cases were extreme outliers on factor scores which the clustering procedure was unable to group successfully under the six major clusters. It is possible to apply a clustering procedure (K-means method) to include all the cases into a pre-determined number of clusters. However such a procedure implies the forcing of cases into a limited number of subgroups. The procedure used in this study produced a natural clustering into typical subgroups. It would nevertheless be possible to bring outliers into the basic typology by means of the application of discriminant analysis and profile comparison. This is described in section 5 of this chapter.

The cluster groups are represented in table 7.1 (page 186) according to the case numbers in each group. This table also reflects the mean I.Q. score of the cases in each of the groups, the percentage of the total pupil population which each group represents and the proportion of institutionalised and non-institutionalised pupils in each group.

TABLE 7.1 Cluster groups of juvenile delinquents based on seven factors relating to needs, values and personal relations

Groups according to case numbers												
Group 1				Group 2		Group 3	Group 4	Group 5	Group 6
1	50	106	162	7	99	11	67	22	41
3	53	108	164	19	101	32	77	49	54
6	57	113	167	24	102	43	85	63	93
14	60	114	168	29	104	58	90	64	105
16	61	115	169	40	109	59	91	76	127
17	68	121	170	42	119	62	107	89	130
20	69	122	177	44	135	83	129	110	141
23	70	128	180	45	139	84	138	146	150
26	73	134		47	145	125	172	149	171
27	74	137		48	148	132	176	179	
30	81	143		66	155	133	182		
31	87	154		71	160	140			
37	88	157		79	163	142			
38	98	158		82	166	178			
46	103	161		92					
N=126		N1=53		N2=29		N3=14	N4=11	N5=10	N6=9
$\frac{Ni}{Nn}$		0,47		0,52		0,27	0,00	0,25	0,29
Mean verbal I.Q.		83,0		81,9		84,1	90,8	91,5	83,7
% of N		42,1		23,0		11,0	8,7	7,9	7,1

Ni = number of institutionals in each group

Nn = number of non-institutionals in each group

2. Subgroup profiles

The profile for each group was determined by calculating the mean factor score on each of the seven factors. Table 7.2 represents the mean factor scores for each of the six subgroups on the seven factors on which the clustering is based.

TABLE 7.2 Mean factor scores for six subgroups of juvenile delinquents

Factor	mean factor scores for each subgroup					
	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
1	-0,248	1,027	-0,558	-0,831	0,785	0,340
2	0,215	0,413	-0,123	0,155	-1,188	-0,204
3	0,470	0,502	-1,566	-0,245	0,515	-0,843
4	-0,363	0,353	-0,398	0,552	0,402	0,796
5	0,254	0,544	-0,940	-0,131	0,898	-0,189
6	0,059	0,439	0,008	-0,637	0,474	0,333
7	0,054	-0,187	-0,345	-0,788	0,890	1,161

The same factor scores which were used as a basis for the clustering were used in calculating the mean factor score for each of the subgroups. Thus in table 7.2 the value of -0,248 in the column for group 1 represents the mean factor score on factor 1 for the 53 pupils in that

group. The value of 1,027 in the column for group 2 represents the mean factor score on factor 2 for the 29 pupils in that group.

The mean factor scores for each subgroup in table 7.2 were used to plot the characteristic profile for each group. These profiles are represented in figures 7.1 to 7.6 on pages 189 to 191.

3. Subgroup characteristics

Each of the six subgroups can be described in more detail in terms of the variables which comprise the seven factors on which the group profiles are based. The characteristics of each group can be described by referring to table 6.7 and to section 4 in chapter 6 for a more detailed relationship between the variables which comprise each factor. A high group score on a particular factor implies that the members of that group are all likely to have high scores on the variables with high loadings and low scores on variables with negative loadings in that factor.

The interpretations of scores on the variables are based strictly on the definitions of these variables as they are explained in section 2 of chapter 3.

Characteristic Profiles of Six Groups of Juvenile Delinquents

Figure 7.1 Group 1 (normal delinquents)

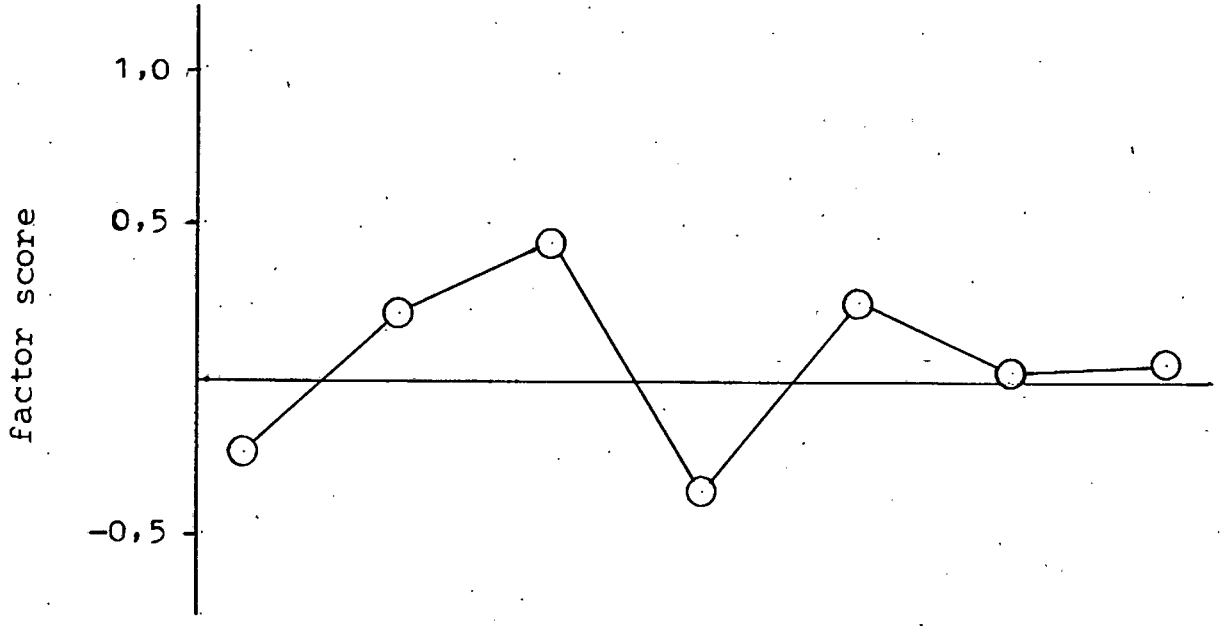


Figure 7.2 Group 2 (socially deprived delinquents)

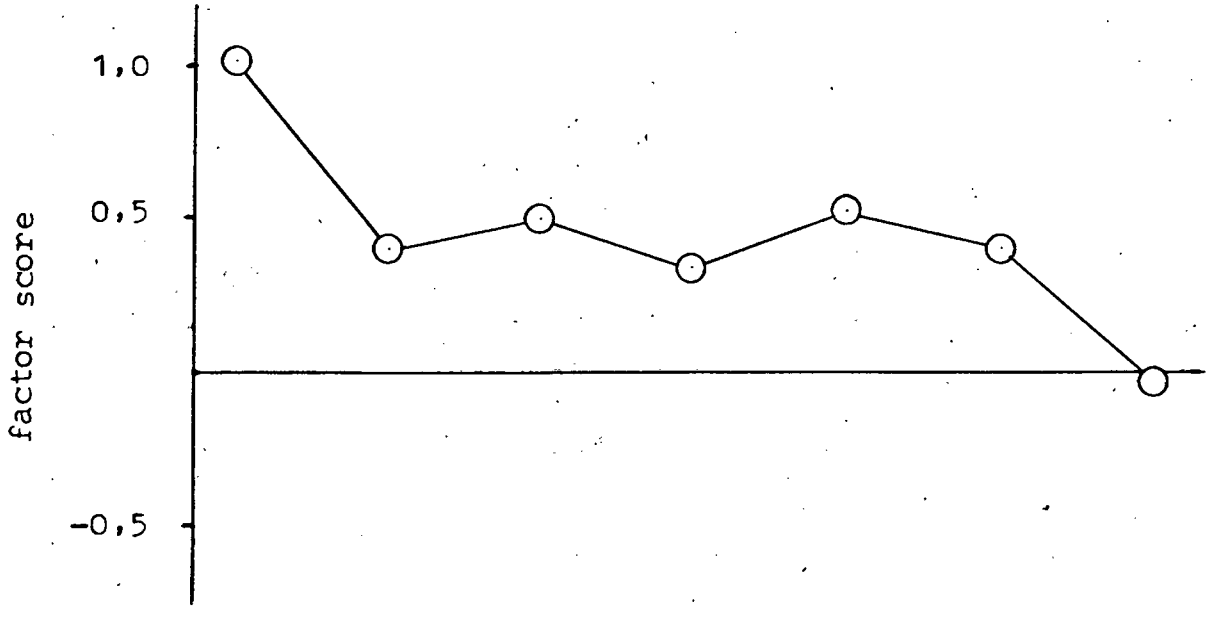


Figure 7.3 Group 3 (amoral anti-social delinquents)

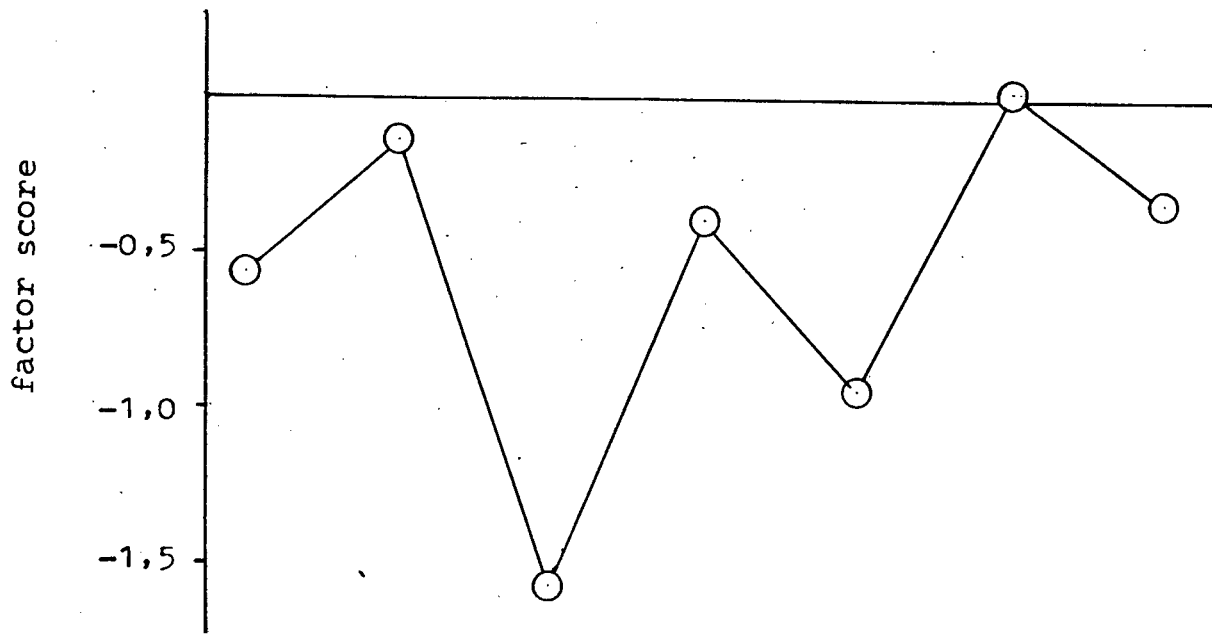


Figure 7.4 Group 4 (aggressive psychopathic delinquents)

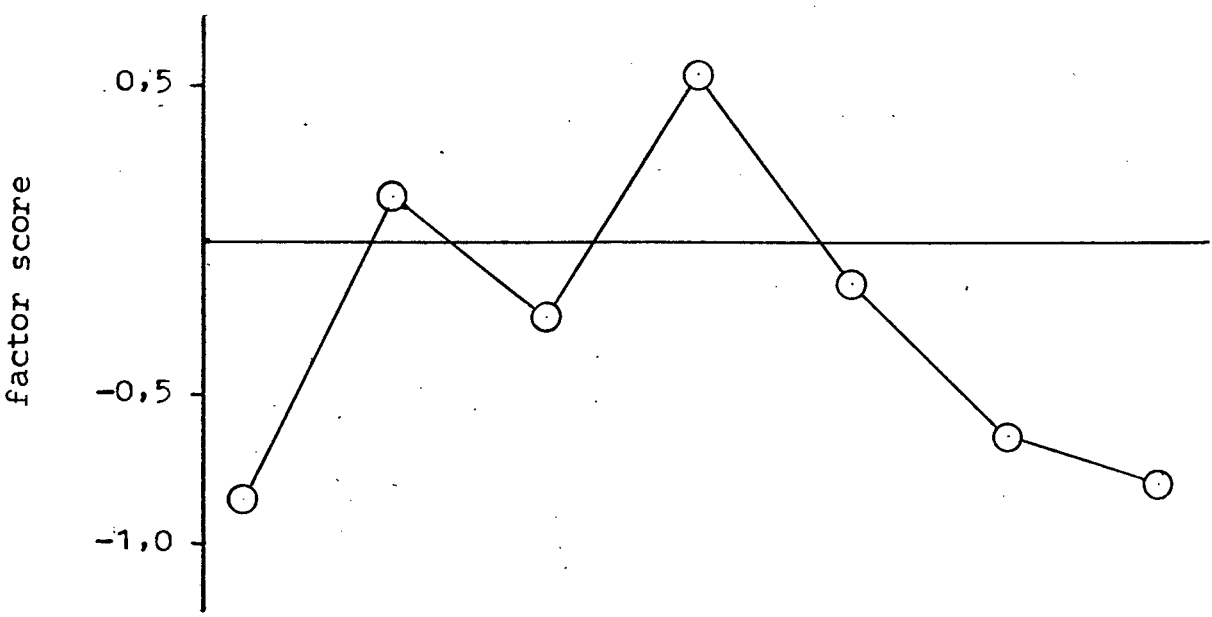


Figure 7.5 Group 5 (neurotic deprived delinquents)

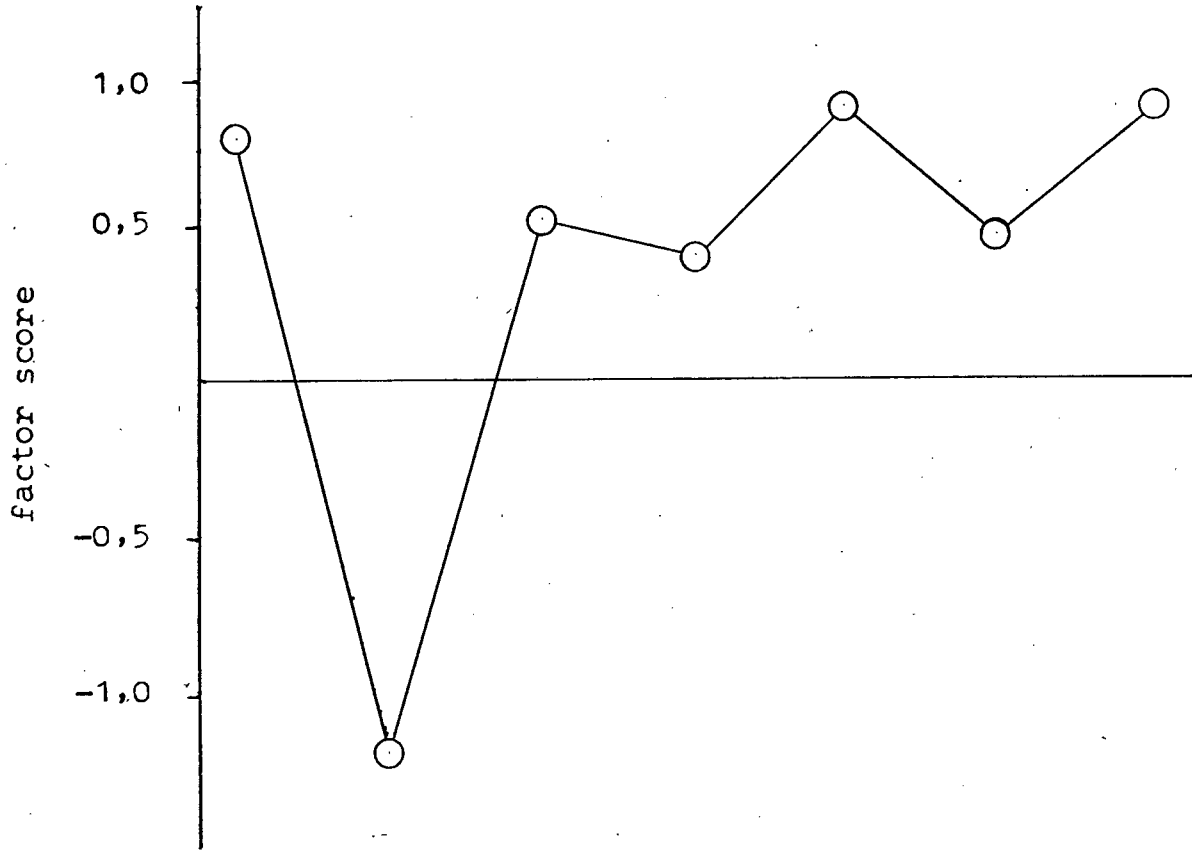
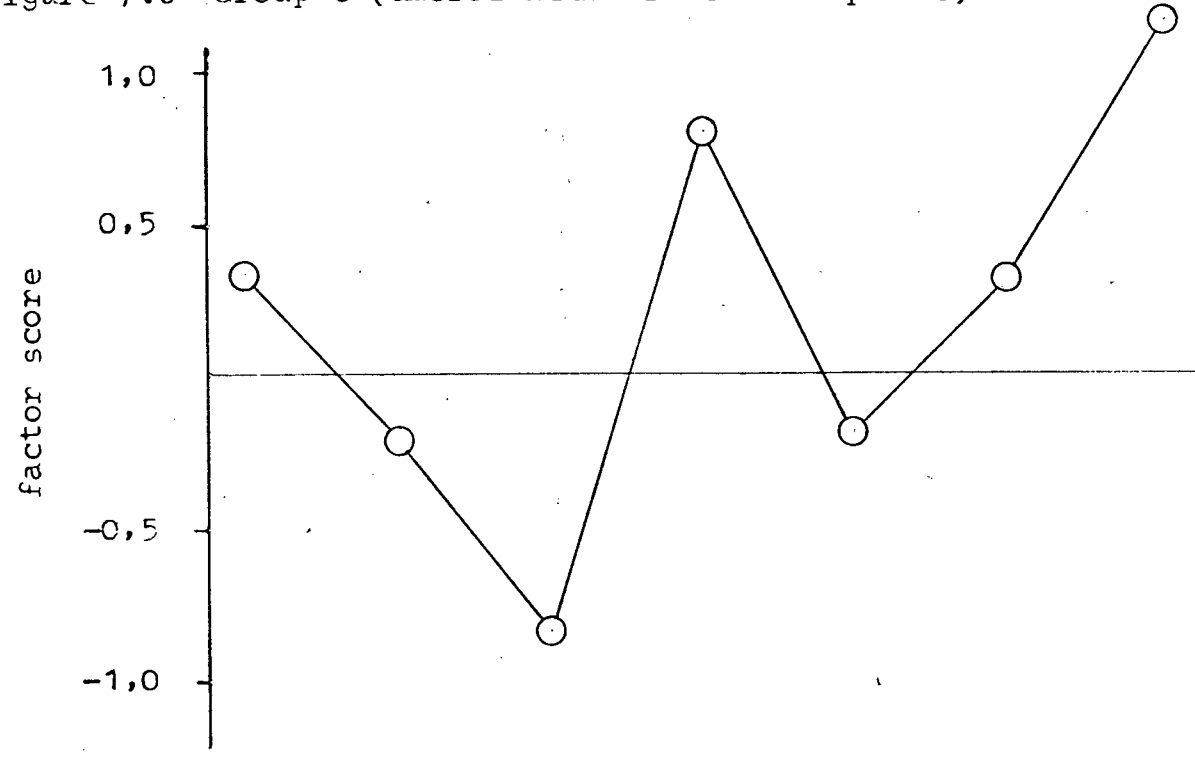


Figure 7.6 Group 6 (amoral hedonistic delinquents)



GROUP 1 This is the largest group and accounts for 42,1 per cent of the total pupil population. It contains slightly more non-institutional than institutional pupils as defined by the criterion in section 1 of chapter 3. The mean verbal I.Q. of the group is 83,0. They display the following personality characteristics in terms of factor scores:

a high score on factor two (neurotic self-restriction), factor three (self-constriction) and factor five (respect)

a low score on factor one (social dependency) and factor four (immature demands)

A more detailed analysis of their needs, values and personal relations shows the following:

(i) Needs: Their needs are relatively well satisfied. The low score on factor one implies that they are likely to score low on those need variables which have high loadings on that factor. They do not have a high need for deference, intraception, abasement, nurturance, affiliation, achievement or change. They have a low need for aggression, autonomy and exhibitionism.

(ii) Values: Their high score on factor three implies that they value responsible, honest and self-control highly. A high score on factor five shows that they also place a high value on

national security, self-respect and polite. They place a low value on freedom and have a low score on personal freedom.

(iii) Personal relations: A slightly high score on factor two shows that they have fairly high scores on self-esteem, nervousness, sociability - G and health. They have high self-esteem and social confidence, are not inclined to be nervous and are not pre-occupied with their own physical condition.

In general this group does not show any great need deprivation, they have fairly sound values and show no maladjustment in their personal relations. They do not feel very restricted in their personal freedom. The personality deviance of these pupils is not radical and they can be referred to as the "normal" delinquent group.

GROUP 2 This is the second largest group and accounts for 23 per cent of the pupil population of the school. Of these 52 per cent are institutionalised pupils. They have a mean verbal I.Q. of 81,9 which is the lowest for the six groups. They display the following personality characteristics in terms of factor scores:

a very high mean score on factor one (social dependence)

a relatively high score on all the other factors except on factor seven (self-expansion)

A more detailed analysis of their needs, values and personal relations shows the following:

(i) Needs: Their high score on factor one shows a high need deprivation. Those needs which reflect their high social dependency are the need for deference, intraception, abasement, nurturance, affiliation, achievement and change. The tendency to score high on factor four reveals a need for aggression, autonomy and exhibitionism.

(ii) Values: The high scores on factors three, five and six show that they value responsibility, honesty and self-control highly. They also place a high value on national security, happiness and a sense of accomplishment.

(iii) Personal relations: Their score on factor two (neurotic self-restriction) is high which implies that they tend to score high on self-esteem, nervousness, sociability - G and health. As a group their self-esteem is fairly good, they are not over anxious and are not overly pre-occupied with their own physical condition. They also show tendency towards introversion and a difficulty in relating spontaneously to others.

This group is characterised by their high need deprivation. They also show a tendency to be immature in the demands they make on their environment. Their value system is

positive and in general they appear to be well oriented in their personal relations. They will thus be referred to as the socially deprived group.

GROUP 3 This group accounts for 11 per cent of the total pupil population and 78 per cent of them are non-institutionalised pupils. The mean verbal I.Q. of the group is 84,1. They show the following personality characteristics in terms of factor scores:

very low scores on factor three (self-constriction) and factor five (respect) and low scores also on factor one (social dependency), factor four (immature demands) and factor seven (self-expansion).

A more detailed analysis of their needs, values and personal relations shows the following:

(i) Needs: They do not show any need deprivation as they score low on the need for deference, intraception, abasement, nurturance, affiliation and achievement. They also appear to score low on the need for aggression, autonomy and exhibitionism.

(ii) Values: Their very low score on factor three shows that they place low value on responsibility, honesty, self-control and helpfulness. They also do not value national security, self-respect, polite and salvation highly. There is a tendency to a low

score on factor seven which implies that they place low value on broadminded, intellectual and logical.

(iii) Personal relations: There is only a tendency to a low score on factor two. This implies that there is also only a tendency towards low scores on self-esteem and nervousness. They have no great need for social interaction with others and are not pre-occupied with their own physical condition.

In general this group appears to have a low moral sense and to be irresponsible and dishonest. They lack self-respect, are impolite and tend to be prejudiced and anti-social. They can be referred to as the amoral anti-social group.

GROUP 4 This group constitutes 8,7 per cent of the school population and comprises only non-institutionalised pupils. They have a mean verbal I.Q. of 90,8 and are the second most intelligent of the six groups. They show the following personality characteristics in terms of factor scores:

very low scores on factor one (social dependency), factor six (family security) and factor seven (self-expansion). They have a high mean score on factor four (immature demands).

A more detailed analysis of their needs, values and personal relations shows the following:

(i) Needs: They have a very low need for deference, intraception, abasement, nurturance, affiliation, achievement and change. They have a high need for aggression, autonomy and exhibitionism.

(ii) Values: They place low value on being broadminded, intellectual and logical. They also do not value happiness, a sense of accomplishment or family security highly. There is a tendency towards a low score on national security, self-respect and polite and a tendency towards a low score on responsible, honest, self-control and helpful.

(iii) Personal relations: There is a tendency towards a high score on factor two which implies that they tend to have high scores on self-esteem, nervousness, sociability - G and health. This shows that they do not lack self-esteem, are free from symptoms of anxiety, but are mildly pre-occupied with their own physical condition.

This group is thus characterised by their high need for aggression and lack of social dependency and moral sense. They are irresponsible and dishonest, are prejudiced and illogical in their thinking and tend to have a low anxiety level. They do not feel restricted by family influences, lack self-control and are unambitious. They

are incapable of assessing themselves realistically and are inclined to want to present themselves to others in a favourable light. They will be referred to as the aggressive psychopathic group.

GROUP 5 This group comprises 7,9 per cent of the pupil population. Only 25 per cent of them are institutionals and they have a mean verbal I.Q. of 91,5 which is the highest of all the groups. They display the following personality characteristics in terms of factor scores:

an extremely low score on factor two (neurotic self-restriction)
high scores on factor one (social dependency), factor five (respect) and factor seven (self-expansion) with relatively high scores on factor three (self-constriction), factor four (immature demands) and factor six (family security).

A more detailed analysis of their needs, values and personal relations shows the following:

(i) Needs: They show the same high level of need deprivation as group two. They also score high on the need for aggression, autonomy and exhibitionism.

(ii) Values: They score very high on the two value factors respect and self-expansion. They place a high value on national security, self-respect

and polite as well as broadminded, intellectual and logical. They also place a high value on happiness, a sense of accomplishment and family security as well as on responsible, honest and self-control.

(iii) Personal relations: They score extremely low on factor two which indicates low scores on the variables self-esteem, nervousness, sociability - G and health. Other variables associated with this factor are formal relations, self-control and self-confidence.

The main characteristics of this group are that they are highly nervous and are very pre-occupied with their own physical condition. They have a very low self-esteem and are averse to social interaction. They are nevertheless socially dependent and are fairly responsible and honest. Their high score on broadminded would imply that they expect people to be more tolerant. They tend to value intellectual pursuits and like to be orderly and logical. However they tend to make immature demands on their environment. They place a low value on freedom and seem to feel restricted by family influences. These characteristics indicate a dependence on the institution and the safety which it provides them. Consequently this group will be called the neurotic-deprived group.

GROUP 6: This is the smallest of the six groups comprising only 7,1 per cent of the pupil population of the school. They have a mean verbal I.Q. of 83,7 and 29 per cent of them are institutionalised pupils. They display the following characteristics in terms of factor scores:

a very high score on factor four (immature demands) and factor seven (self-expansion)
a low score on factor three (self-constriction).

A more detailed analysis of their needs, values and personal relations reveals the following:

(i) Needs: Their high score on factor four reveals a high need for aggression, autonomy and exhibitionism. They tend to score low on the need for endurance. They show a high need deprivation similar to groups two and five with high scores on the need for deference, intraception, abasement, nurturance, affiliation, achievement and change.

(ii) Values: Their low score on factor three implies that they score low on the variables responsible, honest, self-control and helpful. Their very high score on factor seven implies that they place high importance on broadminded, intellectual and logical. They place moderate importance on happiness, family security and a sense of

accomplishment.

(iii) Personal relations: Their score on factor two is only slightly negative. This implies that they tend to have low self-esteem, are slightly anxious but are not averse to social interaction. The low score on factor three indicates a low moral sense. The high score on factor four indicates high scores on family influence and self-control.

In general this group is characterised by a lack of good standards of behaviour and a tendency to want to be free and independent. However they have a low moral sense, are irresponsible, dishonest and unhelpful. They have good self-control but can be aggressive and exhibitionistic. They are dependent on family influences and tend to value family security, happiness and a comfortable life. Their high score on broadminded would imply that they expect other people to accept their way of thinking. It also reflects their low moral sense and an inclination to ignore the rules and regulations. This group can be called the amoral hedonistic group.

Summary This analysis reveals that the pupils of the school can be divided into six distinct subgroups based on the characteristics of their needs, values and

personal relations. The six groups in order of size are

(i) the "normal" delinquents

(ii) the socially deprived delinquents

(iii) the amoral anti-social delinquents

(iv) the aggressive psychopathic delinquents

(v) the neurotic deprived delinquents

(vi) the amoral hedonistic delinquents

The clustering procedure included 126 of the 182 pupils of whom 37 per cent are institutionals. On a proportional basis the institutionals are over-represented in group two (socially deprived). The non-institutionals are slightly over-represented in group one ("normal" group) and they constitute proportionately more of groups three, five and six. Group four (aggressive psychopathic) consists entirely of non-institutionals.

From the above results it is clear that each of these subgroups, apart from group four, contains both institutional and non-institutional pupils. The personality characteristics of these juvenile delinquents are thus not directly related to whether they were institutionalised or not. This confirms the results in section 3 of this study in which these two groups were shown to be very similar with regard to their needs, values and personal relations.

The effects of institutionalisation are nevertheless apparent when one considers the proportionate number of each of the institutionals and non-institutionals in each of the subgroups. Group two in which the institutionalised pupils are over-represented contains elements of a lack of socialisation. Thus more institutionals suffer from a lack of socialisation than non-institutionals. In addition a small group of institutionals are quite anti-social and have a low moral sense (group three). However the most problematic pupils are all non-institutionals (group four).

The analysis shows that there are considerable differences between subgroups of pupils with respect to their needs, values and personal relations.

4 Validity of the typology

The first question which arises is whether the clusters which were obtained in this analysis are the only ones possible. When several alternative clustering procedures, each offering different mathematical options to the analyst, are possible then the research objectives must provide the criterion for the choice of a particular solution (Overall 1972).

Two criteria were used to decide on the solution presented in this section:

4.1 Practicality

With respect to the number of clusters, too many subgroups would make the implementation of a treatment programme fragmentary and difficult to administer. Conversely a solution of only three or four clusters would make the differentiation too coarse and important minor subgroups would not be revealed. Consequently it was considered to be practically advantageous and manageable to classify the pupils into six groups.

4.2 Interpretability

The solution had to be relevant to already existing knowledge of the characteristics of juvenile delinquents. It had to be comparable to other typologies. It is not possible for psychological typologies of juvenile delinquents to differ widely from one another with respect to their characteristics except in terms of the way in which the typologies are defined. Thus the six types of juvenile delinquents found in this study should be comparable, for example, to the four types found by Quay mentioned in section 1 above.

Quay claims that his four types are common to all young people, juvenile delinquents included. The Quay-types

which are based on observed behaviour compare well with the six types based on personality structure found in the present study. The following table reflects such a comparison.

TABLE 7.3 Comparison of two typologies of juvenile delinquents

Behaviour typology (Quay-types)	Personality structure typology (based on needs, values, personal relations)
1. Unsocialised psychopathic	Amoral anti-social Aggressive psychopathic
2. Neurotic disturbed	Neurotic deprived
3. Socialised subculture	Amoral hedonistic
4. Inadequate immature	"Normal" delinquent Socially deprived

The effect of accepting six subgroups as a solution to the typology in the present study means that the

unsocialised psychopathic group of Quay is split into the amoral anti-social and an aggressive psychopathic group. His inadequate immature type is split into the "normal" and the socially deprived delinquent types. Effectively there seems to be little overall difference between these two typologies except that the one based on personality structure allows for a slightly greater degree of differentiation.

Another typology of juvenile offenders which is in use in American correctional programmes is based on the Interpersonal Maturity Level or I-level system described by Eldefonso (1976). This classification developed by Jesness (1973) is based on levels of development or integration of experience of the individual which characterise his expectations and attitudes towards his environment. Classification is done by means of a psychometric instrument specially devised by Jesness.

Juvenile delinquents are classified into the following I-level catagories:

Level 2 a. unsocialised, aggressive (Ag)
b. unsocialised, passive (Ap)

Level 3 a. cultural, conformist (Cfc)
b. immature, conformist (Cfm)
c. manipulator (Mp)

Level 4 a. neurotic, acting out (Na)

b. neurotic, anxious (Nx)

c. situational, emotional (Se)

d. cultural identifier (Ci)

Because of the different theoretical basis of the I-level classification, these categories are not directly comparable with the typology devised in the present study. No attempt will be made here to discuss similarities between these two typologies. Except for the level 2 category which compares directly with group 4 of this study, the other five groups seem to extend across maturity level 3 and level 4 boundaries.

The I-level classification procedure, although based on certain aspects of personality from which the needs and values of an individual could be deduced, does not make a direct measurement of these motivational variables.

There is a fundamental difference between the present classification based on personality structure and that based on behaviour. The personality structure typology reveals the basic motivational elements of behaviour associated with each type. These underlying needs, values and personal relations variables may be used as the theoretical basis for typical treatment programmes. Since these are also objectively measurable variables, the

personality changes which a specific programme seeks to bring about can be properly assessed in terms of changes in needs, values and personal relations.

Verification of subgroups

The derivation of the subgroups was theoretical and the question which arises is whether their characteristics bear any relation to actual behaviour. Table 7.4 represents the reasons for which the different subgroups were admitted to the Constantia School. The behaviour criterion is the type of offence for which each of the pupils in the six subgroups was committed to the school.

TABLE 7.4 Reasons for admission for the different subgroups of juvenile delinquents

Reason for admission	Subgroups					
	1	2	3	4	5	6
No criminal offence	28,3*	37,9	14,3	0,0	50,0	0,0
Theft	50,9	44,8	28,6	45,4	10,0	55,6
Housebreak and theft	11,3	10,3	28,6	0,0	30,0	11,1
Motor theft	5,7	0,0	14,3	18,2	0,0	0,0
Vandalism	1,9	3,5	0,0	9,1	0,0	0,0
Dagga use	0,0	0,0	7,1	0,0	10,0	22,2
Assault	0,0	3,5	0,0	18,2	0,0	0,0
Robbery	1,9	0,0	7,1	9,1	0,0	11,1

* percentage of each group

From table 7.4 it is clear that the reasons for committal of the subgroups differ. A large percentage of pupils in subgroups one, two and five are in the school because of maladaptive behaviour which is largely non-criminal. These are the "normal", the socially deprived and the neurotic deprived delinquents who together constitute 73 per cent of the pupil population. The pupils in these three subgroups who are in the school for criminal offences were admitted for theft, housebreaking and/or theft and motor theft. Pupils in these groups who were committed for the more severe offences of vandalism, dagga use, assault and robbery are in the extreme minority.

The offences for group three (amoral anti-social) include the use of dagga (7,1%) and robbery (7,1%). Only 14 per cent of this group were committed for no particular criminal offence, that is, for uncontrollable behaviour only.

The offences of group four (aggressive psychopathic) include the more severe ones viz. assault (18,2%), robbery (9,1%) and vandalism (9,1%). All the pupils in this group were committed for a criminal offence.

Group six (amoral hedonistic) includes a large percentage of pupils who were committed for dagga use (22,2%) and robbery (11,1%).

The difference between the groups in terms of anti-social, hedonistic, amoral or aggressive behaviour confirms the theoretical classification. Groups three, four and six comprising 26,8 per cent of the pupils, emerge as the more severely delinquent section of the school population.

The severity of the delinquency based on behaviour confirms the theoretical differentiation on the basis of the three psychological tests used for deriving the classification of the pupils into the six subgroups.

5 Implementation of the typology

If the findings as regards the subgroups are to be of practical value for treatment, it must be possible to assign an individual pupil to a particular subgroup. Such an assignment can be made on the basis of factor scores.

The dimensions of personality found in chapter 6 can be used to devise a specific test for pupils in the school. Such a test would reflect the state of the individual in terms of his needs, values and personal relations.

The scores on the variables in each factor represent the status of each individual on the factor dimensions. Thus the differences between individuals who were originally represented in terms of the numerous variables measured, are represented in a smaller number of factor scores. If this compound score which represents a group profile can be specified, it is possible to assign an individual to one of the subgroups according to Overall and Klett (1972).

The profiles of the subgroups presented in section 2 of this chapter were determined on the basis of such factor score. However the method used to determine these factor scores required complicated calculations and was used as a first step for the accurate clustering of the pupils. It was therefore necessary to compute new profiles which would be easier to implement for use in practice. The scores of all the pupils in each of the six subgroups were thus re-determined on all those variables with the highest loadings in the seven factors used in the cluster analysis. The mean factor scores for each group provided new characteristic profiles to be used for allocating an individual to a particular subgroup according to the degree of similarity of profiles.

Profile comparison

The distance method (Tryon 1970) allows an individual

profile to be compared with the average profiles of the various subgroups provided the individual profile is based on measurements on the same set of variables as the average profile.

The criterion for similarity is the distance between the individual's profile and the average subgroup profile. Geometrically the distance between the profiles is the distance between the points which represent these profiles in the matrix space. The distance criterion then implies that if an individual point is closer to the average point for a particular subgroup than to any other average point, then that individual can be assigned to that particular subgroup.

The generalised Pythagorean theorem can be used to compute the distances in the matrix space Sm. Thus if x_i^1 and x_j^1 are two rows of the matrix X, then the squared distance between the points representing x_i and x_j in the matrix space Sm is found by taking the difference vector $(x_i - x_j)$ and summing the squared elements of this vector. This squared distance is represented by the formula

$$d^2_{ij} = (x_i - x_j)^1 - (x_i - x_j) \quad \text{.....(1)}$$

The distance between two profiles is also referred to as the $\underline{d^2 - \text{index}}$.

to a subgroup is taken as follows:
Let $\bar{x}_1$ and $\bar{x}_2$ be the average profiles for any two subgroups. Then the individual with the profile x_i will be closer to the first subgroup than to the second if the distance in the matrix space Sm between the points x_i and x_1 is smaller than the distance between the points x_i and x_2. This decision rule formula can be stated as follows:

$$(x_i - \bar{x}_1)^1 - (x_i - \bar{x}_1) < (x_i - \bar{x}_2)^1 - (x_i - \bar{x}_2) \quad \ldots\ldots(2)$$

An individual will be assigned to that subgroup which provides the smallest d^2 - index when the individual's profile is compared with each of the average profiles for the six subgroups.

The scores on the different variables which comprise the profiles must be standardised before comparisons are made so as to exclude the effect of unequal variances on the decision rule.

The new profiles which can be used in practice to assign individuals to a particular subgroup were obtained by using the following variables in each of the seven factors in table 7.5.

TABLE 7.5 Variables for use in practice in the classification of juvenile delinquents

FACTOR 1	deference intraception abasement nurturance affiliation achievement change	FACTOR 4	aggression autonomy exhibitionism
		FACTOR 5	national security self-respect polite
FACTOR 2	self-esteem nervousness sociability-G health	FACTOR 6	happiness sense of accomplishment family security
FACTOR 3	responsible honest self-control	FACTOR 7	broadminded intellectual logical

The factor scores for each group were calculated for those variables used in each factor. The new profile scores are represented in table 7.6 (page 215).

TABLE 7.6 Mean factor scores for six subgroups of juvenile delinquents for practical use given as standardised scores

Factor	Mean raw score	S.D.	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
1	227,75	20,66	-0,568	1,270	-0,936	-1,328	1,067	0,496
2	92,28	10,70	0,469	0,815	0,067	0,731	-2,138	0,058
3	12,89	1,42	0,542	1,020	-1,830	-0,176	0,992	-0,549
4	82,03	6,90	-1,147	1,014	-1,411	-0,097	0,430	1,213
5	13,00	1,32	0,433	1,450	-2,005	-0,205	1,063	-0,084
6	17,62	0,85	-0,051	1,059	-0,311	-1,916	1,035	0,185
7	11,96	1,10	-0,047	0,601	-0,815	-1,710	1,222	-,747

The six group profiles based on the average factor scores in table 7.6 are given in figures 7.7 to 7.12. It is evident that these profiles are almost identical to the original group profiles in figures 7.1 to 7.6 (pages 189 to 191).

Assigning an individual to a subgroup

An individual can be assigned to a particular subgroup based on the scores which he obtains on the variables which comprise the factors in table 7.5 (page 214). Raw scores are first standardised using the appropriate group mean and standard deviation for each factor in table 7.5. Thereafter the d^2-indices for each of the six group profiles are calculated according to formula (1) on page 212 and the decision rule of formula (2) on page 213 is then applied.

Example 1: The factor raw scores and the corresponding standard scores for case number 90 in the present study will be used as illustration:

Factor	1	2	3	4	5	6	7
Raw score	206	103	14	72	13	15	8
Z - score	-1,053	1,002	0,781	-1,453	0,000	-3,097	-3,618

Characteristic Profiles of Six Groups of Juvenile Delinquents according to Mean Factor Scores for use in practice

Figure 7.7 Group 1

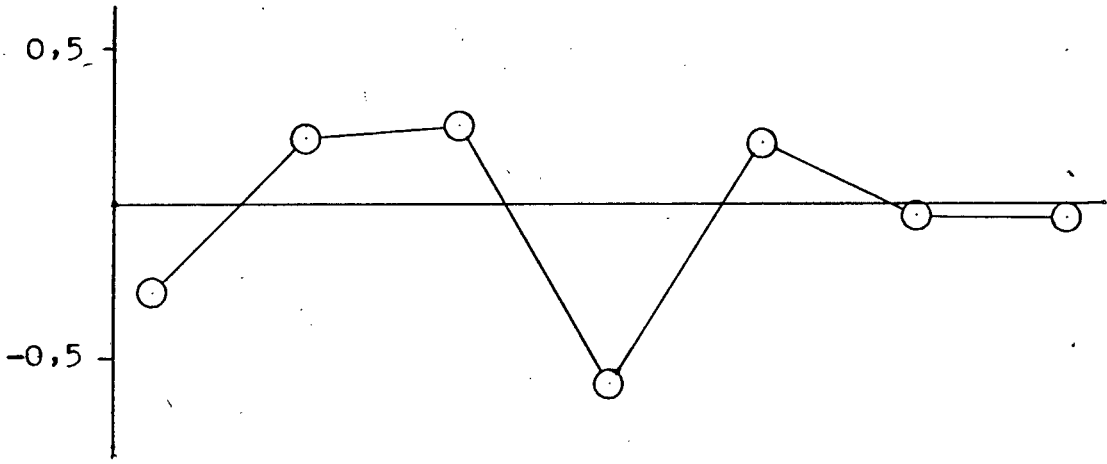


Figure 7.8 Group 2

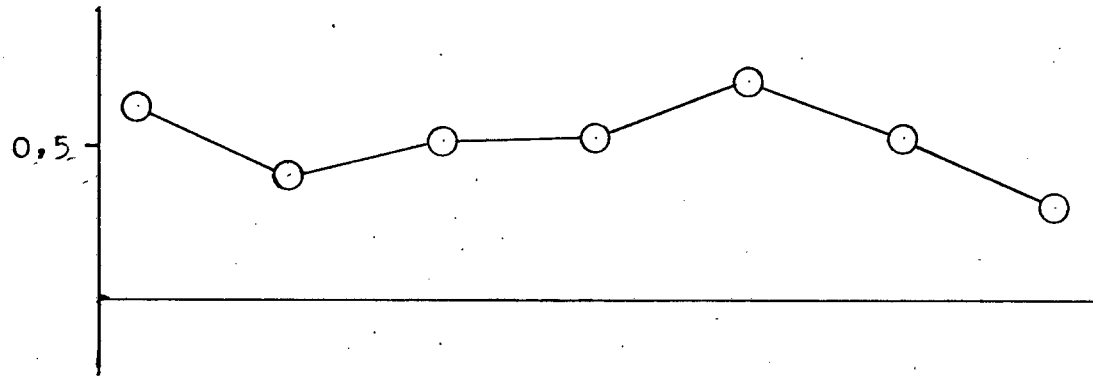


Figure 7.9 Group 3

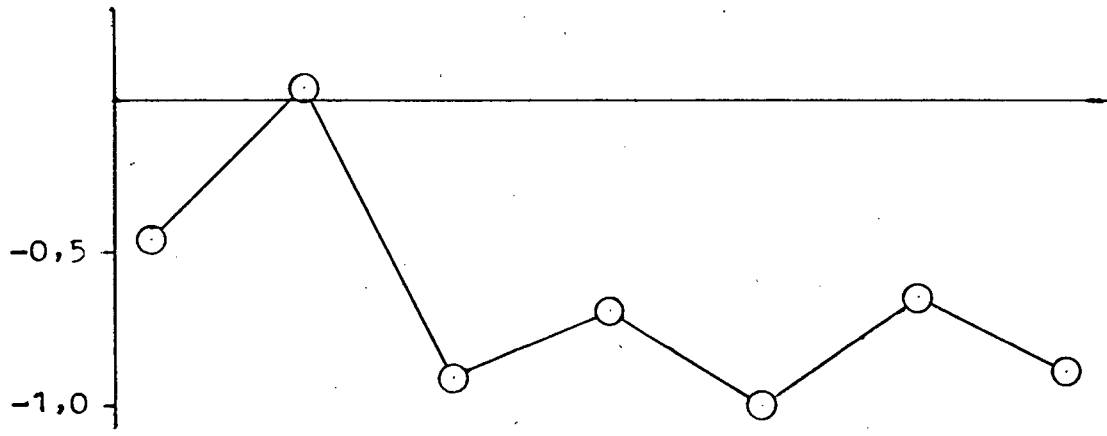


Figure 7.10 Group 4

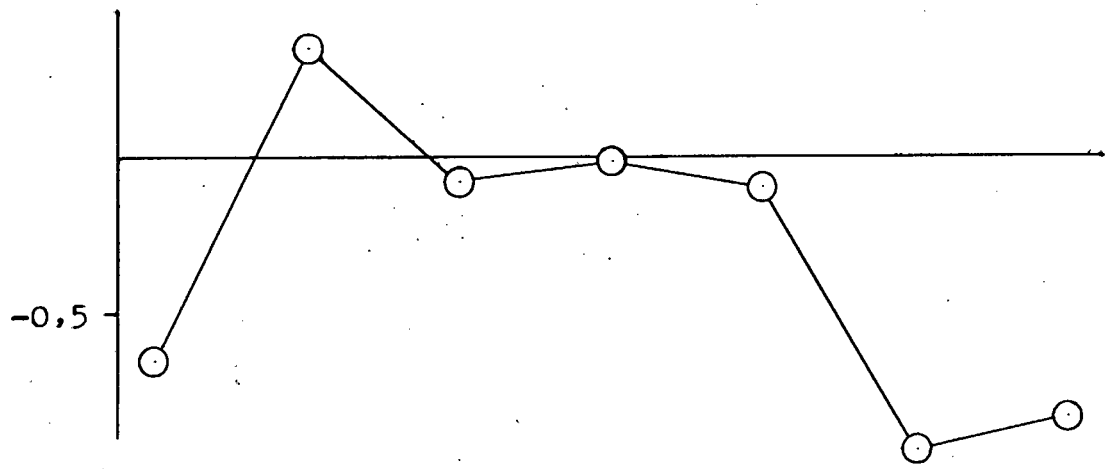


Figure 7.11 Group 5

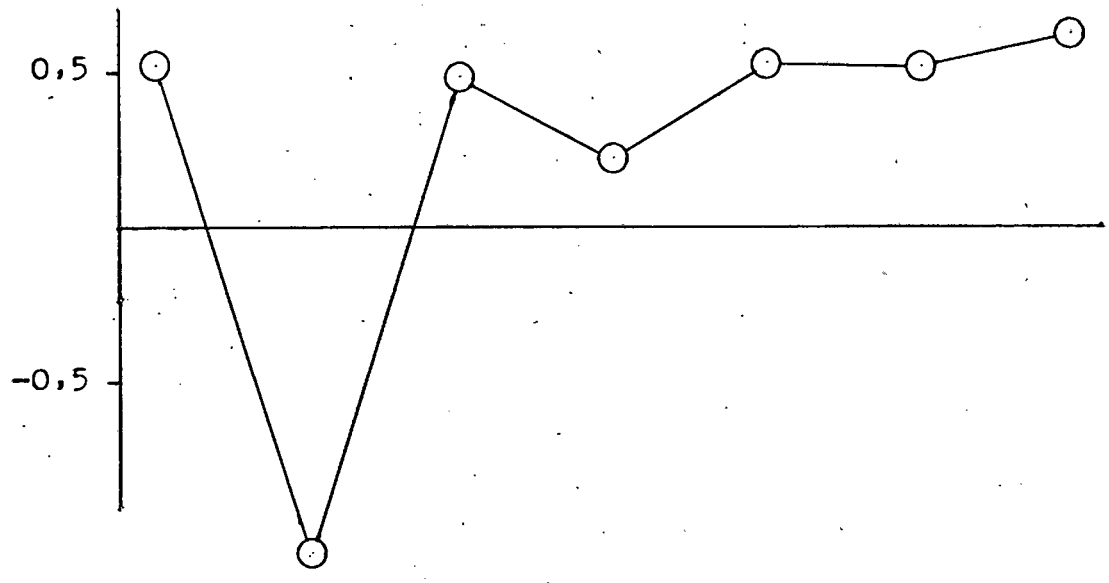
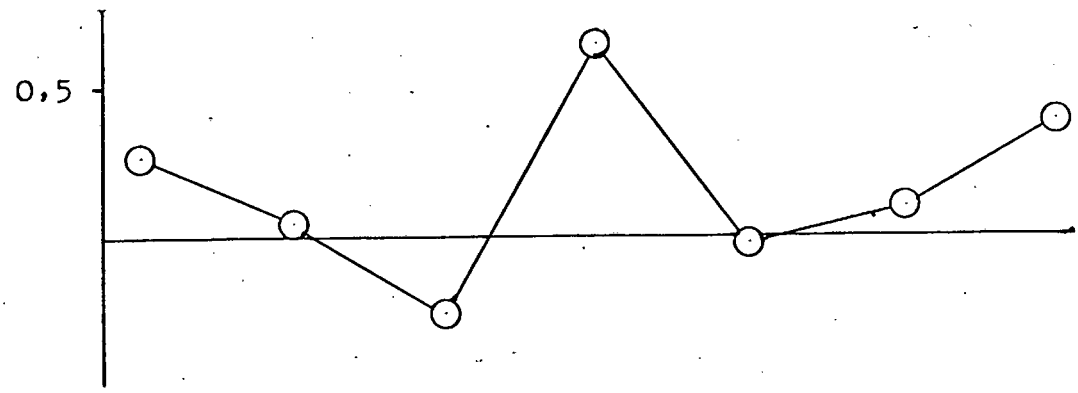


Figure 7.12 Group 6



The d^2 - index is calculated as follows where d_1^2 represents the distance of the profile of case 90 from the average profile of subgroup one:

$$d_1^2 = (-1,053 + 0,568)^2 + (1,002 - 0,469)^2 + (0,781 - 0,542)^2 + (-1,453 + 1,147)^2 + (0,000 - 0,433)^2 + (-3,097 + 0,051)^2 + (-3,618 + 0,047)^2$$

$$= \underline{22,888}$$

The same individual's d^2 - indices for the other subgroup profiles are as follows:

$d_2^2 = 47,258$

$d_3^2 = 27,346$

$d_4^2 = 17,981$

$d_5^2 = 59,573$

$d_6^2 = 41,999$

Since the value of d_4^2 is less than any of the other values the individual's profile resembles the average profile of the subgroup <u>four</u> more closely than any of the other subgroup profiles. The individual is thus allocated to subgroup four. Referring to table 7.1 (page 186) it is seen that case number 90 is indeed a member of subgroup four according to the original clustering procedure.

<u>Example 2</u>: The factor raw scores of a pupil who is not a member of the six basic subgroups (case number 70, see p186)

can be used to allocate this pupil to one of the six subgroups. The scores for this pupil are as follows:

Factor	1	2	3	4	5	6	7
Raw score	208	88	14	73	13	19	9
Z - score	-0,956	-0,400	0,781	-1,308	0,000	1,626	-2,705

The corresponding d^2 - indices are as follows:

$d_1^2 = 11,053$

$d_2^2 = 23,743$

$d_3^2 = 18,297$

$d_4^2 = 17,378$

$d_5^2 = 27,072$

$d_6^2 = 24,442$

Since the value of d_1^2 is less than any of the other values, this individual's profile resembles the average profile of subgroup one most closely. Although he appears to be close to subgroups three and four as well, he would be allocated to subgroup one. For diagnostic purposes it can be noted that this pupil also has the tendency to exhibit certain characteristics of subgroups three and four.

A pupil's profile not only serves as basis of classification, but should also serve a useful diagnostic purpose for use by his therapist. It reflects an individual's personality profile in terms of his needs, values and personal relations with

respect to those variables which are represented in each of the seven factors in the profile. In practice a new pupil can be given the three tests, the E.P.P.S., the R.V.S. and the P.H.S.F. as part of the admission diagnostic battery. By comparing his profile with the six standard profiles he can be allocated to the appropriate subgroup.

6 Implications for treatment

Notwithstanding the need for an individualised approach in the case of each pupil, it may be possible to formulate a different treatment approach for each of the above six subgroups. A more detailed exposition of these approaches is given in chapter 8. Only the major implications of the results of this section will be given here.

(i) The majority of the pupils in the school (group one) are unnecessarily subjected to the very strict measures which are needed for a very small minority of recalcitrants such as those in groups four and six. Groups one and two which comprise 65 per cent of the pupil population are not severely problematic. It should be possible to apply a relatively straight forward educational programme to these pupils with less emphasis on strict detention measures.

(ii) Group five (neurotic deprived) pupils do not differ much from groups one and two in average profiles. This is a small group of pupils whose personal adjustment and need deprivation could be catered for in a specific programme in the school.

(iii) It could be possible to accommodate group three pupils in the school. However they would require a different approach and their anti-social and amoral characteristics could cause interaction problems between them and other pupils where they are all in contact with each other in the classroom, hostel and workshop situations.

(iv) Groups four and six are the most problematic of all and the question arises whether they should be accommodated in the reformatory. These two groups who together only comprise 15 per cent of the pupil population probably account for the largest amount of institutional management problems. Not only are they difficult to handle, but their negative influence on other pupils drastically reduces the good prognosis of the majority. The removal of these two groups from the reformatory to a junior prison could improve the chances of rehabilitation of the other 85 per cent of pupils provided that the latter's programme is effectively administered.

There is only one reformatory for white boys in the Republic of South Africa. Pupils are committed from a multitude of sources and the criteria for sending them to this school differ widely. This results in pupils in the school varying widely in age, intelligence and especially in personality characteristics. It would seem that there are pupils whose personality characteristics are not so pathologic as to warrant strict detention in a reformatory. On the other hand a small group of pupils, largely those who are committed directly from the courts and in some cases for very serious criminal offences, should rather have been imprisoned.

Arranging treatment programmes for so diverse a pupil population poses many difficulties for the school management. This problem could be alleviated in two ways:

(i) A better differentiation should be made between delinquents before they are admitted to a treatment institution. This implies the establishment of at least one assessment centre in each of the major metropolitan areas of the country as well as the establishment of junior prison facilities for some groups of delinquents.

(ii) In the absence of such assessment centres, the Constantia School should employ its own system of differentiation with respect to detention and

treatment of various subgroups of pupils.

7 Summary comments on chapter 7

The dimensions on which the above typology of juvenile delinquents is based may not necessarily be unique since a different ordering of the original data is possible. However the fact that the dimensions which were used resulted in a very meaningful grouping of the pupils supports the underlying structure on which the clustering was based.

CHAPTER 8

A TREATMENT PROGRAMME FOR JUVENILE DELINQUENTS

In this chapter a description is given of the Constantia school at which this study was done. In order to place the school in perspective, some alternate treatment settings as found elsewhere are described. Two general aspects of treatment procedures are discussed namely behaviour modification and value clarification and a differential treatment strategy is proposed for the different subgroups of juvenile delinquents which were identified in this study.

1 Description of the Constantia School+

1.1 Geographic position

The school is situated in a suburb of the city of Cape Town. It is the only strict detention institution for white juvenile delinquents with severe behaviour problems and criminal tendencies in the Republic of South Africa. The pupils are admitted at any time of the year, the

+ Statistics have been taken from the 1980 annual report of the school and refer to data as at 1.9.1980

majority being from the Witwatersrand area two thousand kilometres from Cape Town. The school is set in a residential area bordered by a state forest which gives the impression of a rural setting.

1.2 The management

The school is administered as a fully subsidised special school under the direct jurisdiction of the Department of National Education. It is classified as a reformatory and is one of several "Children's Act" schools in the country which cater for children in need of care. Local statutory supervision rests with a Board of Control consisting of nine members of the public appointed by the Minister of National Education. The chairman is ipso facto the local Commissioner of Child Welfare and is the chief magistrate of the district in which the school is situated. Executive control rests with a headmaster assisted by the heads of the academic, technical, psychological and supervisionary departments. Since all the pupils are effectively "children in need of care" certain strict management prescriptions exist. The institution is essentially managed as an educational centre and educational prescriptions for the curricula are the same as for all other schools in the country. The policy and application of treatment methods have evolved internally over the years with the sanction of the Departmental Inspectors of Education responsible

for the school. Inspection is on a regular basis.

1.3 Staff

There are 29 teachers on the staff. Of these 15 are academic subject teachers (6 are female) and 14 are technical teachers including the heads of departments. The minimum academic qualification needed by an academic teacher for appointment is a three year university degree plus a teaching diploma. Technical teachers require a National Technical Diploma plus a teaching diploma. A special qualification in the education of children with behaviour problems is not a prerequisite for appointment. A teacher with such qualifications is the exception rather than the rule.

There are four full time psychologists on the staff. The minimum qualifications needed for appointment are a four-year honours degree in Psychology and a teaching diploma. The senior psychologist must have at least a master's degree.

The remaining 41 members of staff consist of 7 administrative clerks, 14 female care staff (house mothers) and 20 male supervisionary staff who also perform various other duties on the grounds. No qualification is required for the care staff and their academic qualifications vary from a Standard 8 to a Standard 10 school certificate. No provision exists for a professional person qualified in social welfare.

1.4 The pupils

There are several state schools such as Industrial Schools where a young person can be placed in state care away from his parents due to behaviour problems and school truancy. Persistent absconding from these Industrial Schools coupled with more severe behaviour problems usually leads to transfer to the reformatory. On average thirty per cent of the reformatory intake is on transfer from these Industrial Schools. The remaining seventy per cent of the pupils are committed from the courts by a magistrate under the Criminal Procedures Act for specific criminal offences. Crimes include housebreaking and / or theft, motor car theft, possession of cannabis, assault and / or robbery and in rare instances manslaughter, usually with extenuating circumstances.

Once admitted all children are under the statutory control of the Children's Act No 33 of 1960 and are termed "children in need of care".

Only fifteen per cent of the pupils come from families in the nearby city and its surrounds; sixty five per cent are from the larger cities of Johannesburg, Durban and Pretoria; ten per cent are from the smaller cities of Bloemfontein, Port Elizabeth and East London and ten per cent are from the rural areas.

The average age of the pupils has dropped from 17,9 years in 1975 to 17,3 years in 1980 with a range from 12 to 21 years. Average age at time of admission is 16 years. The average I.Q. has dropped from 92,9 in 1975 to 90,0 in 1980. The intellectual range includes nine pupils with an I.Q. below 60 and sixteen with an I.Q. above 120.

Social backgrounds vary from very wealthy families through middle class to the more heavily represented low social status families. The disparity is further emphasised by the fact that seventeen different church denominations are represented.

The language ratio is thirty five per cent English speaking and sixty five per cent Afrikaans speaking pupils. This approximates the national ratio. There are no pupils of other nationalities or whose home language is not one of the two official languages.

1.5 Scholastic attainment

The majority of pupils have only passed Standard 6 on admission. Scholastic achievement levels range from Standard 2 to Standard 9. The average retardation on age basis is two scholastic standards.

The school offers practical and standard grade courses from standards 6 to 10 in subjects prescribed by the

Department of National Education similar to all schools in the Republic. A wide range of subjects is offered, the only limitation being the staff allocation which is made according to pupil number. This allocation is more favourable than for any other special school for children with behaviour problems. The teacher-pupil ratio is seldom more than 1 to 15 and is often only 1 to 5. The largest pupil group is on the Standard 8 level, thirty five are in Standard 6 or below and nineteen are in Standard 10. A special course is provided for pupils below the Standard 6 level and for those with severe learning disabilities. A considerable number of pupils have reading problems and at least ten per cent of them cannot be accommodated in the ordinary classes due to either agraphia or dyslexia. The school had no remedial teacher at the time this study was done and these pupils received special attention from a primary school teacher in a special class setting. The pupils receive instruction in their home language.

The school has thus to cater for pupils with a diversity of social, educational, intellectual and age levels. All scholastic courses lead to a National School Certificate issued by the Department of National Education. All examinations except for the Standard 10 standard grade course are set internally. Pass rates have been consistently over eighty per cent for the last ten years.

1.6 Technical Education

Every pupil is required to do one practical workshop subject. They have a choice between welding and metalwork, woodwork, painting and decorating, bricklaying and plastering, motor mechanics and a basic trade course for pupils below the Standard 7 level. These are all examinable subjects in theory and practical work and appear on their school certificates. They do not do an apprenticeship course and do not receive a full trade qualification.

1.7 Extramural Activities

The school timetable also includes periods for physical education, religious studies, youth preparedness, cadets, guidance, singing and music appreciation.

Sport forms an important and integral part of the programme. All pupils must participate in organised games. The school has extensive grounds which cater for rugby, soccer, athletics, cricket, swimming, tennis, badminton, jukskei and cross country running. Rugby, soccer, cricket, cross country running and some athletics are practised on a competitive basis with other schools and clubs.

Afternoon programmes on two days per week include activities for the upkeep and improvement of the grounds.

1.8 Psychological Services

These form an important and central aspect of the school services. The psychologists are involved in all aspects of pupil management. The case load is approximately fifty pupils per psychologist. Their duties start with the admission orientation of each pupil and his scholastic and intellectual screening. A well equipped test laboratory allows for further psychometric assessment for placement in the correct class group and serves as a basis for therapy. The psychologists are responsible for many of the pupils' personal matters such as family contact and all correspondence with social welfare officers. A free access system allows easy contact between pupil and psychologist so that the latter can monitor the pupil's emotional and interaction problems in the school. The psychologists also participate in sports coaching. Regular contact with pupils in the hostels is regarded as essential for a good understanding and knowledge of the individual pupil.

There is constant contact with the rest of the staff. Pupil problems are freely discussed with individual teachers and once a week a formal group discussion of problem cases is held.

1.9 The therapeutic programme

The present methods are based on reality therapy applied within the total milieu of the school. Regular individual interview sessions aim at giving the pupil an insight into his own behaviour. The diversity of the nature of the pupil population with regard to intellectual capacity, social background and learning ability necessitates a variety of approaches. A background report received from the social welfare officer who knows the home circumstances allows the psychologist to work through family relationships with the pupil.

There are no psychotic cases. Pupils are referred to a nearby psychiatric hospital for neurological assessment should this prove neccessary after preliminary screening.

Group therapy is not generally applied except in the case of a small group of enuretics for supportive therapy. Group therapy is difficult at the moment because of the intensive academic and extramural programme, inadequate selection criteria and experiential poverty of the pupils.

There is a system of behaviour reward in use but no specific behaviour modification technique is employed. Pupils are assessed on their behaviour by every member of the staff who deals with them. Good behaviour

is rewarded by giving the pupil a token in the form of a small badge which is worn on his shirt lapel. The primary motivation for the pupil to display good behaviour is to be promoted from a secure and tightly supervised hostel setting to a less restricted one. When he has made sufficient progress he can acquire freedom of movement on the school grounds. A pupil must also through consistent good conduct earn the right to visit his parents or go on holiday leave.

1.10 Period of treatment

The average period of stay for a pupil is eighteen months. Release on licence occurs only at the end of each academic year. Criteria for release include behaviour improvement reflected by the behaviour monitor system described in 1.9 above and the achievement of an academic pass according to intellectual ability.

The programme emphasises scholastic attainment as a prerequisite for entrance into the labour market. Should a pupil reach the limit of his ability to progress academically, he is considered for release on licence provided he has been in the school for at least eighteen months.

1.11 Hostel accommodation

There are five hostels each with facilities for approximately forty pupils. Initially there is no differential placement except for younger and older pupils being separated. Pupils progress from one hostel to another in accordance with the behaviour badge they earn. No classification on the basis of personality characteristics is made at present.

Some of the supervision staff also function as hostel care staff. Although the teachers are also encouraged to serve as hostel staff they do so only at selected times because of the demanding nature of the task.

1.12 Family contact

Except for the fifteen per cent of the pupils whose families are within a radius of thirty kilometres from the school, the majority have no regular family contact except through correspondence.

Local pupils can qualify for weekend leave depending on good behaviour and provided they have been at the school for nine months. Local parents are allowed to visit twice a month and parents visiting from afar are allowed to see their sons at other times by arrangement with the headmaster.

A pupil also qualifies for a holiday at home after nine months. Holiday arrangements for the June and December vacations are initiated from the school and need the sanction of the social welfare officer in the respective home town, depending on the home situation. Not all the pupils qualify for holiday leave at the same time. The remaining pupils are kept occupied by the teachers in a special non-academic programme during the vacation.

1.13 Community interaction

There is no community contact and involvement with the pupils. This is a negative aspect of strict detention which is fully realised by the management. An attempt to alleviate this problem has been initiated through a programme of extended teacher-pupil involvement over weekends. Pupils are taken on excursions arranged by the teachers, for example, to the theatre, to watch provincial rugby matches, to the beach or to climb the mountain. These are some of the attempts made to broaden the pupils' horizons. Social interaction with girls is non existent except for very rare occasions when they meet the girls from a local reformatory and an industrial school. The protective and statutory demands for caring for children under the Children's Act to some extent preclude the public from access to the reformatory.

1.14 Medical care

The school has a sick bay and a dispensary. The local district surgeon and a dentist visit the school on a weekly basis. No provision exists for a medical doctor to be a member of staff. A trained nurse manages daily medical care. More serious cases are immediately referred to the district surgeon or taken to hospital. All forms of special medical attention are available to the pupils through the district surgeon.

1.15 Probation

After release on licence a pupil is placed in the care of his parents or a member of the family approved by the respective probation officer at home. The pupil remains under probationary supervision for a period determined by the Childrens' Act, usually not more than two years. The probation officer is required to submit reports to the school relating to the pupil's adjustment to the community. A pupil's licence may be revoked for a further period of detention in the school in the event of unfavourable adjustment. The probation officer and the parents are responsible for placing him in a job.

1.16 Treatment outcome

The success of the treatment programme is at present only assessed post hoc based on after care reports. The criteria for evaluating the outcome is somewhat nebulous. Usually it is simply whether or not a pupil has further criminal involvement or is imprisoned. After care reports are not received for thirty per cent of the pupils released on licence. The following data represent statistics for 380 pupils released during the years 1975 to 1978:

Cases with no reports or available information	37,3%
Recidivists - criminal involvement or imprisonment	27,9%
Poor adjustment without criminal involvement	11,6%
Favourable adjustment	23,2%

The figure of approximately thirty per cent non-recidivism is similar to that found in overseas situations (Lipton 1975, Vinter 1976).

It is evident that in spite of the facilities provided and the educational efforts made the success rate does not match the aspirations of the people entrusted with the treatment. Elements which prevail outside the school, for example, home circumstances and economic factors, may affect the successful adaptation of a pupil after his release from the school. However as far as treatment at the school is concerned two aspects need special consideration:

(i) the general setting in which the pupils are accommodated and the methods of discriminating between those pupils with a good prognosis and those with a poor prognosis

(ii) the more conscious application of specific treatment procedures.

2 Alternative settings for treatment

Several other types of settings for treating juvenile delinquents exist in other parts of the world. Only the Massachusetts system will be described here since it was allowed to develop naturally due to the need for adequate methods of treatment.

As a consequence of ineffective treatment facilities for juvenile delinquents in the State of Massachusetts, U.S.A., the District Youth Service of that state summarily closed all institutions in 1977. The outcome of this radical approach to find better methods was that four alternative types of treatment facilities were instituted. Bakal and Polsky (1979) describe these as follows:

(i) Group homes

Such units house ten to fifteen youngsters who go to local schools or hold jobs. The staff consists of a

live-in couple, one set of relief parents and another relief person for weekends, two counsellors, a tutor and two student helpers. The unit functions as a family and is community oriented and serves to stabilise the youngsters who fail to function effectively in their own homes.

(ii) Therapeutically oriented homes

These provide a therapeutic milieu which concentrates on individual, family and group treatment. In-house education and training facilities are provided. The staff is composed of former clients plus a professional staff for supervision. The approach is that of reality therapy over a period of one or two years. Limited use is made of drug therapy with psychiatric back-up. However it seems that unmotivated youngsters do not benefit from this programme and runaways are not re-accepted since this system requires self-motivation to be effective.

(iii) Modified concept houses

These units were designed for a small group of youth with drug or alcohol problems. The treatment approach involves confronting the individual with his problem. However in such a non-secure unit it is easy for the youngsters to run away. This type of treatment centre appears to be unsuitable for the problems which it is designed to treat.

(iv) Residential schools

These are boarding schools set up on cottage principles and are well structured to meet the needs of those youngsters who display uncontrollable behaviour. Only a small percentage of youth are placed in these schools and it is claimed that there is little or no stigma attached to such placement.

The above mentioned four types of treatment facilities all cater for youngsters who fail to fit into the regular school system. They have an open structure in the sense that a youngster's placement can easily be changed should a particular setting be found to be unsuitable for his needs or problems.

According to Polsky it became evident that there remained a small group of difficult youths who could not be accommodated in the above open structure units. This eleven per cent of the delinquent population needed more secure treatment units due to their histories of violent crimes and long records of previous institutionalisation or both. These secure settings must be part of, rather than separate or isolated from, the open community based units. Polsky stresses that these units must be small and heavily programmed and they should ideally cater for a maximum of fifteen youths.

The question arises as to where the Constantia School fits into a structure of alternative treatment units such as described by Bakal and Polsky. In some respects the school is similar to the secure unit advocated for that small percentage of hard core delinquents. On the other hand it is also a residential school which has to cater for a relatively diverse pupil population as mentioned earlier in this chapter. Furthermore these pupils comprise subgroups of delinquents ranging from the severely delinquent to those pupils who simply appear to be in need of care and special education in a structured environment.

Presently these pupils are accommodated on a relatively non-differentiated basis in hostel units which are very much bigger than those found in the Massachusetts System. Present methods of treatment are thus inadequate as far as differentiation into smaller groups is concerned. By placing smaller groups of pupils with similar characteristics together in smaller hostel units, the goals of treatment as suggested by Polsky could be more easily achieved. These goals are:

(i) to provide the pupils with shared experiences where conflict has a realistic rather than an irrational content

(ii) to provide them with experiences of empathic tolerances of others around them and a democratic sharing of responsibility

(iii) to modify the trend in their behaviour which leads to the domination of others, isolation of the self and a regression of the quality of life

(iv) to re-integrate the pupils into the community.

Assuming that such smaller units can be established through the structural alteration of the present accommodation facilities, the next step would be to consider the treatment aspect itself in terms of accepted theoretical principles.

3 Treatment of subgroups

3.1 General procedures in differentiation

In chapter 7 section 4 it was stated that the personality characteristics of the six subgroups differ so widely that a differential treatment is needed. Tutt (1974) stated that in Britain where youth are classified and placed in schools according to the type of delinquency displayed, treatment in such schools has not proved successful in practice. Theoretically the idea is sound but the allocation of pupils to different schools according to the specific need of the individual is unsound and leads to labelling. Furthermore it is unlikely that sufficient finances are available to establish a number of smaller treatment centres in South Africa. Hence the larger residential

school providing for the treatment of a large group of juvenile delinquents will in all probability remain in use with one such school serving each of the more densely populated areas of the country, or each of the four provinces. At present however it is important that the existing institution be assessed to see whether it meets the needs of the differing pupils.

The most important differentiation which is needed between the diverse groups described in chapter 7 section 3 is the accommodation of certain groups in separate hostels or cottages. The general academic programme for all pupils would allow them to mix during the normal school periods of the day. However it is essential that those pupils whose influence could jeopardise the treatment of others should be placed in separate living quarters.

Gardner (1978) maintains that the child who fails to learn under one set of conditions may learn to behave differently under another set of conditions. Furthermore a child with behaviour difficulties can learn best if the programme is organised around his own unique combination of characteristics.

The architectural structure of the hostel quarters should make it possible for smaller groups to be accommodated, with preferably not more than twenty five pupils in each

unit. It is in the closer living situations where the deviant, delinquent subculture values operate and where peer group influences are at their strongest. Unless the groups are small enough to facilitate more pupil-staff interaction, it will be difficult if not impossible to penetrate and change the deviant peer group influences. Most of the socialising personal interactions of the pupils occur in the hostel situations. An appropriate social environment is as important as an academic educational environment in a total milieu therapy approach in a rehabilitation programme.

Polsky (1967) warns against the maintainance of deviant values in the cottage system. These deviances usually persist because of the aggressive code of behaviour and the exploitation of smaller boys by the bigger ones. Differential hostel placement could prevent this from happening.

Stigmatism within the school due to the grouping together of the more recalcitrant pupils need not arise if this group is managed without discrimination. Feelings of abandonment must not be allowed to arise within these boys whom Polsky refers to as the low status group.

Any system which adheres to a procedure of rigid classification does not allow for behavioural changes which could occur within the individual. Pupils may undergo positive

change while still participating in basically negative social systems. Should a pupil's re-evaluation reveal such change he must be given the opportunity to progress to a new environment to further his field of experience. Classification and grouping should not be so rigid that it restricts the pupil's personal growth towards social maturity and responsibility.

3.2 General basis of a treatment programme

The basic premise on which the subsequent treatment approach is based is that the pupils of the school comprise those juvenile delinquents who cannot be treated in the community and must be accommodated in a special school. All the principles mentioned by Pooly (1978) for the integrated community based approach, the cottage system as described by Polsky (1967) and the community homes approach of Tutt (1974) can contribute towards the formulation of a "middle of the way" approach. This implies facing the reality that the juvenile delinquent has rejected the conventional education system and has dropped out and become alienated from the normal school. He is already educationally retarded and to prevent him from complete human disaster he must be given special education. Such education must include the following three elements:

(i) Formal education to provide the pupil with certain basic skills of literacy and numeracy, the prerequisites for an independent adult life and successful personal communication. Study fields should cover reading, language usage, science, mathematics and social studies. Craig (1975) reports improved self-concept and reduced recidivism for delinquents as a result of academic achievement. In this respect Tutt (1974) emphasises that examination syllabuses need to conform to outside standards of school leaving so as not to place the pupil at a disadvantage when applying for a job. Remedial education must be provided with techniques appropriately chosen for adolescent boys.

(ii) Functional education, especially for children in need of care, to teach them about problems of adult life and how to cope with them. This includes aspects such as political, legal and consumer education.

(iii) Social education to bring about the improvement of personal interactions and the reduction of behaviour patterns which produce conflict.

Elements (i) and (ii) must aim at breaking the cycle of deprivation of basic education and (iii) must aim at

creating behaviour which reduces social conflict for the individual. The incarcerated juvenile must be treated in his total living experience as a member of a specific peer group and a family where his social relationships and personal transactions determine the quality of his life. Within this context a milieu therapy approach which stresses the transactional character of human behaviour should be used. A milieu therapy implies the utilisation of all available resources in the daily living experiences of the individual to facilitate personality growth.

Personality growth is largely dependent upon the quality of the social relations of the delinquent with his peers, members of his family and the staff of the school. By designing a planned environment in the school to facilitate learning, one can achieve maximum effect on personality growth. The rehabilitation can be furthered by the inculcation of new desirable attitudes on the part of the pupil towards his school work and by promoting in him socially appropriate behaviour.

To maximise the effect of such a milieu therapy the professional and non-professional staff must work together to penetrate and change the deviant social system and behaviour patterns of the juvenile delinquent.

The therapy of the individual cannot be divorced from

his daily life. The staff must concentrate on the pupils' social relationships and their pathology. An important goal of this transactional approach to behaviour intervention is to integrate the milieu therapy with individual treatment. The personality characteristics of each pupil must be assessed in terms of his values, needs and personal relations to establish his position within this therapeutic milieu. This knowledge will reveal his strengths and weaknesses which the therapist can then use to help the pupil to cope with the educational demands which the milieu makes on him. Thus the clinical procedures must be selective, intensive and planned for each pupil for his period of stay in the institution.

Two specific procedures should be employed in the treatment. These relate to (i) behaviour modification and (ii) value clarification.

3.2.1 Behaviour modification

The basic premise which underlies all the learning which is required of the pupil is that educational behaviour is functionally related to its consequences. New academically and socially appropriate behaviour should be inculcated under a schedule of reinforcement while inappropriate and antisocial behaviour is extinguished by a schedule of non-reinforcement.

Establishing a therapeutic milieu implies the planning of a contingency oriented environment in which the formal, functional and social education of the pupil is facilitated by methods of operant conditioning. This can include such specific procedures as contingency contracting, token economies and behaviour modelling. Tutt (1974) states that a true therapeutic community must include the use of token economies together with traditionally based schooling. In this respect each institution must formulate its own perspective on the education which it aims to provide and the details of the methods by means of which it wants to achieve its objectives. Behaviour modification using operant conditioning methods forms the basis of the treatment methods to produce the changes needed through the learning process.

One of the difficulties in such a programme is the establishment of effective contingencies to elicit the appropriate or desired behaviour. Cohen (1971) suggests that as a starting point the value system of the individual should be used. The premise is that something which the individual values most will be an effective contingency in producing a desired behaviour. However a more basic aspect of this behaviour which is based on values, is the satisfaction of a specific need.

An appropriate contingency would be established by

referring to the continuum of contingencies listed by MacMillan (1973) which are:

(i) primary rewards e.g. food and water
(ii) toys and trinkets
(iii) tokens with back-up reinforcers e.g. toys, food
(iv) visual evidence of progress e.g. graphs, grades
(v) social approval
(vi) sense of mastery with self-confidence.

A knowledge of the needs and values of the individual could assist in overcoming the difficulty in choosing the appropriate level of the contingency needed for that person.

3.2.2 Behaviour modification and the findings in this study

As a general example the higher order needs of the institutional and the non-institutional pupils (table 4.2) and the relationship between these needs and values (tables 6.9 to 6.11) could indicate suitable contingencies for these pupils. The high need for endurance is coupled with the values obedient, honest, helpful and self-control. These four values refer to personal aspirations for which social reward in the form of praise and acknowledgement would be effective contingencies to use. Thus more primary rewards such as money or tokens would be less effective since these do not relate to the dominant needs of the pupils.

Those needs which appear low on the hierarchy for both the institutional and non-institutional pupils are aggression and exhibitionism. Table 6.9a shows a high positive correlation of these needs with exciting life. Exciting life is low on the value hierarchy of these pupils (see table 4.2). Since this value corresponds to a contingency which is low on MacMillan's scale it is not likely to be optimally effective in eliciting the desired behaviour.

Whatever the contingency is, it must be borne in mind that juvenile delinquents have a restricted temporal experience compared with normal children (Quay 1975). They are more present-oriented and consequently any contingency should follow the desired behaviour as closely as possible in time.

Considering the needs and values of the pupils of the school as a group, the above levels of reinforcement show that in general they would be more responsive to social rather than more concrete lower levels of contingencies. Johnson (1976) in a study of a large number of juvenile delinquents showed that they were less responsive to social reinforcement than non-delinquents. However since the present study shows that the pupil population consists of subgroups who differ in their degree of delinquency, Johnson's findings do not

pose any contradiction. It is possible that the different subgroups of delinquents require different levels of contingencies.

3.2.3 Value change strategies

Johnson (1979) states that delinquent values precede delinquent behaviour. Although there are ways of influencing a person's behaviour by means of the techniques of behaviour modification referred to in section 3.2.1, a strategy which aims directly at changing a person's values could also produce behaviour changes. However, there are certain difficulties which make the application of value clarification on its own ineffective in practice.

According to the "expectancy - value" theory of Rokeach (1968, 1973) and Feather (1971a, 1975) it is possible to influence a person's values and thus produce change in his value structure. The values which a person holds and which direct his behaviour can differ from those held by other members of society. This value clash produces conflict due to unacceptable behaviour of one person according to the norms of others. Rokeach uses the idea of cognitive dissonance to produce value change. By creating an awareness in a person of the values of others, the discrepancy which exists between his own

values and that of others will produce pressure which would cause his values to change. Medford (1976) reports that use of cognitive dissonance is relatively less effective than the method of value clarification. Medford and Schmedinghoff (1977) both report that value clarification, which merely emphasises the creation of an awareness of one's own values and that of others, is also ineffective in producing a change in one's value structure.

The methods of Raths et al (1973,1978) and Coombs (1971) also aim at producing an awareness in a person of his own values and that of other people. They propose that a person should be helped to analyse his own values by means of the following processes:

(i) choosing freely from alternatives after having considered the consequences of his actions

(ii) prizing the choice with which one is happy and sharing a willingness to affirm such a choice in public

(iii) acting by doing something about one's choice and repeating such actions over time.

The methods of Raths and Coombs aim at resolving conflict which arises in cognitive dissonance. However Hersh (1980) maintains that such methods could still produce conflict although they do promote an increased awareness in a

person of his own and other people's values. This is merely a starting point in attempts to produce value changes with consequent behaviour change.

One element which occurs in all the methods of value clarification is the interpersonal discussion and feedback between people which is needed to create necessary awareness of values. Poor interpersonal relations restrict such personal interaction.

The writer maintains that it is essential to consider the relationships which exist between a person's values, his personal relations and his needs if a complete approach is to be formulated to produce change. In this respect a person's values cannot be changed unless certain aspects of his personal relations can also be improved. There is a cybernetic relationship between these three aspects which interact to produce mutual changes.

The nature of these relationships is illustrated in the findings of this present study in tables 6.9, 6.10 and 6.11.

In table 6.10 and 6.11 the personal adjustment variables which are most highly correlated with almost all the values are formal relations, moral sense and self-control.

Unless a juvenile delinquent learns to improve these aspects of his personal relations, the values which are positively related to these aspects are not likely to undergo any change. Scharf (1978) states that an essential element in value clarification is learning which increases self awareness. Thus a person's values will remain unaffected unless he can learn to live with and interact properly with other people.

Learning will also not occur maximally unless certain related needs of the person are satisfied. Any of the relationships in tables 6.10 and 6.11 could be analysed in such a manner. As an example from table 6.10 the value sense of accomplishment might be considered as a "target" value to be changed in a person who is unmotivated or apathetic. Those needs which must be satisfied are achievement, order and deference while the personal relations which should simultaneously be improved are moral sense, self-confidence and formal relations. To create change in such a person by impinging upon all the related variables requires a comprehensive educational effort, no less than the application of the learning principles and techniques of a behaviour modification programme such as described in section 3.2.1.

Behaviour modification and value clarification must be considered as inseparable processes in the general

approach to the treatment of juvenile delinquents. Both processes lend themselves adequately to implementation in the context of a milieu therapy.

3.3 Recommendations for the treatment of subgroups

Assuming that the physical structure of the school can be adequately adapted for differentiation, the characteristics of the subgroups described in chapter 7 section 3 indicate a differentiation with regard to the following: (i) accommodation, (ii) punishment, (iii) management, (iv) educational activities and (v) community and family involvement. Some suggestions relating to more specific treatment of each of these subgroups will be given.

Group 1 ("normal" delinquents)

These pupils show the least maladjustment with respect to their needs, values and personal relations. Their needs are generally well satisfied, they are not aggressive and they function fairly autonomously. They are more responsible, honest and self-controlled than the others, are more polite and have better self-respect and self-esteem. They are sociable and are likely to have less strife living together.

It is essential that these pupils who have a good prognosis and a relatively positive value

structure be placed in a hostel where they do not have contact with groups 3, 4 and 6. Their hostel need not provide for such strict detention. After an initial period of confinement, allowance should be made for them to progress towards less supervision over their movements in and around the hostel and school buildings. If a system of behaviour reward is employed, the contingencies could be related to giving these pupils such freedom of movement to allow them to play games on their own on the sports fields and allowing early and more frequent weekend visits to parents and family who live in the vicinity of the school. Maskin (1976) found facilitation of family interaction and communication to be closely related to successful treatment of juvenile delinquency and a reduction in recidivism. Since direct family involvement is impossible for many pupils due to the geographic position of the Constantia School, an earlier progression to holiday leave should be made possible.

Since their needs are well satisfied, the level of contingencies for producing desired behaviour can be high on the MacMillan Scale. One should concentrate on allowing them more tasks which enable them to achieve a sense of mastery. They need school activities such as a debating society and a hobbies club and outward bound activities such as mountain climbing and hiking.

Their values are positive enough to allow them to participate freely in activities of their own choice. They are not likely to abscond since they do not place a high value on freedom and do not appear to be sensitive to restrictions from which they need to run away.

Punishment for this group should be related to higher level contingencies and could take the form of social disapproval and the withholding of the right to participate in high reward activities such as described above, for example, games, outings and contact with the community.

Group 2 (socially deprived delinquents)

This group differs from group 1 in intelligence, need deprivation and maturity. A large proportion of them are institutional pupils. They do appear to have some sense of responsibilty and hold the same positive values as group 1.

Because of their high social dependence this group need not necessarily be accommodated in a separate hostel from group 1. Interaction between them could be beneficial and the group 2 pupils could gain socially from the group 1 pupils who are mostly non-institutionalised. However as the group 2 pupils are on the whole less intelligent than the group 1 pupils it would be better

to keep them in a hostel of their own. Separate accommodation would also allow for easy management of specific activities aimed at providing them with compensatory experiences outside the school as they comprise more institutionalised pupils than any of the other groups.

These pupils usually have had little or only tenuous family contact and therefore should be allowed the same quick advancement to contact through holiday leave or even trial placement with their families. The machinery for re-admission should be quick and easy should this placement prove unsuccessful.

Contingencies for inducing behaviour change can be high on the MacMillan Scale since they should respond well to social approval and achievement motivation.

They need to be exposed to experiences outside the institutional setting which would serve to divert their introvertive, neurotic self-interests. Outings which bring them into contact with new situations in everyday living, such as supervised trips to the town, beach, museums and other places of interest would cater for their need for change.

Their aggressive and exhibitionistic tendencies result

from an irrational application of contingencies in the past. These pupils need more individual attention in the elimination of inappropriate behaviour which causes social conflict with other pupils and staff.

Punishment for this group can be of the same kind as that for group 1. For both groups mild corporal punishment may be indicated for the more severe instances of misbehaviour. It is important to differentiate between the withholding of a reward and the removal of a privilege. The best policy is the maintainence of a good relationship and a positive approach by the staff. Thus to use the statement "if you behave well you may go on weekend leave" is a better approach than to say "you will not go on leave if you misbehave".

Group 3 (amoral anti-social delinquents)

This group tends to be psychologically disturbed. Their experiences of failure in the past have resulted in their negativistic personal characteristics. They are consequently withdrawn, lack self-respect and are anti-social. Their low need for achievement and affiliation with others and low self-esteem emphasise their affective isolation from other people. Their apathy is reflected in their low need for aggression and exhibitionism.

These pupils should be accommodated separately at first. Later on they could be allowed to progress to mix with group 1 and group 2 pupils. Normal social interaction should be encouraged to build up affective ties with others. Negativistic tendencies result from childhood experiences of inconsequenciality of treatment by parents or other adults (Gardner 1978). They need a programme which concentrates on socialising experiences with reinforcement for compliance.

A behaviour management programme should be based on an adapted continuum of contingencies for disturbed children (Hewett 1968). These contingencies are:

(i) tangible rewards; money, food, trinkets
(ii) social attention
(iii) completion of tasks
(iv) multi-sensori experiences
(v) approval and avoidance of disapproval
(vi) being correct
(vii) acquisition of knowledge and skills.

Most of the contingencies listed under (iii) to (vii) above aim to reward achievement with consequent improvement of self-esteem.

Part of the programme for this group should include training for achievement motivation. This involves

Punishment for this group should be kept to a minimum so as not to emphasise their feelings of failure. Provided that their programme has reached the stage where they value social approval, the use of "time out" or removal from a rewarding situation can be used as a deterrent to anti-social behaviour.

Group 4 (aggressive psychopathic delinquents)

These pupils are severely psychologically disturbed and must be placed in secure custody for the protection of other people. With such a large number of relatively undisturbed pupils in the school, the presence of the psychopathic pupil is disruptive and diminishes the rehabilitation prognosis of the others.

Ideally they should be accommodated in a youth prison. The statutory machinery does exist for the removal of such a pupil from the reformatory to a prison but it is subject to administrative delay and is usually only done in the case of extreme disruptive behaviour.

In the absence of a suitable alternative institution, it is imperative that this group of pupils be accommodated in a separate hostel where they cannot interact with the other groups. They are inclined to intimidate the other pupils overtly and covertly by means of emotional

blackmail and manipulation. This happens because they are in general more intelligent than the other pupils.

The treatment of the psychopathic personality presents custodial institutions with the biggest of all rehabilitation challenges. In this respect Jehu (1972) maintains that it requires an intensive behaviour modification programme to be even minimally effective.

A behaviour modification programme for group 4 should comprise the following:

(i) a tight and highly structured environment in their hostel

(ii) the use of contingencies which are low on the Hewett Scale.

Social incentives are of little use for these pupils. They are inaccurate judges of other people's intentions due to their poor interpersonal perception (Chance 1960). Specific contingency contracting procedures can be employed in their hostel. Contingencies for appropriate behaviour should be low on the continuum and rewards should be more concrete for example, tokens with tangible backup. Incentives such as approval, being correct and the acquisition of knowledge or skills are insufficient since they score low on the factor <u>self-expansion</u>.

Contact with family holds little value for them (low score on family security) and any need for such contact is merely for the supply of food and other articles. Contact with the families should thus be strictly controlled so that these basic needs are not satisfied by the family. Only in this way can contingency contracting be effectively employed and the pupils' manipulative habits curtailed. Holiday leave should not be withheld, but should be limited and be more strictly linked with good behaviour.

Punishment for these pupils is a difficult matter since their transgressions are usually of a serious nature. Corporal punishment is not indicated for the psychopathic person. They are poor at learning pain avoidance tasks (Siegel 1973) and have developed a physiological defence mechanism making them insensitive to pain (Welsh 1978) which causes them to be stimulus seekers. However they do learn adequately with reward (Schlichter 1971).

Since aggression is an outflow of situations of stress and corporal punishment creates stress, it would only increase the aggressive behaviour of these pupils. As an alternative to punishment Schlichter advises the use of elements in the reality therapy approach of Glasser (1969). These are

(i) getting personally involved with the pupil

(ii) avoiding the recall of the pupil's past indiscretions and concentrating on his present behaviour

(iii) working towards getting the pupil to make value judgements about his behaviour and setting goals for his behaviour change

(iv) getting him to make a commitment to change either verbally or in writing.

Any "time out" procedure which is used as punishment for gross misbehaviour should be strict and could even include stimulus deprivation by putting the pupil in isolation.

Group 5 (neurotic deprived delinquents)

This is also a small group of disturbed pupils whose emotional immaturity and neurotic behaviour restrict their social adjustment and personal development. They are more of a problem to themselves than to the other pupils. Although they tend to be nervous and introvertive they are nevertheless socially dependent. They lack self-control and are inclined to make immature demands on their environment.

They need to be accommodated separately from the other groups. They are usually demanding and seek attention.

They also have problems in interacting with other pupils. They nevertheless need as normal an environment as possible to assist them in coping realistically with their own behaviour problems. Since they are so demanding their hostel numbers should be less than for the other groups. As they are the most intelligent group of pupils they would benefit most by group therapy and therefore should be in a separate hostel. They could after some time be allowed to progress to the hostels for groups 1 and 2 to allow them to interact with less troublesome pupils.

These pupils are in need of intensive therapeutic intervention which is demanding on the therapist. Specific procedures should include the reduction of tension and anxiety and the establishment of realistic goals. They should participate in activities together with groups 1 and 2 to build self-confidence and self-esteem. Their high achievement motivation (high score on self-expansion) is usually coupled with unrealistic goals resulting in failure to achieve and further loss of self-esteem. The unhappiness which this causes is reflected in the high value that they place on <u>happiness</u> and a <u>sense of accomplishment</u>.

They are sensitive to relationships with their families and should be given opportunity to make early and

regular contact with them. Their concern for family approval makes them want to achieve in an attempt to improve their self-esteem.

More individual therapy for each pupil should concentrate on establishing realistic self-acceptance (value clarification), acquiring skills to make him self-reliant and improving his self-confidence. The reality therapy of Glasser could be used in conjunction with social reinforcing contingencies.

Punishment for misbehaviour should consist of the application of social disapproval and short spells of "time out" from socially rewarding situations.

Group 6 (amoral hedonistic delinquents)

This small group of pupils have characteristics very similar to that of group 4. They differ from the latter in that they show a greater need deprivation, are uninhibited and make immature demands on their environment.

These pupils should not be accommodated in the same hostel as any other group. Although they have similar values to the psychopathic group 4 pupils, some aspects make it imperative that they be treated separately.

Their personality make-up seems to make them prone to use drugs and they strive for immediate gratification of their needs. They pose a management problem since they require strict detention to prevent them from acquiring drugs and proselitizing others. Should further investigation prove that they actually suffer from a drug dependency they will need specific treatment for this. Separate accommodation would facilitate group therapy for drug related problems. In this respect it will be necessary to use value clarification principles which aim at re-orienting their value systems in accordance with behaviour which will not maintain their drug using habits.

A behaviour modification programme for these pupils should take account of their immature demands. Rewards aimed at eliminating aggressive and exhibitionistic behaviour should be low on the continuum of contingencies since they will be more responsive to concrete rewards. The programme should aim at improving self-control and emphasise moral education much more than for the other pupils. This must include more individual therapy, group therapy and interaction among themselves to emphasise responsibility, honesty and helpfulness. Their freedom should be strictly curtailed and any freedom of movement should be directly linked to responsible behaviour.

Punishment should be similar to that for group 4. Corporal punishment is likely to elicit more aggression and will not help to improve pupil - staff relationships. It would be more advantageous to withhold concrete rewards when they exhibit improper behaviour.

Since they value family security and are still dependent on family influences, contact in the form of holiday leave must be allowed as for the other groups. Holiday leave for these pupils is likely to carry a high risk of absconding or getting into trouble.

3.4 Summary

The prognosis of three of the subgroups of pupils, namely groups 1, 2 and 5 would appear to be good. The other three groups which together comprise less than thirty per cent of the pupils will require concerted efforts in the form of individual therapy and effective management of their programmes in order to bring about desired changes. Individual pupils in these three problem groups would also need periodic re-assessment in order to allow them to be placed in other hostels should they show improvement. In this way their opportunity for new experiences in the school could be extended.

Care should be taken not to discriminate between the hostel groups with respect to the overall activities in which they can participate. Only by allowing them the same opportunities and access to school resources will the possibility of hostel stigma be avoided.

The diverse personality characteristics of the pupils makes it impossible to rely on a single therapeutic technique. In addition to the general application of behaviour modification principles, other methods such as transactional analysis (Berne 1961) and the reality therapy approach of Glasser can be usefully employed.

A primary aim of the school management should be to develop the therapeutic milieu. The pupils' maladaption does not solely lie in their personalities, but also in their collective social practice and peer culture. These pupils must be given the opportunity to experience different and more constructive social interactions to the ones to which they are accustomed. The value of constructive personal interaction is evident from a study by Shlien and Duggan (1978). A programme in which adolescents with behaviour problems were used to help others with similar problems resulted in a better sense of personal responsibility and improved self-esteem.

As mentioned previously in chapter 1, no treatment programme can be improved unless its actual accomplishments are known or can be properly evaluated. When a general treatment programme is used for all delinquent youth the extent to which rehabilitation has taken place is often disappointing. Such a programme may well be successful for one or more types of delinquency, but not for other types. Consequently when the treatment programme is assessed in terms of its effectiveness for all types of juvenile delinquents the success rate appears to be low.

The advantage of using a differential treatment procedure is that a particular treatment procedure is devised for each group of delinquents with similar psychological characteristics. Consequently it is possible to determine to what extent a programme that has been designed for a particular group is successful in bringing about the desired change in that group.

It is more likely that an effective treatment procedure can be developed and refined for a group with common and known psychological characteristics than for all juvenile delinquents with a wide variety of characteristics. There is therefore a dire need for a technique whereby juvenile delinquents can be classified into meaningful psychological types.

The absense of a useful system of differentiation between different types of juvenile delinquents has proved to be one of the greatest difficulties in developing more specialised treatment procedures. The findings of this study should be helpful in overcoming this problem. In the final analysis it is the outcome of the treatment procedure employed at an institution such as the Constantia School that determines whether it has a right to exist.

APPENDIX A

E.P.P.S.

On the next few pages are a number of statements. Each statement describes a certain aim, situation, activity or action. You must judge each statement according to how important or desirable it is to you as a person. Different judgements can be made viz. not at all important or desirable, not important or desirable, neutral, important or desirable and very important or desirable. This can be represented on a scale as follows:

1	2	3	4	5
not at all important or desirable	not important or desirable	neutral	important or desirable	very important or desirable

This scale appears at the top of each page. You must decide in which category you want to place each aim or activity. Above each category is a number. You must simply write the number which corresponds to the category which you choose on the answer sheet opposite the corresponding number.

Example: P.T.O.

Example: Suppose you must decide on the importance or desirability of a certain activity A. Say you choose the category not important or desirable. The number above this category is 2. You mark the number 2 with a cross on your answer sheet next to that item i.e.

A. 1 X 3 4 5

Should you have chosen another category then you would mark the number which corresponds to that category on your answer sheet.

Please judge all the items and be honest with yourself.

All results are strictly confidential.

APPENDIX B

R.V.S.

On the following pages are two groups of ideas. They represent different aims or personal attributes which can serve as directional values in one's life. These aims or personal attributes must be judged on the grounds of importance or desirability which they hold for you. Different judgements can be made viz. not at all important or desirable, not important or desirable, neutral, important or desirable and very important or desirable. This can be represented on a scale as follows:

1	2	3	4	5
not at all important or desirable	not important or desirable	neutral	important or desirable	very important or desirable

This scale appears at the top of each page. You must decide in which category you want to place each aim or attribute. Above each category is a number. You must simply write the number which corresponds to the category which you choose in the bracket space next to each item.

Example: P.T.O.

Example:

Suppose you must decide on the importance or desirability of a certain aim A. Say you choose the category not important or desirable. The number above this category is 2. Thus you write a 2 next to that item i.e.

Attribute A .....(2)

If you have chosen another category then you write down the number which corresponds to that category in the bracket space.

Please judge all the items and be honest with yourself.

All results are strictly confidential.

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