STRESS, WELLNESS AND SUBORDINATE SERVICE ROLES IN FEMALE CABIN ATTENDANTS
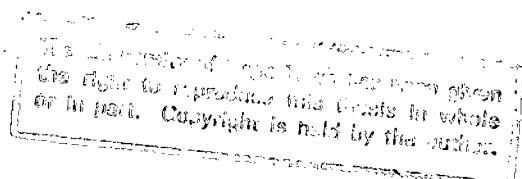
GAIL TILLEY

Dissertation Submitted in Partial Fulfilment of the Requirements for the Degree of Master of Arts in Industrial and Organizational Psychology, Faculty of Social Sciences and Humanities

University of Cape Town

Supervisor: Prof. D.J.W. Strümpfer

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Declaration

The work contained in this dissertation is the result of my own efforts and has not been submitted for the purpose of any other degree or examination in any other university.

GAIL TILLEY,

April, 1989.

Dedication

In memory of my mother, Kay Liversage and to my father,
Bill Liversage, my husband John and children Bevan,
Jonathan and Kate ... at last.

ACKNOWLEDGEMENTS

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Friends, especially Barbara Epstein and all others who were invaluable, whether for talking through ideas or proof-reading or just being there.

Classmates Pam Porter and Rob Robinson: Those trips to Unisa were not in vain. Break a leg! Thank you Pam for being a supportive co-researcher. Parachute help!

My husband, John, and children who have had to cope with my 'absences' and pressures. Thank you. Melita Mogalifi has selflessly held my family together when my pressures were too great.

A special thanks to Margaret Fothergill who stepped in and smoothed the last minute crises to finish typing the document and who has been a veritable guardian angel in nurturing this thesis to the end.

To all of them: "Happy landings!"

LIST OF ABBREVIATIONS

CA	Cabin Attendant
GRRs	Generalized Resistance Resources
SAA	South African Airways
SIRS	Seriousness of Illness Rating Scale
SOC	Sense of Coherence
SRRS	Social Readjustment Rating Scale
SSR	Subordinate Service Role

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ABSTRACT

Stressful aspects of work and non-work life were investigated amongst 101 female cabin attendants (CAs) who had worked at the South African Airways on either internal or external crew for a minimum of three years. A particular focus was on the subordinate service role of CAs. The research design consisted of different complementary phases. Firstly, extensive interviews were conducted with supervisors and co-ordinators, in order to gain background information on the organization and on the work of a CA. Secondly, semi-structured interviews of about 30 to 60 minutes duration were conducted with CAs while they were on stand-by duty. Thirdly, after the interview each one was asked to complete a self-report questionnaire which contained scales, to be returned at a later stage.

The qualitative study was the main source of information and attempted to capture real-life experience. These data analysed in terms of cultural antecedents to the stress process, organizational stressors of various kinds, stress reactions and strains (consequences), conditioning variables that affect the appraisal of stressors or buffer the stress-strain chain, and coping behaviours. Extensive use was made of case material and verbatim descriptions, in order to convey the warm quality of this comprehensive information. The qualitative data identified a wide range of stressful experiences of CAs.

In addition to this description, the qualitative data were also content-analysed to provide a number of quantified dimensions used in the quantitative phase, along with the questionnaire data. These dimensions were: perceptions of stress levels, role-conflict, hardiness, social support, burnout and wellness.

The questionnaire contained scales to give indications of: workload, participation, potency, trait anxiety, trait anger, exhaustion, depression, general health, somatic complaints, smoking, drinking and pill consumption and propensity to leave. Acceptable Cronbach alpha coefficients were found for these measures.

Simple correlational analyses identified clear relationships between stressors and consequences, as well as between variables which had been included as potential moderators in the stressor-consequence relationship. Unacceptably high correlations were found within the groups of stressor variables, moderator variables and outcome variables, with the implication that not all of the results could be viewed as independent findings.

In the investigation of moderator effects, the sample was split at the median of each moderator variable, to form high- and low-scoring subgroups. In each subgroup separately, variables were intercorrelated and test were done for the significance of differences in correlations between the two subgroups. Potency, hardiness, trait anger and social support each moderated a number of stressor-consequence relationships in meaningful ways.

The thesis was concluded with proposals in terms of organizational restructuring of the work of CAs, as well as additional and modified training, that could serve to reduce the stressfulness of their work and to increase their effectiveness.

CHAPTER 1

INTRODUCTION

<u>Misconceptions about Stress</u>

The present study concerns stress in female airline cabin attendants (CAs). The public stereotype of their occupation is one of glamour and privilege. Yet it is often rather glamourless, always demanding, as well characterised by some stressors unique to this particular position and some stressors unique to subordinate service roles (SSR) (Shamir, 1980) in general. It is doubtful whether managers and supervisors of CAs are fully aware of these aspects of the occupation. Obviously if the situation is not fully understood, it cannot be managed properly either.

Opinions regarding the exact nature of stress range from well-researched, academic and quite often contradictory opinions, to popular notions and misconceptions held by the media and individuals. Popularisation of many of the concepts such as wellness and the stress-coping-health relationship have occurred (Juechter & Utne, 1982); as a consequence, many individuals have become keen to manage their stress and live healthier, more productive lives. Organizations have also developed an awareness of the need for stress management to its own advantage and to enhance its employees' effectiveness, as well as to the advantage of

individuals employed in them (Schein, 1982). Many individuals still, however, have half-baked notions as to who is eligible for stress. Stress symptoms, for example, are often viewed as war medals, earned only by the valorous worthy. Top executives are entitled to stress symptoms but, as one senior manager exclaimed about subordinate service personnel during an interview when this study was being set up: "What? Who? Them! They don't get stress ... only senior executives get stress!" Thankfully this attitude did not persist and did not prevent the research from being carried out!

The nature and function of the job of the CA is primarily one of service to passengers. Similarly to many other jobs in service industry, the CA's prime function is to cater for the passenger's needs, often having to disregard her own personal needs and feelings. The CA thus is put into a SSR in relationship to the passenger, a role which has many unique characteristics and conflicts. Many CAs experience these conflicts as stressful, in addition to other stressors inherent in the job or life-style. Other CAs manage these same stressors effectively.

By way of introduction, the following two profiles will demonstrate the essentially stressful nature of the work of CAs. These profiles do not reflect the experience of two individual but are the reflections of the composite experience of various people of the same

"type". A presentation of a case-study would have verged on a breach of confidentiality. The present method is one way of capturing the rich source of qualitative data. The two examples also introduce and illustrate the concept of Hardiness (Kobasa, 1982), Potency (Ben-Sira, 1985) and Sense of Coherence (SOC) (Antonovsky,1979, 1987) which are central to this thesis. These three concepts emphasize that some individuals are capable of managing their stress more easily than others.

Examples: Two Sides of the Same Coin

Side 1: Aggie

Aggie was interviewed while waiting on standby. She seemed to be an intelligent, perceptive person, with good communication skills and capable of interpersonal warmth. She is a 25-year-old CA, who has been working in the airline for four years. She is single, has no romantic attachment and lives with a flatmate. She is a qualified teacher but has no teaching experience. She joined the airline to travel overseas. Four years later she is still on internal services. Unfortunately, soon after she joined the airline all posts were frozen and she had no chance to join the external (overseas) crews. Her hopes have steadily dwindled over the last few years, her smile has worn very thin and she has difficulty in providing the personalised service required in the airline and demanded by passengers. At this point

in time she has been promised a potential overseas post-
ing.

She does not believe management; her attitude
towards management is that they do not care for her, and
never listen to any of her problems. Even though
promises are in the air, she feels sceptical because
talk has been going on, but no clear decision has been
made, or objectives set for her. She is beginning to
doubt her own competencies because she has seen others
being sent on trial runs overseas. Some of these did
not, in her opinion, warrant this reward, due to their
lack of performance and unreliability, e.g. some CAs
going absent without leave so that they can attend an
important function or engagement. This usually occurs
when normal flight schedules do not allow flexibility,
and they are therefore unable to apply for proper leave
through the normal channels.

Her general negativism towards management prevents
her from using their resources. Since she does not trust
anyone in a managerial position, she has difficulty in
talking to her co-ordinator about her problems. She
feels caught in a trap of conflicting demands (Shamir,
1980; Whetten, 1978) and feels alienated, which deepens
her mistrust. Management are viewed as uncaring
bureaucrats who view her as a number, while she just has
to go on smiling. She feels that she has always carried
out her responsibilities and tried to provide the best

service to passengers, with whom she used to enjoy work-
ing. Gradually she finds working with passengers less
and less rewarding. They often get on her nerves and she
feels that her smiles have become artificial. She often
functions automatically, "in remote control". She feels
that at times she cuts corners and "can't be bothered
anymore" to give them service. Occasionally she "can't
face the thought of working with them" and then works in
the galley to avoid passenger contact. While taking
refuge in the galley she sometimes kicks the service
trolley to vent her frustration.

At times all of life feels overwhelming, but she
cannot stop working for the airline: "You become hooked
and it is difficult to leave".

Her one consolation is her relationships with her
fellow crew, with whom she gets on very well. They sup-
port each other when things go wrong, from the moment
passengers walk up the gang-way. They have many
"bitching" sessions, when they vent their anger at
management, whom they blame for their sorry state.
However, she insists that no solutions or actions ever
result from these occasions, which only lead to more
frustration and feelings of powerlessness.

This negativism is beginning to affect her social
life as well. She feels constantly tired after flights
and cannot be bothered to call up her friends, "because

it always depends on me: I have got to do the telephoning". She has no steady boyfriend: "It's easier that way. There are less demands on me". She often feels that she does not have intimate friendships: she has many acquaintances, but no one whom she can really trust. She feels she is being pushed more and more to rely on airline friendships where generally the relationships are superficial and meaningless.

There are still rewards in the job and, at times, she does enjoy the passenger contact and other benefits. But her bad days seem to be increasing and she frequently cries after flights. She has also been sick often, with recurring bouts of influenza, very frequent headaches, back-aches and sore feet after busy flights and heavy roster schedules. She has menstrual problems. She does not sleep well at the best of times but disapproves of tablets. She knows that she also does not eat regular meals and frequently eats "junk food". She blames her irregular hours for these problems.

She no longer feels a positive sense of self and has no goals, except trying to get enough sleep for the next flight. She feels all her life is living out of the suitcase and feels that she never gets out of her uniform. She also feels that she is continually "doing her hair and putting on a face". On days off she relaxes to the extent that she wears no make-up, and generally makes little effort to do anything.

At the conclusion of the interview Aggie was referred for counselling as she no longer was in control of her life and "burning-out" fast (Golembiewski, Munzenrider & Carter, 1983). Aggie is caught in a conflict of role expectation from management, herself and the passengers. Her experiences illustrates the progressive outcomes of adapting to distress. She is not a "maladaptive personality" (Funk & Houston, 1987, p.573), but rather low on sense of coherence (Antonovsky, 1987), not a "hardy personality", and has little sense of control, commitment or challenge left (Kobasa, 1982) and she has fallen into the "learned helplessness trap" (Cohen, 1980, p.99).

vs Beryl

Side 2: Beryl

Beryl was interviewed just before a flight. She is a 26-year-old with five years of flying experience. She is at present on internal flight crew schedules, but has had previous overseas experience. She has been married for two years and has two children. Her response to a question whether she had experienced stress or not was, "No, not really, I'm not the negative type". She explained that at times she experiences stressful situations or demands but manages them; for instance, she plays squash or jogs as an outlet.

She enjoys her job and the passenger contact. She feels in control of most situations and actually

"controls" passengers with body language: "They say I have an air about me". She feels that the first eye-contact with passengers is important. She views difficult passengers as a challenge, where she does her best to ensure they can have a good flight. "After all they've paid a lot of money for their tickets, they deserve my service". "Bad" or very demanding passengers she "punishes" in her own mind by allocating two ice-cubes in their drinks to "good passengers" and only one cube to "bad" passengers, who are none the wiser!

She related an illustration of how she handled a male passenger who was particularly difficult from the first moment, being excessively demanding and complaining that nothing was right. She saw this situation as a challenge to transform a potentially nightmare trip into a dream. She was firm and pleasant; witty remarks finally won him over. She even went so far as to press his creased shirt, using a heated food carton as an improvised iron.

She is quite proud of some of her escapades which usually involved bending the rules. For example, she delights in retelling the story of how she baked a cake on board, breaking the rules and extending her limitations. She is discriminating because there are some rules one can break and others not. (It is quite ironical that before meeting Beryl, during preliminary interviews with management, one person had actually mentioned

with great concern, a breach of discipline he had en-
countered the day before. He had found crew denying the
fact that a cake had been baked during a flight. He men-
tioned at the time that crew stick together if criti-
cised. It was interesting to encounter the culprit in
the flesh, relating blithely, along with her other ad-
ventures, the cake-baking episode.)

Beryl encountered as many of the same severe stres-
sors as Aggie, but her perception and coping style is
different. She manages stress successfully.

Her relationship with management is experienced as
a stressor, but her strong pro-active style reframes the
situation constructively into: "Oh, management! ... Who
cares!" "I do what I like and get away with it, but I
know my limitations. They don't get me down, I do my own
thing."

Beryl experienced the same difficulties as other
CAs, with irregular hours, sleeping and eating patterns.
She has, however, actively planned her busy schedule,
with short term and long term goals. She also attempts
to keep fit and healthy.

In her home life she experiences stressors involv-
ing rearing the two children. She appears to be flexible
and able to handle the load of many roles, stepping in
and out of them as is necessary.

She appears to have quite a supportive network of friends outside the airline and is not dependent on work relationships only. She is intelligent and quick to rise to challenges, as came out clearly in her attitude when asked to participate in the research. She actually reworked some plans and came in early before a flight, especially for the interview, which was quite exceptional when compared to many others, who were less flexible and overwhelmed by their being so busy.

Beryl is an example of what Kobasa (1982) called a "hardy personality", who apart from being in control in her life, also has a strong sense of commitment and challenge. A strong sense of meaningfulness in her life can also be identified (Antonovsky, 1987).

Field of Study

The broad topic of stress has been well researched since the early work of Selye and Lazarus. In particular, the stress of work, for different occupational groups, has been extensively described and researched (e.g. Cooper, 1985; Cooper & Marshall, 1976, 1980; Cooper & Smith, 1985). At the same time, the concept of adaptation to stressors has been extended and focused on the stress-coping-health relationship (in addition to previous references, see e.g. Antonovsky, 1979, 1985, 1987; Kobasa, 1982; Kobasa & Pucetti, 1983).

This study will present some unique features of the occupation of CAs along the stress-coping-health relationship. Inter-organizational as well as extra-organizational factors need to be considered if the well-being of the person is to be considered (Matheny, Aycock, Pugh, Curlette & Silva Cannella, 1986). Among the unique stressors experienced by CAs are those inherent in the SSR as described by Shamir (1980), a type of position that is subject to contradictory role expectations which cause role conflict. The study will also highlight ways in which CAs cope with the demands of their work. They show the whole gamut of reactions to stressors: some manage their stress, others burn-out progressively (Antonovsky, 1987; Ganellen & Blaney, 1984; Golembiewski et al., 1987; Strümpfer, 1983). Because the field of stress and occupational stress is so vast, focus in this study will be kept only on some aspects relevant to the working life of a CA.

The main focus in the present study allows for individual differences in perceptions of and response to stressors. Firstly, "Events may or may not be seen as stressful depending upon the myriad of other relationships in which the individual is involved" (Davidson & Veno, 1980, p.131). Stated in role theory terms, stress depends upon the transaction between the focal person, the environment and the other important factors in the particular situation (Cooper, 1985; Matheny et al., 1986). Part of this transaction encompasses a set of ex-

pectations held by these significant others (Cogill, 1981; Schuler, 1979). These expectations of some required behaviour or task, form a "role set" (Cooper, 1985) which may be one of many stressors in organizational life. In terms of personal development, it should further be remembered that, contributing to the individual's perception of the situation are all the antecedent conditions that the individual has been exposed to such as culture, personal history, personality make-up, work situation, state of fitness and health (Strümpfer, 1985).

Since the present study concerns working adults, stressors inherent to the employing organization should receive particular attention. Tung and Koch (1980) viewed an organization as consisting of three interactive systems. They mentioned, firstly, the physical-technical environment or context in which the individual performs a task; potential stressors in this arena are task overload or underload, task difficulty and task ambiguity. Secondly, the social-interpersonal environment of the organization or the context where the individual interacts with the management, peers, subordinates and customers, should be considered. Potential stressors in this area are role conflict, role ambiguity and role overload or underload. Thirdly, these authors mentioned the "person-system", i.e. the unique personality of the individual which is brought to the organizational setting, which includes, for instance, anxiety, need for

clarity and perceptual styles. Moderating personality
variables such as Hardiness (Kobasa, 1982), SOC
(Antonovsky, 1979,1985, 1987), Learned Resourcefulness
(Rosenbaum, 1988) or Learned Competence (Ben-Sira, 1985)
could also be viewed as part of the third arena.

A prolific amount of data exists in the literature
which explore occupational stress and its outcome in be-
haviour. As already stated, various paradigms exist
which explain the way a person copes with organizational
and personal stressors in the stress-health relation-
ship. A full exploration of these concepts is beyond the
scope of this dissertation, which will concentrate on a
salutogenic rather than a pathogenic approach. An-
tonovsky (1979, 1987) described the difference as being
an emphasis on the ease/dis-ease continuum in the health
relationship, where the individual moves up or down,
with a stronger or weaker SOC. A pathogenic approach
works in a homoeostatic paradigm, where attempts are
made to eradicate stressors or, as Antonovsky (1979)
stated it, "getting rid of the bugs" (p.15).

Qualitative and Quantitative Data

The present study centred around role expectations
and role conflicts as previously described, which act as
stressors and cause work stress. These stressors are
either perceived as manageable or not, depending on the
SOC of the individual. A search of the literature

revealed little information regarding either CAs or SSRs in general. Hopefully some of the information gained from this study will contribute to further exploration of this occupation and the broader group of SSR occupations.

The present study was conducted at the South African Airways (SAA) and was run in conjunction with a study by Porter (1988) which investigated aspects of work schedules and their stress outcomes. The data collection was done in two phases. Firstly, all participants were interviewed individually, following a flexible semi-structured format. Apart from using the obtained qualitative data as such, the interview protocols were also subsequently content analysed, by developing a number of stressor, moderator and consequence scales, on which each participant was then rated. Two kinds of data could thus be presented: qualitative data provided a base from which further quantitative dimensions could be developed. Secondly, a self-report questionnaire, containing a variety of stressor, moderator and consequence scales, was administered after the interview. The final statistical analyses thus incorporated quantitative data based on the interview, as well as data obtained from the self report questionnaire. The details of these procedures will be presented in Chapter 4.

This study relied on both qualitative data and quantitative data, for the reason that the two supplement each other. The traditional quantitative analyses result in descriptions of averages and statistical trends that are rather far removed from the realities of individual experience; however, in their being based on large numbers of observations, such trends can be quite reliable and of a known level of probability. Qualitative data lack these last characteristics but provide descriptions in "warm" and "rich", personally meaningful individual terms. This could also provide a rich source of data which could also lead to the development of further quantitaive measuring scales. The two kinds of data will be addressed in separate chapters.

The usual pitfalls of managing qualitative data were encountered. An attempt was however, made to "grow with it" and manage it, by attempting a grounded theory approach (Miles, 1979; Turner, 1983). Consequently an ongoing reassessment and evaluation of the different information was possible. One limitation present in dealing with qualitative data, concerns inter-rater reliability. Miles (1979) made a strong case for collaboration between two interviewers who work closely with their subjects and have a sense of ownership of the data; they can check out each other as the research concepts grow, and jointlly gain a good understanding for the data and concepts.

Outline of Remaining Chapters

The next chapter will present a review of the literature on stress research; the specific focus will be on the stress-coping-health relationship at work, where the concepts of hardiness, potency and SOC will be explored. The concept of wellness will also be explored. Occupational stress will not be discussed in detail, but specifics related to CAs will be detailed.

Chapter 3 will present the research design, in terms of both qualitative and quantitative data collection. Chapter 4 will present and discuss the qualitative findings and Chapter 5 the quantitative findings. The last chapter will contain conclusions proposals and recommendations for further research.

CHAPTER 2

LITERATURE REVIEW

In reviewing the literature on stressors, stress and strains, particularly as it pertains to the work situation of CAs, this chapter will, firstly, present a brief introduction on these concepts, then a general model of stress at work. That will be followed by a review of stressors pertinent to the work of a CA, after which will follow a presentation of stress and its consequences, with special attention to CAs. Literature on a number of variables that could mediate between stressors and strains will be reviewed next. Finally, a section on the concept of wellness will follow.

Stressors, Stress and Strains

Stress has become part of everyday life, to the extent that life today has been called the Age of Stress, where stress is the "Purple Heart of an eventful life" (Ivancevich & Matteson, 1980, p.5). According to Antonovsky (1987), Lazarus was the first to describe everyday life as stressful. Antonovsky (1979) described the human condition as stressful, with stressors being omnipresent, and found it remarkable that people survive nevertheless. This train of thought led him to the salutogenic paradigm which places an inherent emphasis on "wellness" factors, rather than on pathogenic factors where stressors need to be eradicated. If an individual

is viewed from the salutogenic paradigm his management

of stress moves along a continuum: health ease/dis-ease.

Most comprehensive literature reviews refer to

Selye and Lazarus as being the pathfinders in the early

research into stress (Cooper, 1985). Selye (1982) ex-

plained the process of stress-related illness. He broke

away from the earlier stimulus-response orientation to

include an adaptational process, and developed a general

adaptation theory. Most current theories have refined

descriptions of this process which follows the stages of

an alarm reaction, resistance (the adaptational pro-

cess), and subsequent stage of exhaustion if successful

adaptation has not transpired. Lazarus (1971) emphasised

the perceptual processes that occur in stress whereby

one's resources can be overtaxed. These taxing demands

affect physiological, psychological and social aspects.

MODELS ON STRESS

(1) Matheny et al. (1986) provided a critical evalua-

tion of different stress models. Early stimulus models

of stress viewed and psychosocial demands as occurring

when environmental factors play a major role, e.g. in

major life events like a war, an accident, or in death.

Such events were seen as stressors. This model postu-

lated that a "stressor" in the form of clustering life

events "leads predictably to stress symptoms such as

illness" (Matheny et al., 1986, p.501). Cooper and

Baglioni (1988) similarly saw this model as placing the

individual in the middle of a stress equation where the

person continuously reacts to or is acting upon the environment.

② A second approach, using the response model, depicted the individual as becoming physiologically and psychologically aroused. Selye's (1982) work over several decades marked a dramatic paradigm shift in stress research, and emphasised the physiological and psychological arousal of the "general adaptation syndrome". A state of exhaustion progressively develops when resources are taxed.

③ Lazarus' work extended upon this framework to focus upon the cognitive appraisal or perception of the individual. Lazarus (1971) proposed that environmental stressors are not waiting out in the environment, but depend upon the individual and the "fit" of the behavioural and cognitive coping skills. This transaction between the person and the environment is the third approach to stress.

Current views of stress emphasize that the key psychological process by which stress is defined or whereby tension is turned into a stressor, is perception (Marshall, 1980). Most leading writers in the field, such as Antonovsky (1979, 1985, 1987), Kobasa (1982), Lazarus (1971), Pearlin, Lieberman, Menaghan and Mullan (1981) and Shirom (1982) are in agreement in this respect, while Selye has been criticised for the lack of

emphasis on cognitive triggering. It is maintained that stress lies neither in the environment or the individual, "but in a transaction between the environment and the person" (Matheny et al., 1986, p.502). "The intensity of the stress experience is determined by the degree of perceived threat, and how well the person feels he/she can cope with the danger that has been identified" (Cooper & Baglioni, 1988, p.88). Antonovsky (1979) indicated that most researchers emphasise the importance of the subjective stress experience and that mostly stress is viewed as consisting of a wide range of stressors.

Lazarus (1971) stated that adaptation (i.e. dealing with the stress response) leads to primary appraisal (seriousness of the demand) and secondary appraisals (the adequacy of one's resources). Primary appraisal occurs when the person evaluates the demands as being irrelevant, positive or stressful. The secondary appraisal has two variants. Cooper and Baglioni (1988) stated that these occur when the person or personality type moderates the coping reaction.

These approaches have paved the way for the current emphasis on individual perception and its mediating processes, for example the role of the "hardy personality" (Kobasa, 1982, 1985), SOC (Antonovsky, 1979, 1987), "potency" (Ben-Sira, 1985), and "learned resourcefulness" (Rosenbaum, 1988).

Stress as described in the present study includes:

1. Internal and external demands (stressors).

2. Appraisal of the seriousness of these demands.

3. Person's resources and ability to cope with them; mediating factors.

4. The manifestation of stress (or consequences).

Lazarus' original definition of stress includes all these facets of experience and is thus used as a definition in this study:

STRESS

> Stress refers to a very broad class of problems differentiated from other problem areas because it deals with any demands which tax the system, whatever it is, a physiological system, a social system, or a psychological system, and the response of that system. (Lazarus, 1976, p.56)

Stress is not necessarily perceived or experienced as harmful. There is the possibility of eustress or good stress and dystress or bad stress (Strümpfer, 1983). Creative stress or eustress, allows one to work under pressure and meet deadlines (Ivancevich & Matteson, 1980) and this is desirable. Strümpfer (1983) viewed the eustress-distress distinction on a continuum, where the positive aspects of stress are often ignored. "Some degree of stress is necessary to keep people active and fully functioning. When muscles are not used, they begin to atrophy, and unused skills are soon lost" (Strümpfer, 1983, p.6). Bad stress or dystress can lead to many

behavioural and physical symptoms. This occurs when "the resources are over-taxed and the demands become disruptive and unhealthy" (Strümpfer, 1983, p.13).

Physiological symptoms are manifest in a range of ailments from a simple tension headache to coronary heart disease (Antonovsky, 1987; Ivancevich & Matteson, 1984). Psychological consequences can range from exhaustion, to anger and depression, to burn-out (Golembewski et al., 1983).

Pathogenic or Salutogenic Paradigm

Since the paradigm by which stress is approached is fundamental, another important distinction needs to be examined when conceptualising stress. The pathogenic paradigm follows a medical orientation where the assumption is that disease is caused by physical, biochemical, microbiological or psychosocial factors (Strümpfer, 1988). Disease is seen as negative, to be eradicated and treated at all costs (Antonovsky, 1979). The pathogenic orientation is the one which is conventionally explored in the literature, where "the vast amount of research on the role of a diversity of stressors - from, for instance, life-events stress to role stress and role ambiguity - and their effects on ill-health, also demonstrate this orientation but too clearly" (Strümpfer, 1988, p.4). The salutogenic orientation, represented most clearly by Antonovsky's (1979, 1984,

1987) move towards describing a person's position along a health ease/dis-ease continuum is a major paradigm shift. The basic assumption lies around the perception that not all stress is necessarily negative and poses the question as "why people stay healthy?" (Antonovsky, 1984, p.35) when subjected to so many stressors, in a medical and psychological sense. Antonovsky explained this mystery of survival or health in terms of general-ised resistance resources (GRRs) which help the in-dividual along towards a SOC, defined as; "a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling or confidence that one's internal and external environments are pre-dictable and that there is a high probability that things will work out as well as can reasonably be expected" (Antonovsky, 1979, p.10).

Antonovsky did not deny the pathogenic source of stressors, but he did maintain that the "magic bullet" strategy of, "one symptom one cure", must be avoided (Antonovsky, 1984). Strümpfer stated that "The pathoge-nic and salutogenic paradigms thus do different things, which compliment each other" (Strümpfer, 1988, p.12). Stressors activate the organism and mobilise the GRRs.

Some individuals succumb to stressors, others do not; this ability to manage stress is ascribed to a SOC. Antonovsky's description of the salutogenic paradigm is thus based on the need to study wellness (Antonovsky,

1984). Furthermore this approach then avoids the "magic bullet" syndrome and avoids instant cures and gimmicks of popularised stress management. He sees the core of the salutogenic paradigm as focusing on successful coping "on what may well be called behavioral immunology" (Antonovsky, 1984, p.117).

> If the tension is managed poorly, stress
> results and the way for desease is open,
> but, if it is managed well, the stressor
> may remain neutral or even become health-
> enhancing (Strümpfer, 1988, p.9).

The SOC is seen as a global orientation incorporating experiences of the past and expectations of the future. Three components are comprehensibility, manageability and meaningfulness. Strümpfer (1983) furthermore, in a quest to identify this difference, referred to differing but related concepts, all of which emphasise individual characteristics and coping mechanisms. In addition to the SOC concept, he looked at the work of White (competence), Kobasa (the hardy personality) and Kohn (self-direction). In a more recent exploration of the salutogenic paradigm, Strümpfer (1988) more comprehensively explored similarities in linking concepts. Antonovsky (1987) similarly compared theories which form part of the same "Zeitgeist". Emphasis has been placed on Antonovsky's more generalised salutogenic approach in the present study, in keeping with this broader concept of stressors. Further discussion on the measurement issues of the dimensions of SOC, hardiness and potency will occur when discussing the variables

used in considering the research questions.

Stress at Work

Strümpfer (1983, 1985) described a model of the
components or organizational stress and their interac-
tions as illustrated in Figure 1. This model presents
"cultural antecedents" as the background to the process
of being exposed to stressors. Strümpfer (1985, p.62)
listed "systems", like religion, politics, economics,
ethnic and demographic factors as the first set of cul-
tural antecedents; "situations", like political, economic
or community conditions were the second set. The person
who enters a potentially stressful situation brings with
him or her a range of strengths and vulnerabilities that
are rooted in these antecedent systems and situations.

Next enter organizational stressors, which may take
the form of individual, interpersonal, inter-group and
organizational forms. Stressors lead to reactions, or
the subjective experience of stress; the fight-flight
reaction and the general adaptation syndrome were listed
under this heading. Reactions are, in turn, followed by
consequences, which could be short-term or long-term,
both showing physical and psychological components.

FIGURE 1 :   MODEL OF COMPONENTS OF ORGANISATIONAL

STRESS AND THEIR INTERACTIONS
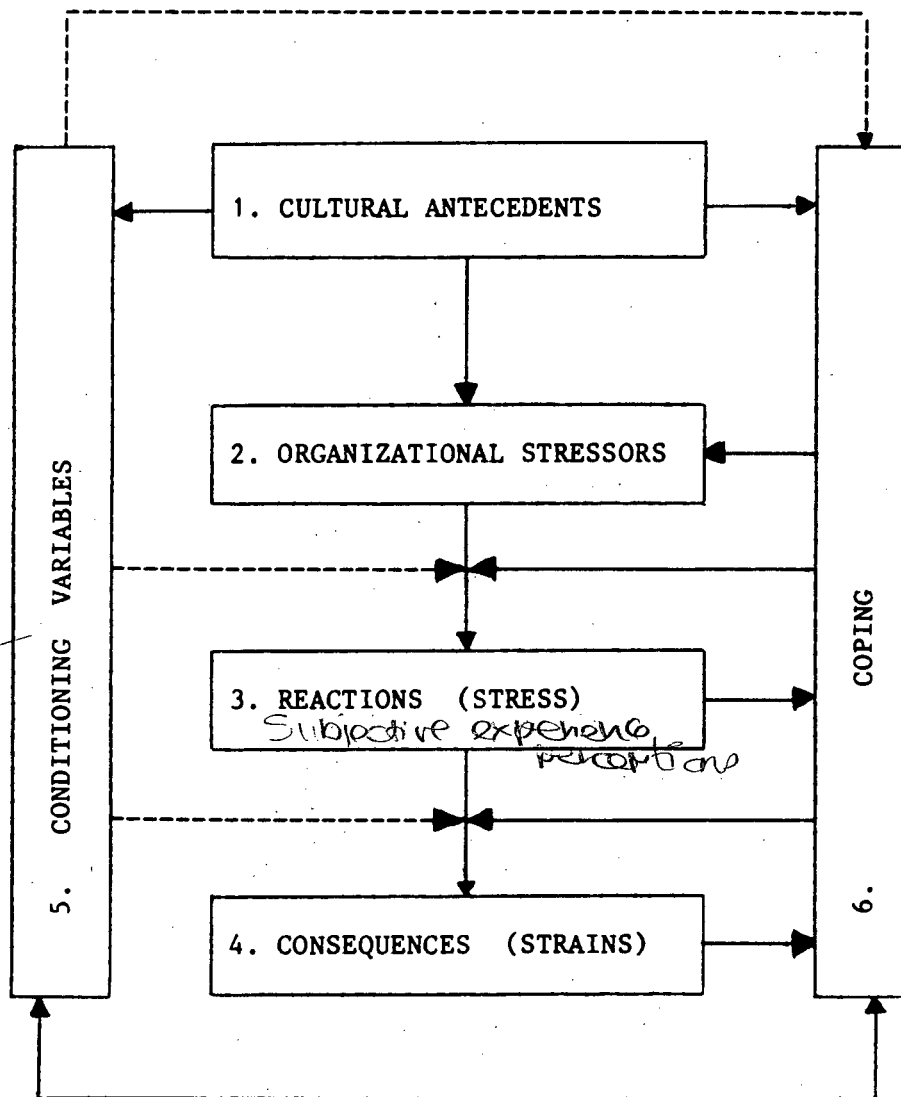
SOURCE: Strümpfer, 1983, p.7.

It should be noted that "conditioning variables", with individual and situational subcategories (Strümpfer, 1985) moderate the link between stressors and stress by facilitating or retarding the appraisal of stressors as stressful; they also moderate the stress reactions and consequences link.

Coping behaviour could, firstly, modify the organizational conditions which produce stressors, so that the stressor potential itself is increased or reduced. Secondly, coping could also impact on the appraisal of stressors as such, by modifying the meaning of the stressor in ways that render them more or less threatening. Thirdly, coping behaviour could constitute ways in which the person deals with stress experiences in ways which precipitate consequences of ill-health, or ways of managing stress so that (s)he remains well.

Other linkages in this process model also deserve attention. It should be noted that cultural antecedents feed into both the conditioning variables and coping behaviours, thus contributing indirectly to the person's strengths and weaknesses too. Both of these categories of variables are also influenced by the aftermath of consequences of the stress process. Lastly, the conditioning variables affect coping behaviour, while the latter affects the former.

Of importance to this study is that organizations
differ in size, climate and function (Ivancevich & Mat-
teson, 1980, 1984) and thus each holds the potential of
creating unique stressors, Similarly, each job has its
unique set of stressors with which the worker will in-
teract through appraisal, stress reactions and conse-
quences of strain. Through individual and situational
conditioning variables, and particularly through coping
behaviour, the person is not, however, necessarily a
passive victim of the process.

The review of the literature following below, will
be presented against the background of the model
described above. Earlier stress models covered the con-
tent of stressors and their consequences but lacked an
emphasis on process factors, Cooper and Baglioni (1988)
described sources of occupational stress, individual and
organizational symptoms of stress, as well as their out-
comes in terms of disease, e.g. coronary heart disease
which is an individual symptom and apathy which is an
example of organizational disease (perhaps "dis-ease"
in Antonovsky's terminology). Their concept of stress
incorporated the relationships of all the factors in-
cluding the mediating and coping mechanisms relating to
the stress-health relationship. This emphasis on process
factors is also described by Bluen (1984).

Stressors in Air CA's Job

The literature on stressors that could be related to the work situation of a CA will be presented in this section.

A literature search failed to provide any extensive information regarding specific stressors for CAs. Information exploring environmental stressors (heat, cold etc.), acute reactive stress (physiological reaction to the fight-flight syndrome) and life-stress exists, however, in the aviation medicine field. Most research has been conducted on pilots (e.g. Alkov, Gaynor & Borowsky, 1985; Green, 1985) and flight controllers (e.g. Crump, Cooper & Maxwell, 1981; Rose, Jenkins & Hurst, 1978; Wilson, 1981).

The focus of research has been on life stress or domestic stress and on life-events. The corner-stone in aviation work in this field was that of Alkov et al. (1985). Sloan and Cooper critically evaluated what they refered to as a "too simplistic and a gross underestimation of the impact of domestic and non-occupational factors on pilots" (1985, p.1000). They suggested that the concept of life events should be extended to include perception of the event, together with inclusion of process factors and interactive relationships. This suggestion links with the orientation used in the present study, as illustrated by Strümpfer's (1983) model. Sloan

and Cooper (1985) also suggested that models of occupational stress literature used for other occupational groups could offer a considerably better foundation to the approach of stress in aviation. Issues such as fatigue, flying patterns, scheduling, responsibility, decision making, lack of stability at home, quality of marital relationships, lack of social support, inability to relax at home etc., are seen as of far greater relevance than straightforward life events. Information regarding stressors relevant to the field of aviation is of great practical use to individuals as well as management. (Sloan & Cooper, 1985, p.1003).

The remainder of this section will deal with five broad areas which seem to cover the nature of a CA's work situation, viz. factors intrinsic to the job, organizational structure and climate, role stressors in the organization, the service role, and the SSR.

Factors Intrinsic to Job

Factors intrinsic to the job of the CA include the working conditions and the physical environment, taking account of such factors as noise, heat and physical space (open/closed, territoriality).

Blanc, Digo and Moroni (1970) found that air hostesses felt that shiftwork was one of the major sources of stress. One of the most common perceptions regarding

the strain of shiftwork is "being excluded from society" (Cooper, 1985, p.628). Shiftwork has been extensively researched in many occupations; it was also explored by Porter (1988) who conducted a study in conjunction with the present one. These factors however, lie outside of the field of the present study and the reader is referred to Porter (1988) for extensive coverage.

Job overload is commonly viewed in the field of aviation as producing stress manifestations such as fatigue or the inability to relax (Cooper & Sloan, 1985). On the other hand, job underload either a repetitive or an under-stimulating job, have links with ill-health too (Frankenhaeuser & Gardell, 1976).

Physical danger is another possible stressor that has implications for flying crew (Kennedy, 1986; Mohler, 1985), e.g. situations such as experience of disaster situations, turbulence and "unsafe" aircraft. The need for self-preservation may conflict with duty towards passengers in this respect. A demotivated CA is more likely to cater for "self" needs and have fewer re-sources to help cope in a crisis situation (Cornellier, 1984; Dunn, 1986; Kilpatrick & Brunstein, 1981; Rhodes, 1985). Research on other occupational groups, such as pilots and policemen, who also have built-in risk factors (Davidson & Veno, 1980), has indicated that a person is able to cope more effectively in a situation by being prepared and trained, and thus feeling in

control of a situation (Ivancevich & Matteson, 1984).

An added dimension which is specific to flying crew, is that tedious and monotonous jobs have to be accepted, in juxtaposition to the possibility that a sudden emergency situation could arise. "This can give a sudden jolt to the physical and mental state of the employee and have a subsequent detrimental effect on health" (Cooper, 1985, p.628). Furthermore, boredom and disinterest could retard responses in an emergency situation.

Job demands such as those mentioned above, should not be viewed in isolation. Karasek (1979) found that unresolved strain resulting from high job demands com- bined with low decision making latitude and responsi- bility are linked to states of exhaustion, depression, and consumption of sleeping tablets and tranquillisers. To the extent that CAs' work is rule bound, they have relatively little decision latitude, which could thus exacerbate the effects of various job demands.

While they are not intrinsically part of the CA's job but often part of her life-style, a number of risk factors which increase the likelihood of disease should be mentioned here too. Kennedy (1986) and Mohler (1985) have mentioned the following: excessive smoking, exces- sive use of alcohol and drug abuse; excessive reliance on junk food; lack of regular aerobic exercise and

inadequate attention to satisfying recreational activi-
ties; time zone disruptions and sleep loss; in addition,
obesity, untreated hypertension and glucose intolerance
were mentioned.

Problems concerning career development could also
be fitted under this heading, even though they are of a
somewhat different kind. Career blockages were found by
Cooper (1985) to be highly related to organizational
stress, for instance, lack of promotion, status incon-
gruence, lack of job security and thwarted ambition.
Similarly Blanc et al. (1970) found that career blocking
or lack of a career path were experienced as highly
stressful. In a large sample of women at different
levels in an organizational hierarchy, women were found
to be more stressed by a wide range of organizational
stressors, e.g. lack of promotion or career development
was regarded as being highly linked to health and job
dissatisfaction (Cooper, 1985). Nelson and Quick (1985)
reviewed the literature in terms of stress amongst
professional women.

Lastly, relationships at work could also be clas-
sified marginally with job factors, although it is more
of a social nature. Relationships with peers and manage-
ment can be sources of conflict and strain. Cooper
(1985) noted that greater help and support was received
from friends and from colleagues than from supervisors.
The social support literature is extensive and commonly

linked to the stress-health-coping relationship (e.g.
Cohen & Wills, 1985; Kobasa & Puccetti, 1983). Whereas
the field of this study lies more in the direction of
role conflict stressors, the study by Porter (1988),
included a more in-depth description of the concept of
social support.

Organization Structure and Climate

The climate of a company rests on the values
(Desatnick, 1986) held and manifested by a supervisory
style of behaviour (Schein, 1986). At times a conflict
can arise between one's own values and needs and those
of the organization (Schein, 1977). If the management
value system is seen as totally different and incon-
gruent, the subordinate will withdraw from the situation
and develop a cynical attitude (Schuler, 1979). Organi-
zational "politics", lack of participation in the deci-
sion making processes, and rules and regulations are
potential sources of conflicts if different to the
individuals values. Cooper (1985) found that greater
participation leads to higher productivity, improved
performance, lower turnover, lower levels of stress-
related illness, and lower levels of escapist behaviour,
such as drinking and heavy smoking. Cooper (1985) quoted
the work of Margolis, as well as that of French and
Caplan, as being significant in this area.

The earlier work of Ruh, White and Wood (1975) emphasised that job involvement was affected by both individual differences, as well as characteristics of the job. Frankenhauser and Gardell (1976) made similar points regarding job underload and overload. Karasek (1979) found that exhaustion, depression and consumption of sleeping tablets increased with high job demand and low levels of decision making.

Ingram (1986) proposed an interesting new concept in organizational culture, viz. the "crawlspace" of an organization. This area involves what he called the "underlife activities" (Ingram, 1986, p.468) of organizational life. The analogy to a building's crawlspace is clear: "Despite its confining nature, the crawlspace is important to the building, most notably providing access to the underside of the structure needed by maintenance and repair workers" (Ingram, 1986, p.469).

If a focal person is in tune with the organizational value system, (s)he becomes locked in and is committed to a role; this is "primary adjustment". "Secondary adjustment" occurs with a limited form of organizational commitment, where the person "sits on the fence" or "hedges his bets". Usually this involves some form of rule breaking or violation of prescriptions of one kind or another, for example in the person's way of thinking, feeling or dressing or "playing the system". Interestingly, an organization evolves features which almost

compel secondary adjustment. These activities allow an individual ways to belong without "belonging too much" (Ingram, 1986, p.469) and they constitute a means of dodging identifying with the status quo. The climate of the organization and structure and control apparatus of the organization influence the norms and sanctions of the degree to which the individual becomes involved in the "underlife activities" and uses the "crawlspace" of the organization. In the case description of Beryl in Chapter 1, examples were mentioned of how CAs bend organizational rules. What is typical of such situations is that CAs are familiar enough with the "crawlspace" of the SAA that they know what is possible, marginally acceptable and would satisfy the needs of all parties concerned. Such behaviours constitute ways of coping with stress.

The organization's climate and management style determines the degree of co-operation that the individual will give. This depends to a greater extent on whether the individual's values "fit" or are at odds with the prevailing system (Ingram, 1986). As previously described, the authoritarian (rule-bound) management system does not effectively create a climate of co-operation for those CAs that were interviewed. The model described by the Transactional Analysis school of psychotherapy could possibly best describe this interaction. Management creates a climate, where their management style is strongly paternalistic (the parent) and

rigidly control the behaviours of their employees (the children) (Emmanuel, 1974).

Role Stressors in Organization

"Roles serve as the boundary between the individual and the organization" (Schuler, Aldag & Brief, 1977, p.111). These serve the interests of both parties (management and the individual) or they can be dysfunctional, resulting in role conflict and role ambiguity.

Role strain can arise in the individual if boundary roles are transgressed, because "boundary spanners are exposed to more conflicting role expectations than non-boundary spanners" (Whetten, 1978, p.256). Whetten's study investigated role conflict and ambiguity amongst institutional leaders at management level; however, many similar situations are evident amongst persons in SSR positions (Shamir, 1980), as is the case with CAs. Shamir (1980) too, commented that boundary roles are more exposed to conflict. Increasingly attention has also been focused on the fact that lower level status positions have a lower discretionary range; the person in the focal role as a consequence feels powerless and dependent upon his/her supervisors (Karasek, 1979).

Role conflict is "a simultaneous occurrence of two or more sets of pressures such that compliance with one would make compliance with the other more difficult"

(Schuler, 1975, p.683). Inability to cope with the role conflict frequently leads to job dissatisfaction. More recently authors have emphasised that role conflict results in job dissatisfaction and is a stressor at lower levels of an organization. Some emphasis has also been placed on the link between performance and role perceptions.

Bloom (1984) and House and Rizzo (1972) described the growing body of literature that revolved around the relationship between role perceptions and work stress, attitudes and behaviours. However, Van Sell, Brief and Schuler (1981) pointed out that there still exists a great deal of inconsistency and differences in the literature, similar to that accuring in the "stress" literature as previously described. The current emphasis is firmly placed on exploring the role of the subjective perception of stress. The importance of "the potential moderating effects of individual differences" (Bloom, 1984, p.131) has been made. The literature also indicated some significant relationships, as in the work of, for instance, Kahn, French and Caplan, that "there is a positive relationship between role conflict and anxiety/tension" (Coldwell, 1979, p.81), as well as a negative relationship between anxiety and job satisfaction.

Schuler (1979) linked the organizational communication process to a possible negative relationship with role perceptions. The actors are seen as being involved

in a dynamic transaction with the focal person and
include such aspects as overload or underload, desire to
interact, communicative initiative and communicative
receptiveness and responsiveness. Low role conflict
allows an openness in the relationship whereby the focal
person is likely to become involved and active in a
relationship with the role sender "because the focal
person's levels of trust, liking and respect for the
role sender increases" (Schuler, 1979, p.271). High role
conflict causes (i) the focal person to withdraw from
the relationship (i.e. with possible defensive or
acting-out behaviours), or (ii) in confronting beha-
viours (negative or positive). These are activated by
the role sender in order to reduce conflict.

This kind of relationship is characterised by low
levels of trust, liking and respect for the role
senders. Withdrawal behaviours then successfully isolate
the focal person, who feels misunderstood and alienated.
This method of coping is seen as negative and is similar
to the regressive coping mechanisms mentioned in
Strümpfer's (1985) model; as a solution it is unsatis-
factory for all the actors. Management's perception is
that the focal person is problematic and decreases their
role sending, which results in further dysfunction for
the organization and the individual.

Withdrawal is seen as a short-term coping mechanism
for the focal person in a stressful situation. Schuler

(1979) cautioned against seeing these relationships as linear or causal. In reviewing the literature, Whetten (1978) commented that role-conflict is usually measured by using only self-report data; however, he warned that "little effort is made to trace the perceived conflict back to the larger organizational or inter-organizational conflict" (1978, p.256).

Role ambiquity is another role stressor, frequently mentioned in conjunction with role conflict. It is seen as "a situation in which there is inadequate role sending" (Schuler, 1975, p.683). Contrary to other occupations, this would not seem to be the case amongst CAs. The nature of the job is defined by a clear role definition at a functional level and by the character or climate prevailing within the SAA as an organization. The organization is typical of Mintzberg's (1979) description of a bureaucracy with hierarchical communication channels and rigid rule bound areas of responsibility.

Service Role

The job of the CA is one of the non-professional-level service workers, and shares many characteristics similar to those in other service positions such as nurses, waitresses etc. The occupation of a CA is necessarily service orientated. Björknes commented that "an airline's image of service will even gain among competi-

tors if their crews paid more devoted attention to their 'bread and butter', namely, the passengers" (1986, p.2).

It is therefore necessary to attend to the nature of the service role. According to Kotler and Bloom "a service is any activity or benefit that one party can offer to another that is essentially intangible and does not result in the ownership of anything" (1984, p.146); they also stated that a service can also be a "deed or an effect or a performance" (p.146). Very little data exist which are relevant to non-professional-level service workers "in spite of the fact that they consti- tute very large occupational categories in Western societies and the number of organizations which rely on such workers for performing their tasks seems to be growing" (Shamir, 1980, p.743). → little info

An important characteristic of a service is the in- separability of the provider from the service. The serv- ice requires the constant presence of the provider; cabin crew, for example, pay constant attention to the every need of the passengers and cater for their well- being on board. The service situation defines the role of the provider. "Role strains, we believe, represent one of the important mechanisms linking events to stress" (Pearlin, Lieberman, Menaghan & Mullan, 1981, p.343). How these role strains develop is clear when it is recognised that the "the individual member of an organization has an internal world and an external world

which include the other individuals with whom he con-
stantly interacts on the job" (Cogill, 1981, p.48).
These role expectations combine specific acts, values,
personal characteristics, style, ideas, etc. They do not
only involve a job description, which defines what the
tasks and behaviour of a position should be (Schuler,
1977).

Subordinate Service Role

Shamir (1980) introduced the concept of SSR, where
a unique set of roles and a variety of subsequent con-
flicts may be experienced as stressors. In a SSR the
person in the focal role is caught in a conflict between
management expectations, the expectations of customers
and the focal person's own needs. This role conflict is
"experienced by people in positions at the interface
between an organization and its clientele, for instance
waiters, sales clerks, receptionists and bank tellers"
(Strümpfer, 1985, p.64). However, the SSR is not neces-
sarily experienced as stressful only, as there are many
positive aspects of the role too, which incumbents find
rewarding.

CAs do not only function in a service role as indi-
cated above, but also provide an occupational example of
the three-sided incompatible expectations from different
sources which characterise an SSR. One set of expecta-
tions regarding their performance is perceived by

conflict → role conflict

bureaucratic management whose style is strongly authoritarian, while another set is held by demanding customers, i.e. the passenger. In addition, their self-needs also have to be fulfilled somehow, if they are not to be left believing that their personal feelings are not relevant or of any importance.

The role conflict that is created in the working life of a CA is located in the boundary roles that link through interaction between an organization member and non-member. The pressure caused by the different sets of expectations upon the focal role can be experienced as stressors. The first of these is the general category referred to as "person-role conflict", and the second "inter-sender conflicts".

Person-role conflict. A person-role conflict occurs "when the role expectations are in conflict with orientations, internal standards or values of the role occupant" (Shamir, 1980, p.744). It can take three forms, viz. inequality dilemmas, feeling vs. behaviour and conflict over territory.

Inequality dilemmas are part of the conflict as the person in the SSR is expected to stay in a subordinate position with lower status and "build up the client's ego" (Shamir, 1980, p.744). Airlines, in marketing themselves, maintain a criterion of consumer sovereignty, as expressed in the saying that, "the consumer is king"

(or, as one South African supermarket chain has it, she is called "queen"). Of course, customers come to expect such treatment as their due. Passengers and management, as well as CAs always expect the passenger to be right and, no matter what, the CA is expected to agree and smile. Their own feelings are considered unimportant, and consequently their self-esteem suffers.

An interesting difference in the SSR of the CAs when compared to SSRs in other occupations, is that CAs do not adopt the status of their client. Usually the position of the SSR is subservient to that of the client (Shamir, 1980); the person in the SSR will then usually get satisfaction out of serving the higher status client, thereby identifying with the client's status. However, CAs often do not perceive their role as subordinate to the client. Generally, CAs are highly qualified. This study included qualified teachers, nurses, two lawyers and the rest at least having one or two years post-matric training. Many feel that the actual task is below them, "a menial task", "that of a waitress". They tend to look down at passengers whom they generally perceive as having lower status than themselves. They, however, usually enjoy working in the business class section on a flight, where they take on the status of the client, or at least regard them as equals; businessmen are not seen as the normal "run of the mill" passengers but come closer to the status of their own qualifications. On the other hand the level of

role conflict experienced by CAs may be increased by the fact that, "the more equal the status of two parties, the higher the level of role conflict" (Shamir, 1980, p.745).

If, however, they are treated as objects and not seen as themselves, their self-esteem is likely to suffer. Unfortunately there is little recognition of this fact among either passengers or management. This situation is worsened by the common stereotyped view of them as "flying waitresses and flying mattresses". This attitude often implies that they are women suitable only for menial tasks, that they are empty-headed but glamorous to look at (Blanc et al., 1970), or even readily available sex objects.

The second source of person-role conflict is the clash of role feelings vs. behaviour. Many CAs feel constantly on display, since people watch their every move; this situation encourages incongruency between feelings and behaviour: a facade where a "plastic smile" is often called for, to create the impression that they are enjoying their jobs and being "nice" to the customer (Shamir, 1980). This emphasis on outward appearances occurs commonly in SSRs where rules and regulations pertaining to dress and behaviour are common (Shamir, 1980), as is the case with CAs, where there are uniform dress and hair regulations, as well as codes of behaviour in managing passengers.

It would appear that for CAs, as in the case of nurses, there is an unwritten rule against showing anxiety or stress in front of the customer, the passenger or the patient (Marshall, 1980). Additionally, when things tend to go wrong "the defensive tendency to 'look good' increases and anxiety is denied" (Bucky & Spielberger, 1972, p.275). CAs are expected at all times to be calm and supportive, especially at times when they themselves may, for instance, be anxious about flying, or exposed to extremely rude passengers. Despite being subject to rudeness, the CA is expected to smile and be pleasant, regardless of her own feelings. This is another way in which they are treated as non-persons in the performance of their duty. The customer is always right and always comes first.

Finally, an area which is beyond the control of the CA is the right to determine the degree of intimacy or contact with the passenger. Terkel (cited by Shamir, 1980) interviewed CAs, and gave an example of a male passenger's behaviour, "like he's rubbing your body somewhere, you're supposed to just put his hand down and not say anything and smile at him" (Shamir, 1980, p.746).

The third source of person-role conflict is conflict over territory. People in boundary roles often have to accept others in their territory, but in the case of SSRs the difference is that the invaders have

higher status. CAs often try to get psychological advantage by making some place their own, e.g. in the galley. Shamir (1980) illustrated the point by describing the possible conflict occurring when, for example, the crew have a preconceived notion that a sports team coming on board are going to give them trouble and that war will naturally ensue.

(2)   Inter-sender conflicts. The second kind of role conflict experienced by persons in SSRs are "inter-sender conflicts which occur when role expectations from one source (role-sender) oppose those from other sources" (Shamir, 1980, p.748). Such conflict arises, firstly, from different sets of demands from the organization and its clients as role senders to the CA as focal person. It is the "two bosses dilemma" and the level of inter-sender conflict is related to the status and power of the role senders relative to each other. On the one hand, management have policies, rules and regulations which set conduct and standards: for instance, they expect all clients to be treated equally. The passenger, however, expects "the service-giver to consider his special case and to treat him as a whole person" (Shamir, 1980, p.748). Shamir illustrated this conflict by reporting on a survey of bus passengers. "Outstanding service" was clearly related to the number of times where the rules were broken to accommodate their needs. Such inter-sender conflict becomes even more severe in organizations where the client has a

[handwritten annotations: "inter-sender conflict"; "→ client has power."]

measure of control over the service given, e.g. via the performance rating sheets handed out to passengers of the SAA. As indicated earlier, a CA may have (at least to their own knowledge) higher status than some of her passengers; when the status of the service giver is, in fact, "higher" than that of the senders, an even higher rate of conflict can be expected.

A second form of inter-sender conflict arises from different sets of <u>demands made by different clients</u>. For instance, for the CA, conflict can arise due to problems between clients who have incompatible expectations or requirements, where each party demands or needs to have exclusive and immediate service. Problems thus occur with "difficult" passengers who insist on special treatment, which normally goes against procedures; if other passengers become aware of this, they will be dissatisfied and more demanding. Shamir (1980) hypothesised nevertheless, that the service giver will often react to clients on an individual basis, even though the service duties are usually highly standardised and often rule-bound, stipulating that clients have to be treated equally. However, this may be beneficial to both the giver and the receiver. The service giver may bend the rules slightly to accommodate an individual's needs and offer them some extra special service. In this way the customer is satisfied, and the service giver subsequently feels an increase in self-worth.

A third area of inter-sender conflict is that between the demands of the home situation vs. those of the work situation. Blanc et al. (1970) found this area to be a main source of stress, especially for young married female CAs. The conflict caused by demands from this area are often taxing and beyond their coping ability. Working hours place strain on family relationships whilst pressures from work can spill over into home-life and vice versa. Blanc et al. (1970) saw the job of a CA fitting with a glamorous life-style suitable for a young unattached girl.   SPILLOVER

Many similarities between certain role conflicts and organizational pressures can be drawn between nurses and CAs. They both play a SSR, although the perceived status of the nurse is frequently higher. Both usually operate in a fairly bureaucratic organization. Both work on different shift systems. Marshall (1980) researched the stress of work for nurses extensively. The work-home life issue is seen to be increasingly pressurised. "The tradition of the nurse as a single woman is fast disappearing and most now have family responsibilities which are important in the balance of their overall lives" (Marshall, 1980, p.36).

The concept of multiple role-stress has been treated exhaustively in the literature. Nelson and Quick (1985) have comprehensively reviewed the literature relevant to the professional woman's distress and subse-

quent disease outcomes. Cooper (1985) noted that the
aviation and aerospace industry take domestic stress
seriously; this concept was described further in the
work of Alkov et al. (1985).

Stress and its Consequences

The last component in the central portion of
Figure 1 refers to strains, or the consequences of or-
ganizational stress. In this connection, Folkman com-
mented laconically that, "Psychosomatic medicine finds
that work can be sickening" (1982, p.95). Apart from a
general view of strains, the question which arises from
a review of potential stressors in the CA's job is
whether any physical, psychosomatic and psychological
problems could be discerned that could be viewed as
stress reactions and as strains. This section will first
present a general overview, then an overview of findings
particular to CAs.

Short- and Long-terms Consequences

Short-term pscyhosomatic symptoms resulting from
stress are likely to occur, e.g. tension headaches,
lower back pain, menstrual problems, hypertension,
eating problems (Cooper & Marshall, 1976; Hendrix, 1985;
House, Wells, Landerman, McMichael & Kaplan, 1979;
Strümpfer, 1985; Zegans, 1982).

Short-term psychological consequences of stress can be indicated by the presence of depression (e.g. Karasek, 1979). Anger as a consequence has also been mentioned in this context (Spielberger et al., 1980), in addition to its role as a moderator variable, as has been described above. Behavioural consequences can also result, when for example, lowered work efficiency occurs (e.g. Caplan, Cobb, French, Harrison & Pinneau, 1980). Other indicators are dissatisfaction with life and work or with relationships; all of these are often linked with somatic complaints. Excessive use of alcohol, drugs, smoking and use of sleeping tablets are also stress outcomes (Karasek, 1979; Kessler, House & Turner, 1987).

On a long term basis, failure to perceive and adapt adequately to prolonged stressors can have serious pathophysiological outcomes, leading to what Selye (1982) called diseases of adaptation. A vast array of research exists linking stressors to physical distress outcomes such as fatigue, headaches, back pain and somatic complaints such as exhaustion and diseases of adaptation (e.g. myocardial infarction, peptic ulcers etc.).

The final outcome of the stress response is either mastery, exhaustion or disorganization (Pearlin et al., 1981). Mastery occurs when appropriate behaviours "fit"

with stressors. Exhaustion occurs when inappropriate be-
haviours or a mismatch between stressor and response oc-
curs, e.g. the demand is more threatening than was ac-
tually perceived and resources become diminished.
Fatigue usually results from the prolonged phase of
coping while an alleviation of the stressor is searched
for. Feelings of depression and hopelessness may result,
low arousal, inability to concentrate, while irregular
autonomic and endocrine functioning are also manifest
(Zegans, 1982). Disorganization will occur when, at the
same time, both resources are depleted and anxiety
prevents an adequate "interpretation and execution of
coping responses" (Zegans, 1982, p.143). The person
subsequently feels overwhelmed. Numerous physiological
processes occur due to the collapse of the central adap-
tational system (mediating cognitive, affective and
physiological responses). These represent non-specific
strains and affect a variety of tissues and systems in
the body. However, all the physiological activity and
strain could irritate any constitutional or acquired
tissue weakness. "When the threshold of tolerance of a
given organ is breached, then the stage is set for
pathology" (Zegans, 1982, p.145).

This progressive path toward the disease end of the
continuum is what Antonovsky (1979) called breakdown.
The GRRs can no longer be mobilised and breakdown oc-
curs.

The burn-out syndrome develops over a period of time, where the individual's resources become depleted and they consequently become emotionally and physically exhausted (Burke & Deszca, 1986; Golembiewski et al., 1983; Jackson & Schuler, 1983).

A number of studies have investigated the phenomenon of "burn-out", which was originally associated with members of the "helping professions" (Golembiewski et al., 1983; Niehouse, 1981; Strümpfer, 1985). It occurs in individuals who operate a service or who work in the "people professions". Burn-out is a process and goes through development phases. One of the early characteristics consists of a "callous response toward these people, who are usually the recipients of one's service or care" (Burke & Deszca, 1986, p.488). The three components of burn-out as measured by the Maslach Burn-out Inventory are: (i) emotional exhaustion, (ii) depersonalisation and (iii) lack of personal accomplishments (Maslach & Jackson, 1981).

Identification of burn-out symptoms is as crucial to the well-being of an organization as it is to the individual (Jackson & Schuler, 1983), because the negative consequences are detrimental to all parties. Golembiewski et al. (1983) and Niehouse (1981) described the progressive phases of burn-out and organizational effects. Some of the symptoms which occur are:

✓ withdrawal behaviours, e.g. when employees leave work early or take long breaks;

✓ inter-personal friction, e.g. a cynical or callous attitude develops, quickness to anger, job boredom; friends begin to look like foes; persons become rigid and show an unfulfilled need for recognition;

✓ performance declines, e.g. the quantity or output of performance may not decline but the quality may;

✓ family life and other close relationships suffers because the person is overwhelmed by these respon-sibilities and is in need of support; help is however often rejected so that the person loses friends; this is dealt with through denial and detachment then occurs;

✓ health-related problems e.g. insomnia, excessive use of medication, alcohol and depression.

Consequences for CAs

→ limited info specific to CA

As indicated previously, there is a limited amount of information specific to CAs and their working lives. A study by Blanc et al. (1970) was the only published source that the present author could trace which described some of the stressors, stresses and strains that a CA experienced in an intra- and extra-organiza-

tional setting. These researchers investigated the psychopathology of CAs and several sources of specific occupational stress involving intra- and extra-organizational factors were outlined. They investigated 151 female CAs of Air France, in a longitudinal study (based on 300 psychiatric interviews), over a 5-year period.

Findings linked the cumulative effect of trauma (stressors) to flying fatigue and individual personality. Twenty per cent of the sample were rated as having neurotic symptoms, compared to ten per cent in the ground staff and one to two per cent in the cockpit crew. Forty per cent were rated as highly emotional, with reactive responses tending to blow things up out of proportion. A border-line classification of neurosis, depression or some psychosomatic illness was able to be made in 50 to 60 per cent of the cases. Three per cent of the cases were "maladaptive personalities" with nervous breakdown or clear symptoms of pathology; symptoms of neuroses, depression and psychosomatic illnesses were identified.

Other symptoms observed, apart from emotional instability, were fatigue, role conflict and lack of motivation. A high incidence of personal problems in home life were reported; 60 per cent of the participants had some problems in intimate relationships and these personal problems further exacerbated problems at work. Work demands, such as role conflict and role ambiguity,

were identified as important stressors. The inability to manage change (for example, changes in locality) were also predominant. Physical ailments, such as stomach aches, eating and digestive problems, and gynaecological problems were identified in five to ten per cent of cases.

Blanc et al. (1970) concluded that the individuals all experienced the same range of stressors, encountering similar problems. Most participants displayed little insight into the nature and complexities of the processes causing conflict. Those participants who tended towards the neurotic, depressive or psychosomatic classification tended to "complain" more about their situation.

→ Not capable of managing situation
→ org must take responsibility to educate.

These authors commented furthermore, that a possible reason for this high incidence of emotional problems was the immaturity of the individuals concerned. In their opinion, the nature of the job attracts young females whereas the job itself is perceived as only an intermediate stage of their existence, and their plans for work and life. The emotional problems run parallel to their stage of development in the life-cycle, from late adolescence to early adulthood. Findings also indicated that the most active working period of the CA occurs during the first five years of service. Thereafter motivational problems occur due to the lack of career prospects; acute problems in this area tended

→ Career development lack thereof resulted in a lack of motivation.

to occur between eight to ten years service.

The high rate of borderline problems was also
ascribed not to an abnormal population, but to a natural
phase of development in the life-cycle of the person.
The mediating factor involved between etiological fac-
tors and clinical symptoms was the personality of the
individual. The individuals who were not managing their
conflict (stressors) tended towards displaying neurotic
behaviour in a psychologically repressive manner.

An unpublished report by Simonson (1986-1987) had a
more physical emphasis but also contained elements of
psychosomatic disorders. Her research investigated occu-
pational stressors of CAs and the related health conse-
quences. A number of increases in statistics occurred in
the 1986-1987 period, e.g. more short-term physical con-
ditions such as lower back pain were identified. A main
contributory factor connected to this ailment was iden-
tified as work strain, where CAs were handling heavy
equipment, baggage and trolleys.

Another important increase was found in stomach and
digestive complaints, when compared to previous find-
ings. Eating disorders such as anorexia and bulimia were
also more prevalent, as were other psychological disor-
ders. Adequate nutrition was identified as being very
important to the well-being and pace of life that a CA
has to live. Miscarriages and menstrual complaints also
appeared to be on the increase. Anxiety related to

flying in aircraft which were allegedly in poor working condition also increased. Simonson furthermore noted that the most significant increase had occurred in the long-term physical outcomes, "in the continuing upscaling of the incidence of both skin cancer, with lung cancer second" (Simonson, 1986- 1987, p.2).

Simonson (1986-1987) also identified the rising incidence of burn-out amongst CAs. An ever-increasing percentage of CAs experience some stage of burn-out but do not recognise the symptoms. The emphasis should be on self-recognition of the symptoms in the pursuit of prevention and treatment, as well as on support systems to be maintained by management (Glicken, 1983; Jackson & Schuler, 1983; Niehouse, 1981).

Mohler pointed out that very few airlines "conduct any form of meaningful periodic health maintenance examination for flight attendants" (1985, p.3). Health mainteance needs to be viewed in the salutogenic paradigm, and include the concept of wellness. He furthermore stated that, in his view, the fact that some airlines only conduct such health maintenance programmes on upper management and cockpit crew is unfortunate. He was of the opinion that CAs have a a critical role in airline operation and are at the frontline of passenger safety.

> Under a variety of circumstances, including
> inflight illnesses, decompressions and
> survivable accidents. It is in the primary

vital interest of all airlines to have well
trained, highly motivated flight attendants
who know that their company is interested
in their continuing health and ability to
perform (Mohler, 1985, p.3).

Conditioning Variables

General Overview

Having described a range of stressors, strains and
consequences of stress that exist in occupational life,
it is necessary to turn to the moderating processes as
illustrated in Strümpfer's (1983, 1985) model. Mediating
factors and the whole issue of "buffers" which act as
moderators is integral to the current approach in stress
theory.

Persistent empirical findings have occurred in the
literature indicating that certain moderating effects
made individuals "strain-prone" and "strain-resistant"
(Sutton & Kahn, 1983, p.4). Correlations between stres-
sor and strain variables is usually low. This would sug-
gest that buffering factors were having an effect on
part of the sample. Sutton and Kahn (1983) illustrated
this anomaly by describing an early study conducted by
French on a sample of supervisors and administrators. A
correlation of .35 between role ambiguity, as a stres-
sor, and a strain outcome of serum cortisol was obtained
with employees who had poor relationships with subor-
dinates, but a low .06 correlation was obtained with
those who had good relationships. Social support from

the subordinates was posed as having a buffering effect, which could explain the difference between these two correlations coefficients.

Researchers are attempting to isolate moderating effects in an attempt to explain why some individuals are stress-prone and other stress-resistant. It could even be said that the necessity for empirical research to investigate the effects and interaction of different moderators (physical, personality, or situational) has become the main focus of current stress research (Antonovsky, 1987; Ben-Sira, 1985; Holt, 1982; Kobasa & Puccetti, 1983). It is necessary to isolate empirically, "artificially" the variables, which interact together in real-life. These interactional factors can explain the differing responses made at times by the individual who is normally stress-resistant. Sometimes (s)he is "stressed" and at other times not. These resistors, applying Antonovsky's (1987) framework, allow the person to move up and down the health ease/dis-ease continuum (Antonovsky, 1985) with a sense of competence or a feeling of potency (Ben-Sira, 1985), without an enduring maladaptive effect on behavioural outcomes (Strümpfer, 1985).

As indicated in the first section of this chapter, stressors alone are not stressful but need to be appraised as such by the individual. Pearlin et al. (1981, p.340) commented that "the intensity of stress that

people exhibit cannot be adequately predicted solely
from the intensity of its sources ... Instead people
typically confront stress-provoking situations with a
variety of behaviors, perceptions and cognitions that
are often capable of altering the difficult condition or
mediating their impact, on outcome behavior or
consequences".

In understanding stress it is not the specific
component in the person, environment or situation which
is important. Rather it is viewing them as multidimen-
sional constructs "that are part of an ongoing process
of person-situation interaction" (Endler & Edwards,
1982, p.37). Research suggests that "instead of merely
attempting to connect stress with strain, investigators
pursue the hypothesis that a given stress has delete-
rious effects on health only under specified parametric
conditions" (Holt, 1982, p.433). Mobilisation of the
different conditioning variables occurs very often in
conjunction with each other (Antonovsky, 1979; Pearlin
et al., 1981).

It is not a case of the individual conscientiously
deciding to use a particular method to reduce a stres-
sor, but rather a combination of inputs in complex in-
teraction. Moderators can intervene at several points in
the stress process. In the model of stress as described
by Strümpfer (1983, 1985) in Figure 1, the broken line
arrows indicate points at which conditioning variables

intercede, i.e. the link between stressors and stress and the link between stress and strain; additionally, conditioning variables affect coping behaviours.

By and large, the earlier literature concentrated on investigating moderators, such as social support and the Type A behaviour pattern. Much interest is currently focused on moderating variables inherent in the personality such as the SOC (Antonovsky, 1979, 1987), Potency (Ben-Sira, 1985), Hardiness (Kobasa, Maddi & Puccetti, 1982) and Learned Resourcefulness (Rosenbaum, 1988). State-trait anger and state-trait anxiety are also receiving some attention (Spielberger, Johnson, Russel, Crane, Jacobs & Worden, 1985).

The person is not seen as passive in the environment. Endler and Edwards (1982) described a characteristic, predictable way of behaving in stressful situations, a phenomenon which they called "coherence" and which appears similar to Antonovsky's (1979, 1987) global concept of a SOC. It is suggested that this predictable means of appraising stressful situations "is dependent upon continuous mediating processes (described in terms of hypothetical variables) responsible for the selection and interpretation of situational information" (Laux & Vossel, 1982, p.708). Similarly, Pearlin et al. (1981) refered to the individual's sense of mastery of situations. The sense of control which is largely based on Rotter's (1966) "locus of control" variable, is

another persistent theme in the literature; Strümpfer
(1988) gave an account of the development of this con-
cept in relation to stress in the salutogenic paradigm
and health-related issues.

Lefcourt (1988) has described the role of the
moderating effect of humour as a stress buffering
mechanism. Some individuals are capable of using humour
as a resource in this capacity, and are able to release
tension and anger in this way.

Of course, there are important theoretical dif-
ferences between these various constructs. Yet, as An-
tonovsky (1987) and Strümpfer (1988) have indicated,
there is a good deal of explanatory overlap as well.
Some of these aspects will be discussed at a later
stage.

A study, not on CAs, but at least in the airline
industry, can be used to conclude this discussion. Alkov
et al. (1985) studied groups of pilots who had been in-
volved in accidents. The results indicated that certain
personality factors made aviators more susceptible to
stress. These individuals displayed little insight into
their own emotions, had little maturity, and no sense of
their own limitations. Most of the aviators who were
susceptible to stress had inter-personal problems with
superiors and peers. There were other symptoms of lack
of coping, for example excessive drinking. Usually when

confronted by stressors, "they turn their frustrations outward and while denying their own feelings project them onto others" (Alkov et al., 1985, p.246). These authors attempted to isolate criteria which identify people susceptible to accidents. Sloan and Cooper (1985) suggested that Alkov's approach be extended beyond the individual life-events connection to include "the possible trends in pilots' perception of event/process relationships" (Sloan & Cooper, 1985, p.1000). These trends would consequently act as moderators in the stress process.

The present study used Ben-Sira's (1985) Potency Scale as a moderator variable. A variable, called hardiness, was also used; it was based on content-analysis of interview data. For these reasons, it is necessary to discuss the constructs of potency and hardiness behaviour. The SOC Scale (Antonovsky, 1987) was, unfortunately not available to the researcher at the stage when the study was planned; since the SOC concept is so frequently introduced into the thesis, it will be reviewed by way of introduction and also because it seems to be the most embracing of the three concepts.

Sense of Coherence

Antonovsky defined SOC as,

> The sense of coherence is a global orienta-
> tion that expresses the extent to which one
> has a pervasive, enduring though dynamic

feeling of confidence that (1) the stimuli
deriving from one's internal and external
environments in the course of living are
structured, predictable, and explicable;
(2) the resources are available to one to
meet the demands posed by these stimuli;
and (3) these demands are challenges,
worthy of investment and engagement (1987,
p.19).

Antonovsky (1979, 1987) viewed this "dispositional
orientation" (1987, p.182) as an ability which allows
the individual to reframe a painful stressor with a
healthy, willingness to cope mentally. General resis-
tance resources (GRRs) "build up a strong SOC, crucial
to one's ability to manage tension well" (Antonovsky,
1987, p.30). Consequently "at a given point in time on
the health ease/dis-ease continuum, the extent to which
GRRs are available to one plays a decisive role in
determining movement toward the healthy end of the con-
tinuum" (Antonovsky, 1979, p.101).

Antonovsky postulated that the person with a strong
SOC has an advantage over the person with a weak SOC. A
strong SOC is a conditioning variable which provides a
head start as the person has already mobilised resources
when confronted by a stressor. The weak SOC person, is
confused, overwhelmed and tends to give up.

Potency

Ben-Sira described potency as,

A person's enduring confidence in his own
capacities as well as confidence in commit-
ment to his/her social environment, which

is perceived as being characterized by a
basically meaningful and predictable order
and by a reliable and just distribution of
rewards (1985, p.399).

The concept of potency revolves around a strong
sense of self and confidence based on one's past ex-
perience, which enables the demands of life to be met.
Potency thus prevents tension from turning into a last-
ing stress. Ben-Sira viewed potency also as a stress-
buffering mechanism in the stress-disease relationship.
Potency thus can act in a tension reducing capacity,
where stress is viewed as a "breakdown following a
prolonged failure in restoring emotional homoeostasis"
(Ben-Sira, 1985, p.397). Homoeostasis restoration is
seen as crucial for the prevention of stress, or
health-maintenance. Potency is viewed as more than a
resource. It is homoeostasis restoring, rather than
demand responding: "it is neither a resource-mobilising
or a stressor-avoiding mechanism" (Ben-Sira, 1985,
p.399), but fulfils a buffering function in the stress-
coping-health relationship.

The Potency Scale devised by Ben-Sira (1985) con-
tains items on mastery and self-confidence as positive
components of potency. However, it also contains items
measuring alienation and anomie as negative components
but scored in the reverse. These two components con-
stitute a weakness of the scale. Strümpfer (1988) com-
mented that, on both theoretical and psychometric
grounds, it seems dubious to express high levels of a

characteristic in terms of low scores on another. He
quoted examples where a low score on, e.g. alienation,
may represent just that or some neutral feeling, and not
the presence of feelings opposite to alienation.

Ben-Sira did not present means, standard deviations
or reliability coefficients for his scale. He reported a
study on a large Israeli sample which related potency
Scale scores to indicators of health, stress, successful
coping and resources. The results tended to confirm his
hypotheses based on his theory of potency.

Porter (1988) reported a correlation of -.47
(significant at the .001 level) between the Potency
Scale and her scale that measured Work Schedule Stress.

Hardiness

Since the late 1960s much research has been done on
the effect of life change stress or health. The original
measure of adjustment to change was the Holmes and Rahe
(1967) Social Readjustment Rating Scale (SRRS). Wyler,
Masuda and Holmes (1968) developed a parallel instru-
ment, the Seriousness of Illness Rating Scale (SIRS) by
means of which people could indicate the amount of ill-
ness they had experienced over a given period of time.
Using these measures, or variations on them, a large
number of studies demonstrated that people who ex-
perience much life change have a high likelihood of sub-

sequently showing a significant increase in illness too
(e.g. Rahe, Gunderson & Arthur, 1970; Wyler, Masuda &
Holmes, 1971). Over a wide range of samples the correla-
tion between such measure of life change and illness
averaged about .3 (Kobasa, 1982).

If there is so little overlap between these kinds
of variables, it seems obvious that the relationship
could be moderated or conditioned by buffers or resis-
tance resources. Kobasa and her co-workers (e.g. Kobasa,
1979, 1982; Kobasa, Maddi & Kahn, 1982; Kobasa, Maddi &
Puccetti, 1982; Kobasa & Puccetti, 1983) have inves-
tigated personality hardiness as one such buffer. The
basic procedure has been to select persons who reported
high levels of change on the SRRS and then splitting
them into subgroups who had reported high and low levels
of illness on the SIRS. A Hardiness Scale was developed
by administering a number of scales, derived from exis-
tential personality theory, to these subgroups and
retaining scales which differentiated between them
(Kobasa, 1979). The theory of hardiness attempts to
answer questions as to why some persons remain healthy
despite dystress experiences. Additionally Kobasa (1985)
emphasises the importance of understanding the interac-
tion of personality in the environment. For this reason
it is necessary to understand both the individual and
the occupation that he or she is part of (Kobasa, 1985,
p.201).

According to Kobasa (1982) hardiness consists of three components, viz. commitment, control and challenge.

Commitment (vs. alienation) is the ability to hold one's beliefs and values regarding the ideas, people or things that one is involved with in the process of living. These include one's work, family, interpersonal relationships as well as social institutions. This aspect of hardiness provides an overall sense of purpose and is linked to goal setting and planning one's life. "But commitment is more than self-esteem or personal competence because it is based in a sense of community" (Kobasa, 1982, p.7). This interpersonal aspect is regarded as a fundamental resource in coping with stress.

Control (vs. powerlessness) refers to "the tendency to believe and act as if one can influence the course of events" (Kobasa, 1982, p.7). Strümpfer (1988) compares this measure to that of locus of control, which has been referred to above. Both decisional and cognitive dimensions of control are incorporated in the concept, where the individual is seen as being able to take responsibility for self-management.

Challenge (vs. alienation) is based on the idea that change rather than stability is the norm of life. The hardy personality is capable of exploring new situa-

tions, experiences and they know where to find the resources as a support when faced by stress. There is a need for challenge, exploration of new ideas and things which lead to personal development/growth.

In Kobasa's theory, people are viewed as having certain personality dispositions which allow the use of adaptational responses in transformational coping which prevent them from being overwhelmed, feeling meaningless or using avoidance behaviours and other regressive coping mechanisms.

> Persons with personality dispositions of this sort possess a valuable aid in avoiding illness- provoking biological states and is adaptational exhaustion ... or depressed immunological surveillance (Kobasa, 1982, p.169).

Studies on hardiness and health (Kobasa, Maddi & Kahn, 1982) are of particular interest for the present study. They pointed to possible interaction amongst resistance resources which demonstrate that hardiness could be especially effective in preserving health when constitutional strengths are low. The writers suggested that health practices such as exercise, rest, jogging etc.

> ... may function to offset constitutional predispositions to some extent. Hardy persons (by virtue of their generally disciplined and realistic approach) might engage most conscientiously in positive health practices (Kobasa, Maddi & Kahn, 1982, p.176).

In contrast, people who are low on hardiness could exaggerate constitutional predispositions and cope retrogressively by over-eating, over-drinking etc.

Funk and Houston (1987) and Hull, Van Treuren and Virnelli (1987) discussed a number of concerns about the hardiness construct, about the Hardiness Scale and about the statistical procedures used in most of the research by Kobasa and her co-workers. Since a new measure was developed to measure hardiness in this study, these concerns are not applicable here.

A problematical area in connection with hardiness research concerns the difference between the findings of **retrospective** and **prospective** studies. One limitation regarding retrospective data is that the measures of hardiness and illness are obtained at the same time. It is thus possible that the directionality of the relationship could be clouded. For example, people who are ill or with psychological problems may appear less hardy. Kobasa, Maddi and Kahn, (1982) attempted to overcome some of the limitations of the earlier retrospective studies, and demonstrated that hardiness predicted both concurrent and future health. However, the differences in the buffering effects were still not consistent across a number of studies (Funk & Houston, 1987).

Emotional Traits

Two other important personality variables which
could function as a mediating or conditioning variables
have been described in the work of Spielberger and his
co-workers. These are state-trait anxiety and state-
trait anger.

Trait anxiety. The concepts of anxiety and stress
have been used interchangeably in the early literature.
According to Spielberger (cited by Endler and Edwards,
1982), stressors are linked to anxiety reactions by the
perception of threat. As indicated earlier, threat has
to be appraised as such and people differ with respect
to their inclination to do so. One of the factors which
condition the appraisal of threat is anxiety.

"It is necessary to draw a distinction between two
different, although related constructs, in order to
understand the manifestation of anxiety" (Bucky &
Spielberger, 1972, p.275). These are: trait anxiety (A-
Trait), a relatively stable predisposition to anxiety-
proneness, so that the person experiences a wide range
of circumstances as threatening and responds to these
situations with differential elevations of state-
anxiety. State-anxiety (A-State) refers to "a transitory
emotional condition that is characterized by subjective
feelings of tension and apprehension and heightened

autonomic nervous system activity" (Bucky & Spielberger, 1972, p.275-276). "The state-trait distinction entails a consideration of both person factors and situation factors in predicting changes in state anxiety" (Endler & Edwards, 1982, p.40). The type of threat, i.e. interpersonal threat, physical danger and ambiguous threat, must be considered together with the A-Trait component when predicting changes in A-State. "In stressful situations people with high trait-A would be expected to show higher levels of A-State than would persons with low-trait" (Endler & Edwards, 1982, p.40).

Matheny et al. (1986) described the anxious reactive personality whom they regarded as having habitual styles of perceiving events which make them more stressed. An automatic feedback loop occurs. Such people tend to overreact to stressors, are hypersensitive to cognitive, visceral and musculoskeletal feedback mechanisms (e.g. pounding heart, shaking hands, perspiration); "thus arousal responses themselves assume the role of stressors and cause further arousal" (Matheny et al., 1986, p.505).

These habitual styles constitute a form of anticipatory coping, and are "characteristic ways of appraising demands and resources" (Matheny et al., 1986, p.504). These moderating factors consequently play an important role in the dynamic person-environment relationship. While the SOC, hardiness and potency have

been described as creating a positive mental set in contributing towards the stress-coping-health relationship, anxiety has been seen to contribute towards creating a feedback-loop which promotes even more anxiety and results in further stress.

Trait anger. The concept of trait anger represents another negative emotion. Spielberger (1980) included trait anger in the State-Trait Personality Inventory, which also measures trait anxiety. Research has indicated maladaptive effects of anger on health (Holt, 1970), especially in connection with the Type A behaviour pattern and coronary heart disease (Chesney & Rosenman, 1985).

The State-Trait Anger Scale was specifically designed to measure "the intensity of anger as an emotional state and differences in anger proneness as a personality trait" (Spielberger et al., 1985). State-anger (S-Anger) is seen as an emotional state with subjective angry feelings; the intensity of these feelings fluctuate according to the person's perception of injustices, affronts or frustration, due to blocking of goal-directed behaviour. "Trait anger (T-Anger) was defined in terms of individual differences in the frequency that S-Anger was experienced over time" (Spielberger et al., 1983, p.169). Persons high in trait anger are more likely to find situations annoying or frustrating. The angry feelings or experiential aspects of anger are

estimated as being of importance in the way the person either expresses or suppresses his/her angry feelings. Spielberger became interested in the fact that, as especially seen with hypertensive patients, it was not only the feeling component that was important, but what the person actually did with it, which was linked to the health relationship. Hypertensives who suppress their angry feelings, so-called "anger-in", have been found to have higher blood pressure. In an interpersonal situation people who react with anger-in actually appear less angry, so that there is a subsequent lack of agreement between the feeling and the behaviour (Dembroski, Mac-Dougall, Williams, Haney & Blumenthal, 1985; Spielberger et al., 1985).

The research on anger-in is of particular importance to the field of this present study. According to Siegel (1985), little longitudinal evidence exists regarding its effects on hypertension and blood-pressure, for example. Siegel quoted the early work of Alexander, who was of the opinion that anger becomes a risk factor when the person with resulting elevated blood pressure, becomes caught in a trap of passiveness and hostile impulses (i.e. feelings of impotency). Dembroski et al., (1985) stated that the increased tendency towards heart disease is a result of an interaction between one characteristic of Type A behaviour (the potential for hostility) and anger-in.

The specific question that is of interest to this study relates to differences in the anger-proneness of the individual and how it could act as a moderator in the stress process. The interaction between stressors and moderating influences which predispose a person to behave in an anticipatory way, could account for some people being stressed and others not, when faced by the same situations in real life.

An example that can be observed in the stress of work experienced by CAs and which is part of their set of unique stressors, is that CAs are expected to maintain a caring and service orientated relationship with the passengers. Many frustrations and angry feelings can accumulate in this service role. Some CAs have developed a way of getting release (anger-out) by retiring to the galley and yelling, or passing rude comments about passengers to other crew members. Other CAs tend to keep this anger in; as a consequence, some eventually feel overwhelmed and develop other symptoms of burn-out as their stress accumulates. Individual CAs caught between the demand that they maintain a caring and service attitude towards passengers who irritate and frustrate them, react in a characteristic anger-in or anger-out mode.

Wellness

Most prior research in the stress-health field

worked within a pathogenic paradigm, thus emphasising the relationship between the stressor and negative outcomes. The move is shifting towards the resistance resources which have a moderating effect on the health outcomes. The concept of wellness includes both the dystress or eustress elements of stress, as well as the correlates of well-being and mental health. In his recent work Antonovsky (1987) linked the SOC with wellness. He was, however, careful to keep the concept on the health ease/dis-ease continuum to avoid the description of SOC falling into a misconception of linking it "to everything that can possibly be regarded by someone, or in some culture as desirable" (Antonovsky, 1979, p.68). He is not advocating a super-prototype personality.

Antonovsky (1987) pointed out that one of the problems regarding the experimental construct of well-being is that there is as yet no commonly accepted definition. Life satisfaction, morale and happiness are three generally used terms which explain "notions about life progress towards goals, transitory moods of gaiety, individual environment fit, positive and negative affects, optimism, irritability, zest, apathy, fortitude and satisfaction with one's attributes" (Antonovsky, 1987, p.179). In Antonovsky's opinion these factors are "global referents" and are contingent on situational factors, whilst the SOC is more contingent on "how one feels about one's functioning" (1987, p.181). Further-

more, research has indicated the link between SOC and health outcomes, as well as between hardiness and illness (Kobasa, 1982, 1985). In view of this fact, Antonovsky (1987) posed a possible reciprocal relationship: "If successful coping with life stressors has positive consequences for health, should it not also have positive consequences for satisfaction, happiness, morale, and positive affect?" (Antonovsky, 1987, p.180). The concept of wellness would thus include the wholeness of the person on the health-ease/dis-ease continuum. This concept relates to the field of study of this research in that stress is not regarded as necessarily having a negative outcome - it is viewed as having to be managed (Antonovsky, 1979; Ivancevich & Matteson, 1980; Nelson & Quick, 1985).

The literature describes different elements that link the physical and mental states of well-being, e.g. life-style, life-events, diet, social support, physical practices, physical state (overweight) etc. (Jeuchter & Utne, 1982; Kobasa, Maddi & Kahn, 1982; Kreitner, 1982). The concept of wellness extends to include more than just a sum of these parts, it is an emphasis on the wholeness of the person (Muzlai, 1984). "Characteristic of wellness or the whole employee is the foresight, integrity and willingness and ability to postpone short-term gratification for the long-term good" (Jeuchter & Utne, 1982, p.11). These characteristics revolve around the prediction, control and understanding displayed in

their global orientation towards life. The emphasis in stress research is moving away from investigating pathogenic physical, biochemical, microbiological and psychosocial stress by themselves.

The advantages of promoting health and well-being amongst employees in organizational life are clear (Hendrix, 1985; Schein, 1986). Increased organizational effectiveness and well-being also occur which result in both the individuals and the organizations being able to adapt to demands with ease. There would be fewer symptoms of disease in organizational life, such as apathy, turnover and absenteeism (Hendrix, 1985). Wellness programmes run by organizations which empower the individual (Hopson & Scally, 1980; Nelson & Quick, 1985) to engage with work and life in a meaningful manner are being managed effectively by large corporations (Ivancevich & Matteson, 1980; Jeuchter & Utne, 1982). Wellness programmes cater for the "whole" person. Such programmes are not based on a pathogenic paradigm as they do not necessarily get "rid of the bugs" (Antonovsky, 1985, p.15). Rather, the emphasis is on management of stressors, eustress and promotion of health. Empowerment through prediction, understanding and control act as antidotes to stress, both by directly reducing stressful aspects of work and by weakening the complex relationship between such stressors and the resulting physiological and psychological strain (Sutton & Kahn, 1983). Wellness programmes thus address healthy

& Kahn, 1983). Wellness programmes thus address healthy living, personal responsibility, as well as physical and psychological well-being (Antonovsky, 1987; Murphy, 1984; Muzlai, 1984).

Focus of Study

A number of issues have been identified in the literature relevant to this study. The fact that certain stressors unique to CAs have been idenfied and the fact that some CAs experience stress when exposed to the same stressors, and others do not, provides a focus for the study and a basis for research questions.

There are indications from the literature that certain personality-situation variables act as resources in the stress process and can moderate the stress outcomes. The link between job stress and well-being has been described, and suggests that dystress can have outcomes in physical health or ill-health. An area of interest that has also been identifies concerns the role of moderating variables on these physical outcomes of stress.

The focus of the present study will thus be on identified stressors, moderating variables and health-related consequences that are unique to the working life of a CA.

In order to operationalise the research, a number of contributing variables and their particular measurement issues need to be introduced. Included in the present study as stressors are role conflict, lack of participation, perception of stress and work load. Moderators include personality hardiness, potency, social support, trait anger and trait anxiety. Outcomes of stress are identified as burn-out, wellness, exhaustion, depression, rating of general health, somatic complaints, smoking, drinking, pill consumption and propensity to leave.

The empirical variables will be investigated and introduced in the following chapter. The research design and methodology used for both the qualitative and quantitative studies to be formulated.

CHAPTER 3

RESEARCH DESIGN

The present study was largely exploratory and was
designed to answer questions based on a review of the
literature, as well as on the needs of both the SAA and
the CAs for reliable information on the occupational
problems surrounding this crucial position in the or-
ganisation. The study was planned to obtain both
qualitative and quantitative information.

A qualitative approach is more suitable for captur-
ing information in real-life situations. The traditional
empirical research approach views qualitative data as
"an attractive nuisance" (Miles 1979, p.590). However if
methodological problems such as bias and validity issues
are considered continually along the way, it is possible
to make use of real-life situations and make sense out
of large volumes of "earthy", "holistic", "rich", "full"
data (Miles, 1979, p.590). For this purpose CAs were
interviewed individually, following a semi-structured
format.

The quantitative phase of the study, in part, con-
tinued from the qualitative data collecting phase, in
that a number of variables were obtained from it by
means of rating scales for certain areas. In addition,
quantitative data were collected by means of a question-
naire, containing a range of scales, which was adminis-

tered after the interview. This was done in order to ob-
tain more objective data in areas covered in the inter-
view, but also in various additional areas. There was
another purpose too: One of the issues which has emerged
from the literature review concerns the interaction of
moderating variables in the real-life situation. Most
current writers stress the importance and need for cap-
turing the multidimensionality of the real-life situa-
tion in future research. This goal is common to most em-
pirical researchers who attempt to arrive at an objec-
tive understanding of the world in which we live (Cook &
Campbell, 1979; Roscoe, 1975). A quantitative approach
suitable for this purpose was therefore included in the
research design.

Overall, the objective was to obtain data in
diverse form, so that the one could enhance the other.

> Qualitative data can very usefully be
> played off against quantitative information
> from the same organizational setting, to
> produce more powerful analyses that either
> sort of information could have produced
> alone. (Miles, 1979, p.590)

In the qualitative part of the study answers were
sought to the following research questions:

1. Are there any antecedent conditions contributing to
    stress in the working life of a CA and what are
    their effects?

2. Are there any unique aspects of the SSR peculiar to the CA and is the SSR stressful for the CA?

3. Are there aspects of "stress" that are experienced positively by the CA?

4. What are the clearly definable coping mechanisms used by CAs (regressive or transformational)?

5. What specific consequences of stress are identified in the behaviour of CAs, and are there any apparent health/wellness outcomes?

The quantitative data were collected to explore the relationships between a variety of stressors that have been identified by other researchers and various health-related outcomes of stress. A number of potential moderator variables were also included in the research design, in an attempt to gain a better understanding of the complexity of relationships.

The research was carried out in three phases: a preliminary exploration, the qualitative data collection and the quantitative data collection. A fourth phase of the study was statistical analysis of the quantitative data.

Data Collection

Phase 1: Preliminary Exploration

Prior to the actual data collection phase quite a considerable amount of time was spent in getting to know the SAA organization and culture, both formally and informally. This was an invaluable time spent in the "crawl-space" of the organization (Ingram, 1986) which provided a good basis for establishing relationships that provided help and support at various stages during the research. This source of support was utilised when formal connections and channels proved useless as a consequence of the bureacratic environment. The relationship building period also helped gain credibility for the researcher with staff at supervisory levels and with crew themselves. It was important to establish credentials and create trust with crew and management alike, and not to be seen as representing either camp, but to establish firmly the identity of being impartial, or non-partisan, to either crew or management. It was also important to become acquanted with the actual work environment, procedures, activities and even the "language" of this part of the organization.

In addition to informal links, formal links were established. Twelve in-depth, unstructured interviews were conducted with liaison officers and co-ordinators. These co-ordinators fill a position of first-line super-

vision and liaise between management and crew. The position also fulfils a both a coaching and a mentoring function, as each co-ordinator is responsible for approximately 80-100 crew. The philosophy behind this function is that personal attention can be given to individuals and their unique problems. It was decided to interview the supervisors who at least theoretically knew their crews' problems, and in this way identify any additional areas which could then be included in the data-collection.

This preliminary phase "of being open to what the site has to tell us" (Miles, 1979, p.591) was important as a grounded theory approach (Miles, 1979; Turner, 1983) was to be used in the conceptual development and final analysis of the qualitative data. It prevented a framework being imposed or becoming self-binding, so that individuals could identify real-life factors. This openess led to the identification of a stressor of such magnitude in the the working life of the CA, viz. that of work schedules, that a second, related study was devised to run concurrently with the present study (Porter, 1988). The two research projects were combined primarily at the data collection stage, but only dimensions related to the focus of the present study were included in the qualitative and statistical analyses and in the discussion. The two projects were complementary, in that they facilitated a Gestalt view of the work-related experiences of the CA, rather than two piecemeal

sets of results and insights.

Phase 2: Qualitative Data Collection

Sample. A total of 151 SAA female crew (108 internal, 43 external service) were interviewed and provided with a self-report inventory.

Both crew on the external (overseas) and the internal flights were interviewed, as they were all subject to the same stressors focussed on in this present study. Only female crew were used in the sample, since male CAs' perception of stress might be different. Only crew with a minimum of three years service were considered, in view of the likelihood that stressors would take some years before showing their long-term effects. External crew had all flown on the internal routes before flying overseas. Participation was purely voluntary, and anonymous.

Interviewing. The qualitative study consisted of 151 in-depth interviews, of between 30 to 60 minutes each. The co-researcher and the present researcher each interviewed about half of the participants, each handling the full interaction with each individual. Both researchers had previous interviewing and counselling skills.

A number of obstacles were encountered in the field-work. Firstly, accessibility to flying crew was fraught with problems due to their erratic life-style and flying schedules. This problem was partially over-come by approaching crew as they were waiting on standby (where they could however, be called to an operational flight at a moment's notice). However, as only junior crew were available on standby, very few "senior" crew with more than six years experience could be included in the sample, These crew, despite three years service, are still considered "junior" in the promotional hierar-chy. One of the benefits of seniority is that senior crew wait on standby at home and not at the airport.

Data collection was time consuming; due to the ros-tering system, there were often few eligible candidates for interviews. Interviews were conducted over a 6-month period. During this period the SAA implemented a number of policy changes but these did not seem to be of a kind that would affect perceptions of core problems.

Apart from practical problems in conducting inter-views, another factor delayed interviewing after initial contact with the organization was made. An air-disaster occurred, which resulted in a large loss of life of both crew and passengers. The study was temporally halted in an attempt to avoid reactive anxiety or stress effects due to the disaster itself.

Interviewing conditions should be described, as
they uncovered another stress factor. As indicated
above, standby crew provided the only practical source
for interviewing CAs. CAs consistently indicated that
they were bored and frustrated whilst waiting on standby
duty. Facilities provided by management are unglamour-
ous, to say the least, and very much like a railway
station, bare essentials with cheap fittings. Some
message was certainly being conveyed to crew in the fact
that the TV was actually chained down, so that it
presumably could not be stolen. Crew spend up to eight
hours on standby, many frittering away their time, as
constructive activities are impeded by noise and move-
ment. When approached for interviewing, no wonder crew
jumped at the chance of doing something different and
constructive.

Participation in the study was purely voluntary.
The researchers had drafted a letter prior to the com-
mencement of research, stating the nature and confiden-
tiality of the research. The letter was sent out to all
crew members and placed in their individual lockers,
both for internal and external flight crew. Confiden-
tiality was emphasised, since the preliminary informa-
tion gathering indicated that a climate prevailed where
crew held management in little trust. Once the initial
contact was made with a crew member, confidentiality and
the fact that the researcher was impartial and not part
of the management structure were emphasised again. Only

two CAs who were approached, refused to participate in
the research.

Objectives of this phase. The main objective of
this phase of data collection was to obtain a rich
source of real-life data, to be gained by means of
semi-structured interviews. It was initially important
to create rapport with the CAs in order to overcome any
possible resistance or suspicion that the researchers
represented management. This aspect was regarded as im-
portant and was stated at the appropriate moment. The
researchers emphasised the fact that if the CAs did not
describe their stressors freely, there would be no way
of judging the levels of stress. This approach allowed
the free flow of personal perceptions. The interview
format, as described in Appendix 1, was followed in a
flexible sequence. Information was gathered around their
perceptions of stress, subordinate service roles, work
schedules, relationships, support systems (management,
peers, domestic-relationships), control issues (personal
and organizational), general health issues and prac-
tices. The CA was given ample opportunity of adding her
own perceptions to the general enquiry. The interviewers
continually probed for illustrative experiences and
critical incidents, but participants were allowed to
speak freely, with minimal direction.

The value of using this approach was that the in-
formation reflected an immediacy, as the person was

telling how it was happening to her at that moment, as
well as reflecting on past events. It was also position
specific and related to particular events and situa-
tions. As discussed in the literature review, many
studies in the stress and health field, by virtue of the
retrospective design, lack these elements (Funk & Hous-
ton, 1987; Kobasa & Puccetti, 1983).

The data obtained from the qualitative study were
analysed by growing towards a theory, using a grounded
theory approach (Turner, 1983).

Qualitative into quantitative. Additional variables
were also identified for subsequent inclusion in the
quantitative analysis, viz. perceived role conflict,
perception of stress level, hardiness, burn-out and
wellness. The qualitative data base combined with
qualitative analyses, was an attempt to capture the
widest possible stress experiences of CAs. For each of
these variables new scales were devised from the
qualitative data based on content analysis. Individuals
were subsequently rated by the author and the co-
researcher on these categories and the data could then
be included in the quantitative analysis. Details are
presented in Appendix 2. The quantification of qualita-
tive material was achieved by the two researchers
jointly constructing scales after perusing the proto-
cols. Individuals were then rated, on the new dimensions
to achieve more stable ratings. Such a method has been

described in the literature (Miles, 1979) for research-
ers who are closely involved with their data and who
have understanding and insight into the research situa-
tion and people. Each protocol was first rated separate-
ly by each rater; differences were then carefully dis-
cussed in order to obtain agreement. The joint ratings
were used in statistical analyses. These new scales were
an additional attempt to capture quantitatively the
real-life stressors that are present in the working life
of a CA.

Phase 3: Quantitative Data Collection

At the conclusion of the interview, the CA was
asked to take away a self-report questionnaire and
complete it at her leisure. No names were written on the
forms but questionnaires were coded to correspond with
the interview number. A total of 150 inventories were
distributed, of which 103 were returned (a return rate
of 69%). External crew were included in this sample, a
factor which could possibly account for the lower return
rate than was expected. The fact that crew generally
had problems with time management (identified as a
stressor in the qualitative study) probably accounts for
the low return rate too. Crew generally found it dif-
ficult to manage anything "extra" when time factors were
involved in any way. Crew feel that they are too busy
and involved in trying to organise their lives which are
demanding due to their flying schedules and consequent

erratic life-style and in some cases, feelings of ex-
haustion due to burn-out.

The self-report questionnaire, as presented in
Appendix 3, consisted of 14 scales, containing 80 items
altogether. The scales represented stressors, moderator
variables and health-related consequences.

Measuring Instruments

The measuring instruments used in the quantitative
data collection included both kinds of scales: the new
scales developed from the qualitative data and described
in Appendix 2, as well as the self-description scales
found in Appendix 3.

Stressors

The <u>Work Load</u> scale originated from the Caplan et
al. (1980) study on <u>Job Demands and Worker Health</u>. It
consists of four questions about work load and scoring
is on a 5-point scale, the greater the score the greater
the work load.

The <u>Participation</u> scale was also taken from the
Caplan et al. (1980) study and contains three items en-
quiring about the testee's participation with others in
decision making and planning at work. Scoring is also on
a 5-point scale. For the purposes of the present study,

this scale was considered in the reverse, in terms of absence of participation; hence the lower the score the less participation and therefore, the greater the stressor.

Role Conflict is a measure devised from a content analysis of the qualitative data. As mentioned previously, rating was done by the author and co-researcher, who worked independently and in collaboration for the final scoring. The scale was devised on the basis of issues that arose from the qualitative findings, viz. issues which involved a conflict of interests in different areas of the CA's life and which could conceivably be experienced as a stressor. The type of conflict that emerged invariably was contrary to the CA's self-needs, whether the stressor arose due to a conflict of interests in the roles which stemmed from management, passengers needs or home life. Findings in the literature supported these concepts (e.g. Cooper & Baglioni, 1988; Shamir, 1980). Four subscales were devised, viz. "System" vs. Reality/own needs, Work vs. Self, Home vs. Self and Home vs. Work. Scoring was on a 4-point scale, the higher the score the greater the role conflict.

Perception of Stress Levels was a single-item scale, developed from the qualitative data to represent the CA's own perception of stress. The higher the score on the 4-point scale, the greater her perception of stress.

Moderator Variables

The Potency scale was constructed by Ben-Sira (1985) and consists of 19 items answered on a 6-point scale. Clusters of items measure the main characteristics of potency, as visualized by Ben-Sira on theoretical grounds, viz. mastery, self-confidence, alienation or commitment to society and anomie, i.e. a belief in the meaningfulness and orderliness of society. The higher the score the more potent the individual.

The Hardiness scale used in the present study was developed in exactly the same way as the other content analysis scales for rating protocols. Kobasa's (1982) dimensions provided the basis for the present measure; they were, however, adapted to fit the unique characteristics of the working life of a CA, as identified in the qualitative study. The measures consisted of three sub-scales of Commitment, Control, and Challenge. Twenty items were rated on a 4-point scale, so that low scores indicated the less hardy and the higher scores a higher degree of hardiness.

The Social Support scale was also divised from analysis of the qualitative data. The theoritcal basis stemmed from Vaux and Anthanassopolou's (1987, p.538) point of view where:

> Knowledge of people's objective appraisals
> of the adequacy of support is more critical
> to the prediction of their well being than
> simply collecting information about the
> number of supports or quanity of supportive
> behavior to which they have access.

Insights from a number of other sources where also considered (Cooper, 1988; Cooper & Sloan, 1985; House, 1981, 1983; Jacobson, 1986), while information gathered from the qualitative data identified certain items as being relevant to the concept of social support too. The scale consisted of five items, viz. social support from Management, Supervisors, Spouse/Partner and Co-workers. The researchers rated the person on a 4-point scale according to their combined assessment. Disagreements were eliminated through careful discussion. Obtainable scores ranged from 5 to 20. The higher the score the greater the degree of social support available to the person.

Trait anxiety derived from the State-trait Personality Inventory of Spielberger et al. (1980). It contains 10 items, answered on a 4-point scale. The higher the score the lower the anxiety.

The Trait anger scale derived from the same inventory by Spielberger et al. (1980) and has the same format as the Trait anxiety scale. The higher the score the lower the levels of anger.

Consequences

The measure for <u>Burn-out</u> was developed from the qualitative data, following the exactly the same method as that of the other qualitative scales. The qualitative data provided a range of symptoms which described the burn-out syndrome, as prevalent amongst CAs. This information was confirmed by sources in the literature (Burke & Deszca, 1986; Glicken, 1983; Golembiewski et al., 1983; Jackson & Schuler, 1983; Maslach & Jackson, 1981; Odendal & van Wyk, 1988). The scale consisted of nine items which described the symptoms of burn-out. Each was scored on a 4-point scale, independently by the two researchers and differences were eliminated by careful discussion. The higher the score the greater the level of burn-out.

The <u>Wellness</u> scale was another measure of health-related consequences developed from the qualitative data. It was developed similarly to the other qualitative scales. The literature sources which provided theoretical framework for this concept were Antonovsky (1979, 1984, 1987), Kreitner (1982), Kobasa et al. (1982), Kobasa and Purcetti (1983) and Muzlai (1984). The measure of wellness consisted of a 4 item scale, which assessed the overall wellness and well-being of the CA, viz. four ratings of a healthy life-style, adequate sleep, adequate relaxation, and a sense of meaning and purpose in life. The two researchers as-

sessed the CAs independently and disagreements were eliminated through careful discussion. Scores range from 4 to 16, with high scores indicating wellness.

The measure for Rating of General Health was taken from Garrity, Somes and Marx (1978). It took the form of a drawing of a 10 step ladder, with the steps numbered. The top step was labelled, "The best your health could be" and the lowest step, "The worst your health could be." The testee was requested to circle the number of the step on which she would place herself currently.

The Somatic Complaints scale came from Caplan et al. (1980). Eight items indicate the frequency of complaints experienced on the job during the last month, and two items explore appetite and sleep problems. The higher the score the greater the prevalence of somatic complaints.

A 4-item self-descriptive Exhaustion scale was adapted from different sources, including Karasek (1979). Responses were on a 4-point scale. The higher the total score the higher the exhaustion level.

The Depression scale was developed by Karasek (1979) and consists of ten pairs of antonymous, self-descriptive adjectives, from each of which the testee has to choose the one that describes her life best. The higher the score, the greater the depression.

A number of scales measured substance abuse. A
Smoking item was adapted from Kessler et al. (1987) and
enquired about the number of cigarettes smoked per day.
The Drinking scale was obtained from Kessler et al.
(1987); it contains two items, the first enquiring about
the frequency of drinking during the past month and the
second about the number of drinks per day, with the
score on the scale being the product of the two answers.
Pill Consumption was measured by two items based on
Karasek (1979) and Kessler et al. (1987), and enquired
about frequency of use of sleeping tablets and tranquil-
lisers.

The Propensity to Leave scale was developed from
Lyons (1971), in that the wording changed from
"hospital" to "company". It contains three items, with a
high score indicating a high propensity to leave. This
scale was the only work related consequence included
with the quantitative data, due to the large number of
variables in the study.

Statistical Analysis

As has been stated previously, the research design
was developed in complementary phases. Firstly, qualita-
tive data provided a base for developing further quan-
titative scales. These were combined with existing
measures (self-report inventory), in a second phase of
quantitative measurements. All the quantitative data

then provided confirmatory statistics for findings in
the first phase.

The statistical analysis was done, firstly, by
means of descriptive statistics, and by using a correla-
tional analysis, which indicated relationships between
the variables, but no causal effects (Bluen, 1986).

The literature review described the criticisms of
the earlier stress-health research on the basis that the
multidimensionality, or the inter-action affect between
stressors and consequences, was not captured. A second
means of statistical analysis was therefore attempted in
the present study to indicate the moderating affects of
such variables. One method of treating moderator in-
fluences is by use of the sub-group method, (Kerlinger &
Pedhazur, 1973; Kobasa & Puccetti, 1983): the sample is
split at, for instance, the median of the potential
moderator variable; correlations between dependent and
independent variables are then calculated for the upper
and lower sub-samples and tests are carried out for
significant differences between the two sets of coeffi-
cients. A significant difference is taken as indicating
a moderator effect by the variable concerned. Tests for
significance were performed by the use of Fisher's $\underline{z}$
transformation technique (Howell, 1987).

There are, however, serious limitations to this
procedure, as information and the strength of relation-

ships is lost; the power of statistical tests is also reduced because of the necessity of reducing sample size (Bluen, 1986); interaction terms cannot be accomodated either. A way of overcoming these problems is to use a moderated multiple regression analysis, which also reveals interactive effects. There is some discussion in the literature (Arnold, 1984; Stone & Hollenbeck, 1984) as to the appropriate use of hierarchical regression analysis or the sub-group methods. There appears to be some difference of opinion as to whether it can be generally applied. This opinion was supported in a study by Mannheim and Dubin (1986) where both a hierarchical multiple regression technique and a sub-group analysis were done, each contributing its unique advantage, because different relationships are investigated (Arnold, 1984).

Sub-group analysis was used in the present study. Although the moderated multiple repression technique would have been preferred, serious practical problems prevented its use.

QUALITATIVE DATA

Introduction

In this chapter a very brief summary of the data
collected in the preliminary phase will be outlined
first. That presentation will be followed by the
qualitative data obtained from interviews with CAs using
Strümpfer's (1983, 1985) model as a framework for or-
ganising the information. The use of qualitative data
allowed a rich description of the experience of the
working life of a CA to be presented. Consequently fre-
quent direct quotes from interviewees will be made; un-
less indicated otherwise, words, phrases or sentences in
quotation marks in the presentation below reflect ver-
batim quotations from protocols.

Phase 1: Preliminary Exploration

The descriptions which follow below are based on
observations and opinions of supervisors and co-
ordinators interviewed during the preliminary explora-
tion. In order to avoid repetition, this point will not
be made repeadtedly, but the reader is requested to keep
it in mind. As previously described, the preliminary
pilot study consisted of twelve interviews with super-
visors and co-ordinators, each lasting approximately an
hour. These interviews were conducted over the period of
a month. It was assumed that the views of the co-

ordinators, who each suppervised approximately 100 crew, would reflect the prevailing climate with regard to some stressors perceived in the organization and in the working life of a CA at the time of interviewing. The obtained information was considered to be a direct barometer of the crew's attitudes, as the co-ordinators had direct access to them and knew their problems. This was so especially as the co-ordinators themselves were all flying crew, and in most cases still operational although functioning mostly in a capacity of evaluating CAs performance.

Team Work and Peer Relationships

In the opinion of several supervisors and/or co-ordinators, flying crew hardly ever operate as a closely integrated team, although each person knows her place and function. What seems to be absent is a close social integration. There appears to be a splintering into "factions" and much group pressure is exerted to join in and be "one of the gang", characterised by a frivolous life style in which each person looks after her own interests. There may even be less integration since certain individuals resent being grouped with these sub-groups and prefer to act as "loners". Some crew succeed in building good and lasting relationships. For instance, this is more possible on internal flights, where the same group of people may be rostered together for a significant length of time. External flights are ros-

tered on a different pattern, with crew changing for
each flight. This factor promotes a hedonistic
"tomorrow-will-take-care-of-itself" life-style, and the
temporariness of relationships which are seen as
"hullo-and-goodbyes", where little intimacy can be
achieved, or if any is obtained it is forgotten the next
day.

Communication

The organization's communication channels were seen
to be extremely bureaucratic and full of blockages. Crew
feel that "no-one ever listens to us", and that manage-
ment do not care about them. Many feel that it is not
worth the effort of trying to voice their opinions and
no longer try, because they never see any results. Co-
ordinators are seen by CAs as being on the side of
management and that they cannot therefore trust the co-
ordinators. For the same reason there is some resistance
in using this mentoring system. This mistrust is not
conducive to building relationships or to using co-
ordinators as a communication channel. Furthermore, most
co-ordinators supposedly "mentor" 100 CAs. This is an
awesome task. Many co-ordinators are capable of estab-
lishing the close personal-relationships needed in a
mentoring system, but others are not. These factors
create a position where many co-ordinators function in a
administrative function only.

Additionally, many co-ordinators feel powerless in the management system, since the bureaucracy strangles any action that might be necessary to improve communication and they have no authority. In this way they loose credibility with crew and feel extremely frustrated and fall into a pattern of learned helplessness. Under more ideal circumstances, a mentoring system could provide close support and supervision for CAs in the work environment.

Job Satisfaction

There was a general feeling among the co-ordinators that crew are never satisfied with their lot or that they indulge in a great deal of petty bickering behaviours, often exaggerating their problems and "feeling hard done by". Particular problems that caused dissatisfaction were management attitudes, exhaustion and work schedules. Roster-clerks, who practise favouritism towards some CAs, e.g. by allocating preferential flight schedules to some and not others, is another such problem. Passenger demands were also mentioned as a problem area.

Crew appear to indulge in "venting" behaviours where they let off steam and complain to each other about these factors. They appear powerless and can achieve no constructive results. To the contrary, they tend to demotivate each other. Internal crew were seen

to be demotivated and low in morale, especially as they have been sitting on internal flights for three years or more with no hope of promotion to overseas flights. Changes in this respect were actually promised by management during the period of interviewing, but crew remained sceptical.

Interpersonal Relationships

Many relationships among crew were reported by co-ordinators as characterised by a lack of trust and a lack of congruence. Crew usually have to put on a "front", or a "face" and cannot show management or the passenger how they actually feel. Many crew do not trust their fellow crew, as the unwritten rule is, "You never tell anyone how you feel", because there will most probably be a breach of confidentiality. Numerous interpersonal problems were identified by these supervisors of CAs, regarding CAs' relationships in their personal lives, e.g. with husbands, boyfriends, friends.

Decision Making

Decision making procedures in the organization are seen as a laborious, lengthy process. A problem often takes a long time to sort out and consequently festers until it escalates again. Working life is seen as rule-bound, with little room for individual innovations or participation. Individuals are "scared of sticking their

necks out". This situation forces crew into a position of dependency, to which some supervisors, however, react with a degree of exasperation: crew were described as "like spoilt children", "everything is laid on for them". At the same time, there are matters which crew cannot deal with independently, for example when routine arrangements, like hotel accomodation in a European city, are changed. Some CAs are not able to cope with these changes and cannot adapt or innovate easily.

There is a great deal of resentment among flying crew about decisions made on operational matters by non-flying management, e.g. "Management does not under-stand what it is like to run out of water when you are up in the sky in a hollow tube with 600 people".

Another kind of planning decision that is seen as a problem concerns "career development issues". Many people feel frustrated because there is no career path or development opportunities within the rigid hierachy, "nowhere for them to go". It is seen as a dead-end job, with a short life span, unless one becomes institution-alised and "hooked in the system". However, if that hap-pens it becomes difficult for a CA to leave, even when she knows that she needs to because she is stagnating.

Effectiveness

Co-ordinators expressed the opinion that CAs feel strongly that they are not recognised for their self-worth, which lessens their self-esteem and particuarly the way they perceive themselves in the job. They feel that they are not able to act independently and are not free to be themselves. Other factors which affect their performance are related to physical and mental states which cause fatigue. CAs are seen as becoming tired and disillusioned. Working conditions also hinder operations. "Things can go wrong even before you see the passenger", for example, equipment which does not function properly, such as a service trolley missing a wheel. CAs perceive this kind of situation as adding to their load. These factors which affect performance have a cumalative effect. There appears to be a build-up in either the ability to cope or the tendency not to cope, after about three years of service. People then either "make it", i.e. they have learned to cope constructively with their stress or they begin to abuse substances, e.g. pills or alcohol, as a crutch in an attempt to manage their problems.

The collection of these preliminary data provided insights into organizational life and helped create an understanding of the CAs' frame of reference in advance of conducting the qualitative phase of the research.

Phase 2: Qualitative Study

Appendix 4 describes a range of responses obtained during the semi-structured interview. These will be summarised and presented in the present chapter within Strümpfer's (1983, 1985) model of organisational stress (see Figure 1), in an attempt to capture the CAs' perceptions of the different factors affecting their individual working lives. An attempt has been made to classify the interview data under the headings of that model, viz. the stress process, including cultural antecedent conditions, stressors, moderating variables, methods of coping and stress outcomes, both psychological and physical. Each section will be illustrated by a few short relevant cases which serve as an example of that particular variable.

Nevertheless, it should be kept in mind constantly, that real-life experience is not compartmentalised, but is the combined process of a multitude of interactional effects. Qualitative data are suited to this purpose, where the richness of individual experience is captured. As far as possible direct quotations from CAs' responses will be used in the description for illustrative purposes. The qualitative approach is primarily exploratory in nature, as a wide range of variables can be considered simultaneously, and it is not constricted artificially in a controlled experimental setting.

Cultural Antecedents

In order to understand the different precipitating conditions which are likely to contribute to the individual CA's perception of stress, it is necessary to try and understand the milieu in which they live. A number of factors emerged from the qualitative data which could foster such understanding.

Airline Subculture

Broad cultural antecedent conditions as described by Strümpfer (1983, 1985), affect all members of a culture, their values and their perception of stress. Some special conditions especially relevant to CAs were however identified, using that occupational group as a subculture or, more broadly, the airline environment as a subculture.

Some such factors are based in the airline subculture, which has some of its own strong codes of behaviour. It even has its own language, a very closed form of slang, incomprehensible to anyone who is not part of the flying crew or subculture. A very strong airline identity is created for flying or operational crew, which is different to that of the formal airline organization. There appeared to be a strong pull towards crew loyalty in issues "where we all stick together", e.g. "against management". Obviously such subcultural

"separate development" will have a certain measure of social isolation as a side-effect.

Some CAs are capable however of establishing and developing good relationships, either on a short or a long term basis. Generally the impermanence and super-ficiality of relationships can be linked to the tran-sience in life-style of the CA.

Transient Life-style

Toffler described transience as "a condition in which the duration of relationships is cut short" (1971, p.51). Transience arises due to a "temporariness in everyday life. It results in a mood, a feeling of imper-manence" (Toffler, 1971, p.79).

The life-style of CAs is characterised by tran-sience and lack of permanence due to their work schedules and fast pace of life with many stop-overs in different cities ("I always wake up in strange hotel beds"). This transience is a factor common to both ex-ternal and internal flight crew. Some CAs carry personal photographs; one CA actually carries around a bed shawl in an attempt to make her environment more permanent, so that hotel rooms do not seem strange; the strange space then becomes her space, which is secure, familiar and consequently create a sense of permancence.

Toffler described the state of transience as affecting a person's ability to manage relationships with people, things, places, institutions and organizations, as well as the ability to manage ideas and information flow in society.

CAs have a wider range of experience when compared to ordinary people who do not travel and live ordinary suburban lives, e.g. "I'm going to buy my shoes in London, and have my hair done in Frankfurt". This style of life appears glamorous to the public, but there is no understanding of the immense difficulties and adjustment that the CA has to make to cope with all the problems related to transience in life-style. Simple things, like building up a home, watering potplants, having pets or paying bills, can escalate into vast problems, while the CA is away.

Social relationships of CAs is another aspect which is effected by transience and impermanence. CAs appear to experience many difficulties in developing and maintaining the kind of social support that they appear to need in order to function effectively. An interesting paradox exists in that CAs, as indicated above, are seen as living a glamorous life-style and that they themselves are beautiful, with plenty of men friends and generally having a good time; yet, many CAs reported the inability and lack of opportunity in "finding the right guy", or "meeting someone decent". Many reported the

difficulty in developing a relationship, as boyfriends are susceptible to the social stereotype about CAs and believe that when they are away they are "loose", "out for a good time", which cause the men to become jealous and demanding. In reality, many CAs appear very lonely and are in desperate need for meaningful relationships.

Transience in life-style also appears to interfere with many CAs' decision making abilities, for example some find it difficult to make permanent decisions about matters like buying a house. There appears to be a predominant "here today, gone tomorrow" attitude. Most CAs reported difficulty in setting personal goals, short or long term. They generally do not seem to know where they are going and feel as if they have little real meaning in life.

The seemly glamorous life-style of a CA attracts many young girls at the age of about 18 years. CAs expressed the opinion that many young girls are not equipped to deal with the reality of this kind of life. Life in the airline often matures them quickly as they learn from bitter experience; otherwise they succumb to group pressure from "hardened crew", many of whom have emotional and adjustment problems and have become part of the swinging crowd and prone to all the bitter consequences. Many CAs feel that young immature girls are caught in this trap and do not have sufficient resources to cope in these situations, for example, "What does a

young girl from the 'Free State' do ...? She quickly be-
comes part of the crowd".

Another factor which arose and which can be ag-
grevated by the life-style of the "partying crowd" are
risk and safety issues concerning the AIDS question.
Some CAs indicated their concern over AIDS. Indications
were that most CAs were reluctant to talk about it, al-
most denying that it was a possible risk. There did not
appear to be general openness or a knowledgeable climate
in this regard, as is often the case in a threatening
situation.

People who experience transcience tend to lead a
fast pace of life, where people, ideas and organization
structures all move rapidly and get used up quickly.
This means that CAs have almost an insatiable appetite
for novelty and fast moving systems. Many of the
frustrations that CAs experience with management result
from a clash arising from differences in style. The
management system, as previously described, is the an-
tithesis of a fast moving system.

In conclusion, it should be noted that, for some
CAs, there are also eustressful aspects to their life-
style. Some CAs do enjoy the novelty of their life-
style, including, in the case of external crew, strange
and exotic people and places. These attitudes may be re-
lated to a sense of adventurousness, sensation-seeking

and personal automony.

Sex Role Sterotypes

Another stereotype which forms part of the set of
cultural antecedents relates to the role of women and
work. The CA is essentially viewed, almost tradition-
ally, as a young, single girl, who will be in the job
for a limited time span, who will then leave the air-
line, settle down and have a family. Such pressures
relating to this sex-role are in common with society's
traditional view of the women as the nuturing care
giver. Many CAs experience pressure in this respect to
become "normal" and "settle down" and not develop a
career. In reality, it appears that a significant number
of the CAs have career aspirations, as well as having
taken on more domestic responsibilities, either in
relationships with live-in partners, or with family
demands. In this respect they are following a similar
trend in society, where working women are able to func-
tion both as homemakers and develop careers. Some CAs
have domestic support, which takes some of the pressures
off their more traditional role of wife and/or mother.
Like other dual career women in other occupations, many
CAs however still experience pressures in this area.

Stressors

Individual Stressors

The literature review in Chapter 2 examined the different aspects relating to the subjective experience of stress. It is clearly evident from the responses obtained from the interviews that some CAs experienced particular stressors to a greater or lesser degree as negative, whilst others managed the same stressor and did not subsequently experience it negatively. Again, there appeared to be evidence of both eustress and dystress as discussed in the literature, where some CAs thrived on stressors which caused dystress to others.

It becomes evident when taking all these differences in perception into account, that isolation of stressors from the individual experience of the CA is artificial and could be misleading. However, the qualitative data collection was an attempt to reflect the feelings and experiences of CAs, by using a process framework in presentation which indicates the interdependence of all the variables in the stress process. The stressors identified are not an objective evaluation of stressors, but reflect the personal experiences of the individuals, i.e. the way they feel.

The number of stressors described by CAs will be described and discussed in the subsections below.

Work schedules

The work schedules and non-routine working hours that are parts of a CAs job, affect their life-style and are, furthermore, regarded by many as abnormal. Some CAs see themselves as "normal people doing an abnormal job". These abnormal factors arise predominantly from the work schedules that CAs work in, where they feel "out of synch" with society. One such factor is the fast pace of life which affects relationships, where friends are left behind, as there is little time for maintaining relationships. The impermanence of their life style is also contributory and results in demands and pressures which CAs experience, in the attempt to live a "normal" life, where they are able to have a sense of meaning and self-worth. Again, some CAs see themselves as different and positively enjoy doing "their own thing". Many such CAs are loath to "do things the airline way", and disassociate from friendships within the airline, and usually bend the rules to maintain their independence.

The work schedules that CAs work under and the resulting demands and expectations arising from these time pressures, are perceived as stressful. CAs appear to be pulled in many opposite directions. In dealing with passengers, time is usually very pressurised and most CAs feel that there is not enough time to serve passengers properly. This leaves passengers feeling as if they have lost out, and leaves CAs feeling as if they

stress. As mentioned earlier, the present study was temporarily halted at the initial stages due to the occurence of an air disaster, which fatally lost all passengers and crew. At the time the present author felt that this disaster constituted an additional reactive stress element, which might bias the results of the study, since the focus of the study was the perception of everyday stress in the lives of the CA. However, actual interviewing occured after a three month break and altogether the reseach was carried out over a period of six months.

It became evident from some responses gained from CAs that they had not come to terms with the air disaster, the sense of loss of friends, as well as fearing potential risks for themselves ("my palms still sweat"). Generally, most CAs appeared to be coping with these factors on a superficial level, but the fact that a number of CAs reported the presence of such anxieties does indicate the pressence of a feeling of being at risk and therefore affects their perception of stress. Evidence gained from the literature would support this view (Dunn, 1986; Green, 1985; Kilpatrick & Brunstein, source unknown; Rhodes, 1985). Some CAs feel guilty that they somehow made it and others did not. Some CAs felt that they were still unsettled but would not tell management. Some CAs stated that if a choice had to be made in an emergency situation, they would choose self-preservation first. Such statements reflect that some

CAs need to deal with unresolved issues, which are
clearly aggravated by motivational problems. Indications
are that support programmes need to be conducted on a
follow-up basis to ensure that the mourning and adjust-
ment process has been allowed to run its course.

There also appeared to be a general awareness of
risks related to emergencies. Airline disasters occur
world wide from time to time, but a local one, as
described above, keeps this awareness alive. Evidence
seemed to indicate that this set of variables con-
tributed significantly to burn-out amongst CAs.

Equipment

Many CAs perceive the condition of equipment on
board the plane as being important to their perception
of stress. Working with broken equipment, for example,
is seen as a strain. One CA said: "You've got to perform
a first class job with second rate equipment".

CAs frequently reported working with equipment that
was not up to standard. Firstly, the ease of their job
was affected, e.g. working with broken bar trollies is
cumbersome; secondly, shoddiness effects their profes-
sional image, so that they feel non-professional and em-
barassed.

Role Conflict

Role conflict emerged as a significant source of stress for many CAs. These constitute the different pressures, demands and expectations that are directed at them and which are conflicting at times.

CAs' perception of stress arises out of the fact that their function is primarily service-oriented. A number of stereotypes about CAs are held by both management and the public. CAs are seen as a "pretty face", "good time girl" even a "flying mattress", where their function is to cater for the passengers needs on an individual basis. CAs feel caught in a number of contrary expectations.

Firstly, they are treated as a stereotype by passengers. While they are usually seen as a "pretty face", a significant proportion of them are highly qualified and have "plenty of brains". Many CAs have some form of post-matric qualifications and several participants in this study held professional qualifications, e.g. teachers, nurses, lawyers, a micro-biologist, a horticulturist etc. Many are in the process of studying for a better qualification. The fact that they are intelligent and are often highly qualified makes it difficult for them to function in a subordinate service capacity, where they are treated as "nothing better than glorified waitresses". They resent being treated as stereotypes by

passengers and consequently have difficulty in giving "personalised" service to the passengers. CAs are expected to serve passengers and cater for them individually, yet cannot do this as they are caught in binding traps, where their self-esteem is lowered. Many CAs feel that they "have not got space" for themselves.

Secondly, CAs experience conflict concerning role expectations on the part of management. While they feel that they can think for themselves, management keep them rule-bound by job procedures and a hierarchy of command. Furthermore, CAs function in a service capacity where they are required to give passengers individual attention, yet management does not care about CAs' needs. CAs find it difficult to give special attention to passengers when they themselves are treated as anonymous numbers, with little actual care about their personal needs. One example of a conflict between management's requirements and CAs' needs centres around the expectation that CAs should look good and attractive, with punishment if they put on weight. Yet no special attention is paid to their dietary needs; even the staff canteen which CAs use when on standby does not supply healthy, weight-conscious food. Consequently, they seem to survive on an ill-balanced diet.

Role Ambiguity

A clear job function exists for CAs, however, role ambiquity in other areas causes a certain increase in the perception of stress levels amongst CAs. A number of situations arose which are either perceived as stressful or are perceived as increasing the number of stressors that a CA has to carry. Such situations make a CA feel uncertain and unable to predict the outcomes of a situation and consequently feel either helpless or not in control of the situation. Examples are passengers being unpredictable or "difficult". Management are seen to be slow decision makers, with no action resulting; "We do not know where we stand". CAs appear often to experience difficulty in planning ahead either in personal life, because of problems with the rostering schedule, or simply knowing which clothes to pack (e.g. winter or summer) when waiting on standby. It would appear that this factor does pressurise some who are already under stress. The vast majority of CAs stated that flexibilty and adaptability in the face of uncertainty was crucial for survival in the life of a CA.

Subordinate Service Role → Serving Passenger

The SSR is another area of role-related stress, although, as previously described, the SSR alone is not necessarily perceived as a stressor. There are many positive aspects to it too. CAs describe their tremen-

dous feelings of satisfaction when they have helped
passengers in a service capacity, for example, many CAs
gained great reward from the fact that they were able to
help the passengers have a "good flight". "After all
they have paid a lot of money for their ticket and are
entitled to good service". Many other CAs were positive
about their ability to be professional in their service
duty, and were able to see to the passenger's needs.
They prided themselves in being able to give passengers
"extras" and sometimes even bend the rules towards this
aim.

On the other hand, there are also many stressful
aspects to the SSR. From the responses it was apparent
that conflict starts to occur when either the CAs
resources to cope begin to diminish or she is caught in
conflicting sets of expectations between management,
self and passengers. Many CAs identified a number of
conflicts that arise from a clash of expectations that
the SSR may subject them to.

The first of these are inter-sender conflicts which
arise when the lack of management support is perceived
as a stressor. For example, in cases when passengers
complain about a CA's service, management are felt to
support the passenger in the first instance. Many CAs
consequently feel at the mercy of passenger's compl-
aints, while management expected certain behaviours and
performance, which were perceived as stressors by many.

<u>Passengers expectations</u> are another source of SSR
conflict for the CA. Passengers expect service from CAs
and attention to their individual needs. It is apparent
from CAs' responses that they experiece difficultity in
this area. Firstly, the procedural systems and time
pressures on board leave little room for catering for
individual needs. Secondly, CAs themselves have few
resources to cope with demanding passengers. They appear
to cope often in a defensive way (cf. section on
Coping). They feel that they often have to "smile", "put
on a face" and consequently cannot be themselves. One CA
described how she cannot hold her smile for thirteen
hours, which is what she told a passenger who wanted to
know why she was not smiling. Most often CAs cannot ex-
press their feelings of anger directly at a passenger.
Part of the unwritten service contract is that the pas-
senger is always right, no matter what one's own feel-
ings are. A CA complained that passengers treat her "as
if they have bought me along with the ticket", while
another felt that, "I am at their mercy". CAs often feel
that "I can't be myself", "I don't have any feelings of
self-worth in what I do". CAs thus appear to be caught
in a number of conflicting demands from passengers and
management which are contrary to their own needs.

Two examples of passenger behaviour could serve to
illustrate the level of stress which they sometimes gen-
erate.

* A CA told about a young man on an overseas flight who was continually dissatisfied with the service, nothing given to him was acceptable. He ordered breakfast, then did not want it, because he wanted brunch instead. He had ordered Kosher food but now wanted ordinary food. The flight was full and he was being excessively demanding. He finally became abusive and swore at the CA, who retaliated by saying "I hope you have a good lawyer" and thus did not feel helpless.

* Another CA related a bad passenger incident where an unruly passenger, after repeatedly being obstructive by bumping a tray of glasses and ordering her around deliberately, urinated on the floor when he went to the toilet, which she then had to clean up.

Other comments made by CAs concerning passenger difficulties can be seen in the following examples. Friction between crew can have a ripple effect and passengers can sense any tension. Another CA felts that she needed to make extra efforts to understand passengers, as "they change in the air, and become excessively demanding, perhaps because they're anxious about flying". Yet another CA described how "people watch you all the time, you've got to learn to prepare yourself mentally and be able to smile and mean it". A CA related incidents of having to deal with tense passengers who cannot smoke because of the ban on smoking, or with boisterous rugby teams, or with passengers who do not

realise that she is only doing her job when she tells them to put up their seats or fasten their safety belts. Another comment made describing difficult passengers was: "They treat us like dogs", "I feel burdened and pressurised by passengers", "there is no privacy on board", "the customer is always right". Another one said that she did not like being blamed continually for things that go wrong on the airline, for example, flight delays. It was then not surprising to hear a CA say that she would get on board with an attitude towards the passengers where, "They must just sit there and not even eat ... I want to bite their heads off", while another one described passengers as "scumboards on board".

Another source of inter-sender conflicts develop when expectations relating to the <u>demands of the home situations vs. those of the work situation</u> arise. These occur in personal relationships found in the CAs immediate emotional and social support system, e.g. husband, lover, boyfriend, family and friends pulling against work demands. The CA primarily believes that her set of work stressors and experiences are unique, so that anyone who does not actually work in the airline, cannot understand them. This includes husbands and boyfriends, e.g. "When I get home at night and my boyfriend asks for a cup of coffee, I burst into tears. He hasn't realised that I've served 600 cups of coffee that day. He thinks I'm just having a good time".

) S-S is it helpful -o must understand the situation

Other demands and expectations which stem from a
domestic environment often conflict with those from the
work system. Examples often concerned the different work
schedules that the CAs were subject to; these will be
dealt with under the section of job stressors. However,
they affect relationships in that CAs perpetually felt
as if they are walking a tight rope between having to
fit in with the needs of loved ones and the routines of
the organization; they often felt as if they let down
friends or loved ones in their own circle. "I've got
used to the fact that I've always got to do the
telephoning" (to friends). "Friends eventually give up
because I'm never there when they want me".

The person-role conflict of the SSR was clearly
depicted in the qualitative data. As indicated above,
many CAs are highly qualified and find it difficult to
be subservient to people of lower status. They ex-
perience inequality dillemas and find it difficult to
stick to the motto of "the passenger is always right",
and smile genuinely on demand. The following example is
of a CA who loved working with people and enjoyed posi-
tive feedback from passengers. The work itself was mun-
dane yet she felt satisfaction, especially when working
with business class passengers: "They know what they
want". "The customer is always right, even if I think
you silly b... I will still serve him.

CAs sometimes express the difficulty in displaying congruence of <u>feelings vs. behaviour</u> in the SSR, often resorting to "hiding themselves, behind a plastic smile", or behind the regulation uniform and dress code. CAs often felt as if they were constantly on display: "All those eyes watch my every move".

Another aspect of the SSR was also in evidence, viz. <u>conflict over territory</u>. Passengers are kept in their place by CAs creating private space or territory for themselves, e.g. in the galley area which is normally out of bounds for passengers. A few "favoured" passengers are allowed into the space; however, extra-demanding passengers are sometimes invasive. Some CAs use control over passengers to hold their position or territory. For example, one CA feels strongly in control of passengers because "You're in power. They're in an alien environment and look up to you and depend on you. You've also got a uniform".

The following are summarised cases illustrating aspects of the SSR concept. They are presented to give the reader a flavour of the contents of protocols.

Person 1. She sees herself as a "loner", she does not trust crew and does "her own thing". She enjoys her passenger contact, and states "that right from the very first moment you must make them realise that you are going to give them service and be nice to them." There

must not even be the slightest negative vibe or they will pick it up and give trouble." CAs need to know who they are as people. She sees her experience in the airline as helping her mature. A quality she feels that is important is flexibility: "One day a `hostess' next day a galley slave."

Person 2. She feels that she used to be so nice to passengers, but now (although she is never rude) she can no longer smile. She feels "ratty" and tired. She has a supportive husband, and has a "flying buddy". She is, however, becoming more alienated from the passengers. She has no time for management and has problems with her roster clerk. She has a slight weight problem. This is an example of a CA who was beginning to sucumb to burn-out.

Person 3. She feels that passengers can make or break a flight. She feels that management and passengers do not recognize her worth, but she does not feel helpless. She enjoys standing up for herself; however, she cannot let her anger out on the passengers. "I sleep things off", "withdraw", or "it comes out in my skin and colouring".

Person 4. She has a very firm sense of direction in her life. She knows what she wants and gets it. She has, at times, really had to do "dirty" work, helping people

with personal ablutions in the toilet for example, or has had to deal with drunken passengers. One incident involved having to handcuff a drunken passenger after he had tried to open a window on a 737 jet whilst in mid-air.

Organization Stressors

A number of demands and expectations originated from the management control system. Many CAs appeared to be negative towards management, resisted any management plans or efforts and could see little good in what management does. The attitude was demonstrated in the resistance that CAs expressed towards the Golden Plume Award, which was devised as a performance evaluation and feedback mechanism by management; without exception, CAs were negative and critical, feeling that it was an inadequate method of measuring their worth. Generally CAs felt that management had certain expectations from them with regard to performance and service, yet management did not show concern for them or their welfare. Two illustrative comments were: "They never listen to me" and "We're told that if we do not like it we can leave".

Complaints about both bottom-up and top-down communications occurred frequently. Comments to the effect that "They never listen to us", were heard over and over. On the other hand, a CA said that management talk about "you people", which alienates crew even further.

The same CA felt that crew are treated as children and negative feedback at briefing sessions is generalized and never specific, so that everyone is, for example, made to feel like a thief.

Many CAs felt the need for a career path or development and were involved in some kind of extramural study, in an attempt at self-development. They felt that their working life in the airline was not limited to a natural cut-off point and a short life span, after which they would leave and settle down to have a family. Such CAs experienced tremendous frustration due to the fact that they were qualified and formed part of an extremely valuable resource pool for the airline. Yet, they felt that they had nowhere to go, other than promotion within the bureaucratic channels. Promotion is presently viewed as not based on merit or performance, as the organization is viewed as part of the civil service where promotion is gained by length of service. In addition, as was pointed out earlier, promotion is typically only to coordinator or supervisor positions, with positions elsewhere and higher up in the SAA being held by people outside the ranks of flying crew.

CAs acknowledged the rules within the formal system of the organization, yet many were able to "bend the rules slightly" for their own purposes, usually in passengers' interest, or to make something work more efficiently. Rules are made by management in a paternalistic

way and little responsibility is given to CAs. CAs
expressed the feeling that they were treated like
children, and it would appear that many then acted out
or misbehaved as children would.

Additionally, the reporting hierarchy is rigid. CAs
are not allowed to control passengers in situations as
the need arises, but have to rely on their seniors.
However, it appears that CAs often do not have respect
for the senior whom, they feel has not reached that
position due to merit, but due to the bureaucratic
promotional system.

Many CAs felt that the management system is
bureaucratic and stifling, where decisions are pondered
over and usually little or no action is evident. CAs
feel that they consequently do not know where they
stand. CAs are expected to stick to the rules and not
think for themselves. This conflicts with many CAs need
for development. CAs are then forced into the role of
the "brainless, pretty face", and have little respon-
sibility. An example from a CA regarding her feelings
about management was: "They're a dead loss, it's like
talking to a brick wall".

The perception of the airline as a semi-government
civil service bureaucracy was yet another stressor.
Administrative staff were viewed as slow-moving, bureau-
crats, who lack initiative and who are frightened to

risk bending the rules even slightly. The organization was viewed as a "system" which grinds along with little creativity. CAs did not see themselves as part of that system. Much time is spent venting their frustration and anger at "the system", "management". There are situations which naturally create the opportunity for such "management bashing", as for example when external crew stop-over at the Ilha do Sal (for up to ten days in a stretch).

Ostensibly these stop-overs are resting periods for crew; however, it would appear from reports of the vast majority of CAs who have had such experiences, that most of the crew are bored and frustrated during this time. Crew indulge in a "Sol-bitch" and set up a vicious cycle of venting frustration and anger which cannot be directed constructively. The only people who may enjoy the time at such stop-overs are the "loners", those who like running long distance or scuba diving. Often CAs would appear to "enjoy" themselves, but are in essence indulging in escapist activities of long rounds of parties and drinking sessions. It would appear from reports that, in these circumstances, CAs would welcome constructive activities which they could find meaning-ful.

<u>Reactions</u>

Reactions to stressors, as represented in the
model in Figure 2, could not be elicited clearly in the
interview situation. The general adaptation syndrome was
actually represented by many sequences of long-term
adaptation described by CAs and mentioned in other con-
texts in this chapter.

Short-term fight-flight reactions were reported
by many CAs, as physical feelings of nervousness at
take-off and landing, e.g. sweating palms and palpita-
tions. However, in the longer term, most CAs habituate
to these daily experiences, repeated over and over. In
the aftermath of the disaster mentioned earlier, these
feelings were, as could be expected, exacerbated by
thoughts of friends, acquaintances and others involved
in the disaster, anecdotes about disaster, etc. Such
crew were not passenger-orientated, and were so self-
involved that they would not be able to react adequately
in an emergency. "If it was between a passenger and me,
I know what my choice would be".

Their transient and impermanent life-style pulls
strongly towards a hedonistic approach to life. The air-
line subculture has geared itself towards this end.
There is a strong emphasis on the "good time",
"partying" and living life moment to moment at a pretty
fast pace. Again paradoxically, many CAs reported that

this was not how they perceived themselves. They were

longing for direction in life. Some withdrew totally and

perceived themselves as loners in an attempt to dis-

sociate and not to get drawn into the hedonistic value

system. Numerous stories were told about the pitfalls

that this life-style brings and the cost that the CA has

to pay. Extreme loneliness, dependence on alcohol and

drug abuse, as well as promiscuity, appeared the most

frequent consequences.

Moderator Variables

Strümpfer's (1985) stress model identified a number

of conditioning or moderator variables in the stress

process, that have an influence on stress perception and

stress outcomes.

A very important conditioning variable that emerged

from the investigation was the social support that the

CA receives or needs from domestic sources, her co-

workers or the management and supervisory systems. For

instance, when CAs are battered by both passengers and

management, good crew relationships sometimes provide a

source of substitute support. A "flying buddy" system

appears to operate where two good friends are able to

schedule their flights so that they can fly together.

This system appears to give much support to the dif-

ferent individuals, as well as some kind of permanence

in relationships. The concept of social support has been

well researched but does not fall into the immediate parameters of this study. The study conducted by Porter (1988) investigated this area throughly for the same sample.

The focus of the present study isolated the influence of personality characteristics, viz. potency and hardiness which were measured in the quantitative analysis. Antonovsky's (1979) description of the characteristics of SOC was described in the literature review; clear indications were obtained from the interview data that the "copers", as opposed to "non-copers", all fitted into a particular style of functioning that could be summarized within the SOC framework.

Many of the responses obtained from the qualitative data related to wider issues, e.g. finding meaning in life and society. Clearly these "copers" all comprehended some clear direction and meaning in life, experienced their lives as manageable and were able to structure their lives in terms of what they experienced as meaningful. Planning elements in day-to-day activities were seen to be essential. Findings from the qualitative data thus indicated that the sample contained a large number of people with elements of a strong sense of SOC (Antonovsky, 1987).

The need for obtaining wider perspectives in events was emphasised. This was especially seen to be important

when dealing with management, "Don't become petty", "Know how to play the system", "Be nice to your roster clerk, then he will be nice to you". These copers do experience the management system as irritating and a "waste of time", similarly to the non-copers. The difference between them was that the copers "make things happen their way", and slightly bend the rules, whereas non-copers appear to become overwhelmed and immobilised by accumulating stressors.

CAs with these characteristics appeared to have a tremendous sense of challenge in being able to deal with any obstacles that confront them, either difficult passengers, management systems, or personal problems in their domestic lives. They appeared to take a hard knock, then bounce back.

The point being made is that copers and non-copers experience the same stressors, yet copers succeeded in managing this stress constructively. They do experience stress but they moderate the negative outcomes. They seem to be filled with determination and a positive frame of mind that helps them manage most situations in life, and at the same time have the resources to help cope in this situation. It was also clear that even "copers" can become over-stressed and burn out, especially if their resources diminish; they then move towards the dis-ease end of the health continum.

The following cases illustrate how some CAs use moderator variables to deal with stress and reduce some of its consequences.

Person 5. Passengers give her feedback. She feels that "if I smile I win". Her greatest reward is in her passenger relationships. She views these as a personal challenge, "If you're nasty, they're nasty back". Her job affects her personal relationships as she is never at home, so she has become a "loner". She has a very close support of family and intimate friends, whom she views as critical for her "survival".

Person 6. She still finds passenger relationships rewarding, even after five years of flying. She feels firmly in control, with an air of confidence about her-self and her life. She flies with her husband and gains tremendous support from his companionship. She enjoys her job tremendously and gets a challenge out of pacify-ing difficult passengers.

Person 7. She experiences a number of job pressures but they do not get her down. "I've got perspective, if there is a problem I sort it out". She feels clear about her responsibilities: "You know what is expected of you". She takes full responsibility for her actions: "You've only got yourself to blame". She feels that it is important to keep control of the passenger relation-ship and does not take rudeness personally. She actively

plans her life, looks after her health (she is a vegetarian). She takes measure to combat exhaustion "after I get back from an overseas flight I'm exhausted, the depth of exhaustion is incredible, but I become revitalised". She exercises regularly.

Person 8. She feels that she can handle any stress. She feels that she is always straight-forward and honest in her dealing with passengers or management. She has some problems associated with dress and hair regula-tions. She is aware of the need for a healthy diet and exercise, but feels that her eating habits are irregular and unhealthy. She feels that most things depend on her.

Person 9. She values the appreciation for small services that she gets from passengers. She experiences the pressures and cannot give the quality of service she feels is necessary. She has a close relationship with her flight co-ordinator. She also feels that she is very accepting and that it takes a lot to upset her.

Person 10. She feels that she can cope with most people and most problems. It is important to "win over" difficult passengers because "they could ruin your day". She feels definitely in control of her life but feels that she needs more self-discipline. She feels that she has gained a lot of confidence because of her passenger contact. "Motivation has to be in my mind".

Person 11. She feels that everything depends on how she feels inside. Her confidence is growing and she feels that she can handle things in a more mature way. She was initially super-sensitive to passengers and fellow crew members but, "Now I've got an identity and I do not take things personally." "My job does not measure my worth, but there are other compensations, like novelty and fun! One needs a life and friends outside the airline but sometimes I feel like a stranger in my own home in my time off ... that must be stress".

Coping

CAs utilize a number of different methods of coping to deal with the different stressors that they experience in their working lives. Perception of the magnitude of these problems appeared to be related to whether the CA found that she was coping or not coping in her life situation. Non-copers appear to be living moment to moment, "I haven't time for anything, not even myself", "I always seem to be packing a suitcase", or "I'm always in uniform, or putting on a face (make-up)". Copers appear always to be planning and organizing their lives.

It must be pointed out that a number of CAs whilst experiencing the same stressors, used their own initiative and creativity by "playing the system", in other words, finding ways and means to achieve their goals, or

bending the rules slightly. Much activity took place in the informal section of the organization, where in fact some CAs could "play" in the crawlspace of the organization, similarly to the way Ingram (1986) described and which was explained in the literature review.

The notion that ordinary people do not understand the demands and pressures that a CA has to cope with, can eventually lead some CAs to associate only with airline personnel. They then become caught in a closed system where they have no friendships other than airline people, "talk only airline talk" and begin to feel strange and out of touch with "ordinary" members of society. Additionally, many CAs realize the trap that they have become embroiled in, feel themselves institutionalised and feel helpless because they have become so dependent on the airline.

The other aspect of this conflict is that they often perceive airline personnel as incapable of having deep and meaningful relationships; so they become very frustrated, as they do not receive the kind of social and emotional support that they need. There were many reports of superficial relationships between crew which were characterized by lack of trust and little support, for example, "they forget about you as soon as they loose sight of you"; "I thought that we were close on that flight, but she does not even remember my name"; "I will not tell them anything personal because they will

not keep it secret". In some cases personal loyalty was
apparent, where meaningful relationship have been
created. However, even this group cohesion appears to be
limited as the relationship between crew members is
usually weak.

Strümpfer (1983, 1985) identified transformational,
therapeutic avoidance and regressive coping mechanisms
which have an effect on the stress outcome. Clear ex-
amples of these classifications were obtained, and will
be described in the following sections.

Transformational Coping

Among some CAs there appeared to be a strong focus
on making things work by using initiative, despite
obstacles. A great emphasis was placed on flexibility
and adaptability in situations. Furthermore, it became
evident that "copers" were involved in a hectic social
life outside of the airlines and were involved in
numerous activities whether they were health enhancing,
e.g. jogging, sports or other regular exercise, or com-
mittee activities. Many CAs embark on health enhancing
activities, e.g. by eating healthy food, sitting down to
a table and eating properly and not grabbing something
from a fast-food outlet. Many had numerous hobbies. In-
terestingly, all CAs experienced the same stressors, yet
the "copers" manage their lives to the extent that they
can include all these activities which enrich their

lives, they "make time".

CAs who have developed this healthy style of coping predominantely have the ability to reframe the stressors that they encounter, where they have such a positive or pro-active style to life, but they feel that they can manage anything. They hardly ever "let things get me down". Some CAs use the same style of cognitive restructuring in dealing with loneliness, where they would look upon their "aloneness" as being free to live the lifestyle they choose.

Many CAs identified the use of humour as a tension release and a way to cope. Witticisms, making and telling jokes and even sarcasm to fellow crew were described. A CA said: "You've got to laugh, you can't cry."

Some ways in which CAs deal with passengers could also be classified as transformational coping. Some CAs consiously use body language and eye contact to control problem passengers. Many CAs will take great effort in giving extra-special attention to passengers and feel a great sense of reward from transforming a difficult passenger into a satisfied one. The service aspect and their expectations of what service includes, often give CAs a feeling of self-satisfaction and reward, reward and feedback which they feel is non-existent from the management system. "I've had a good flight if the pas-

sengers are satisfied", "I get tremendous joy from the passengers".

Therapeutic Avoidant Coping

Some CAs begin to realise when they are not coping, and then begin to use strategies to help themselves in situations. For example, CAs who are tired of passenger contact try to arrange to work in the galley so that they cut down on passenger contact. "I'm so tired of smiling a plastic smile". Another way of cutting down pressure occurs when CAs will limit their service and walk down an aisle with downcast eyes thus avoiding demanding passengers.

Another form of therapeutic avoidance occurs when CAs disassociate themselves from airline contact and friendships, and only foster friendships outside the airline.

Regressive Coping

Clear symptoms were identified which indicated when CAs were not coping. The literature review described patterns of non-coping and how they can develop into progressive stages of burn-out. A number of such cases were identified during the interviews and the CA was then referred to a medical practitioner or psychologist. None of these CAs would approach management. Usually the

first approach that the interviewer would use with such CAs, was to ask them if they had spoken to their co-ordinator at any stage; the usual comment received was "I won't speak to management, they do not care about me". Clearly these individuals were struggling to keep abreast of life, but had diminished personal resources and no support programme from management.

The examples as described in Appendix 4 indicates a wide range of behaviours. Taken singly, these behaviours constitute regressive coping mechanisms, but collectively they demonstrated some stage of burn-out in individuals. The assessment of the interviewers rated a considerable number of people who were in the process of burning out.

It becomes evident from a number of responses that the more tired and stressed a CA becomes, the more she withdraws from passenger contact: "I can't smile anymore", "I hate the passengers now, I never used to and this upsets me", "I hide in the galley". This lack of achievement and lack of job satisfaction, together with absence of valid feedback from mangement, leads to feelings of low psychological success amongst many CAs.

Some of the individual symptoms are seen in feeling tired, exhausted or bored, withdrawal and alienation, blaming behaviours and not taking responsibility for things and frequent crying spells, swearing, and even

verbal abuse towards passengers and management. Mildly self-destructive behaviours were described, e.g. not wearing make up when off duty because "I'm so tired of putting on a face". CAs frequently reported indirectly the presence of alcohol and drug abuse; very few claimed to be users but elaborated in detail about how "others" indulged. A number said that they had used drugs and alcohol as an escape in the past.

Another form of regressive coping, reported by a great number of CAs, occurs when a CA is unable to express her true feeling and wears a "mask or a plastic smile" and "operates in remote control", mechanically doing her chores. She then has little sense of fulfilment in anything, reduces her contacts with people, in general, and has even fewer meaningful relationships, in particular.

In addition to psychological withdrawal as described above, behavioural withdrawal in the form of absenteenism is a rather prevalent form of regressive coping (Rosse & Hulin, 1985). Some CAs will also avoid work and frequently become absent without leave. Others manipulate the system by using sick leave in lieu of ordinary leave.

The following cases illustrate coping behaviours used by CAs in dealing with stress:

Person 12. She has a fatalistic view on life. She seems to go through stages where stress "gets to her". Then she feels nervous and tense, her performance is affected. She becomes less open, more aggressive and unfriendly in her relationship with passengers. When she is like this life on the "outside" (i.e. not in the airline) is difficult. She tends to withdraw from others because "everything is too much effort", and it all "depends on me". Yet she needs personal attention and some sort of security. She feels insecure in her life. She feels in control of herself at times, but verbalises the need for "support" in the organization. At times she eats badly, junk food, but is aware of the need to be health conscious; she tries to go to gym, but cannot always.

Person 13. She has a supportive husband, but he has a demanding job, so she values the independence that she has in her airline job. She feels that her relationship with the passengers is set by her "no nonsense" attitude. She uses her wedding ring as a shield against unwelcome advances. She enjoys passenger contact and likes giving them "value for money". She would like to use her professional skills (acquired before the airline service) but feels caught because she cannot apply them, due to management's bureaucratic rules. She feels that her health suffers because of fatigue, e.g. her skin suffers, her feet swell, weight is a problem. Menstrual problems also occur. She feels that she has erratic

eating habits due to her life style.

Person 14. In order to cope with her pressures, she uses a coping mechanism which she describes as: "I put myself on automatic". She does not like having to behave in this manner. She feels confused about some of her goals in life and would like to have a career path. She feels that she has no patience with passengers and some days she is nervous about flying. She blows her top when she gets angry and fellow crew have learned to keep out of her way. She thinks that she should leave, because the job is unhealthy and has affected her skin, sleeping patterns and eating habits. She cannot leave the airline, however, because she feels caught up in the lifestyle.

Consequences

Strümpfer's (1985) model lists physical and psychological consequences of stress. Outcomes of stress can occur in a short term or a long terms basis. The latter includes diseases of adaptation described by Selye (1982). It must be pointed out that the health-related symptoms identified were based on the self-reports of CAs, and no objective medical data were included. There was no way of verifying or even identifying severe diseases of adaptation of a physical nature.

<u>Psychological Consequences</u>

Numerous CAs reported feeling apathetic and list-
lessness, where "things become too much", or "I can't be
bothered to make the effort". Likewise they become immo-
bilised and find decision making difficult. Some CAs ex-
perience little control over their lives, feel as if
management or the "roster clerk rules my life". They
feel that they are useless and see little meaning in
their existence. Many CAs reach the stage where they
realise that they are not coping and make attempts to
help themselves but find that they are unable to do so.
Many feel that they need to leave the airline but can-
not, as they do not have the resources to cope with
change.

Usually CAs become alienated and withdraw from con-
tact with passengers, friends and management. Relation-
ships are marked by a lack of trust. Many CAs are emo-
tionally reactive: as a result of their strain they be-
come quick tempered, hyper-sensitive, aggressive and
vent their anger and aggression in tantrums. Moodiness
and irritability are also apparent and the person be-
comes unpredictable, so that people in their social sup-
port system, do not know how to react, A great deal of
bickering and friction amongst crew also occurs.

Many CAs also experience strain in that they suffer
from low self-esteem, are depressed and negative; every-

thing seems to overwhelm them, even small incidents. Their perpectives of events seem to become distorted and "I can't think straight anymore". There were indications of a few cases of CAs who experienced acute anxiety, in the form of "nervous breakdowns", for which they were receiving treatment; the information was, however, too vague to obtain an indication of actual frequency.

Physical Consequences

CAs frequently reported tiredness and exhaustion. They associated these outcomes with "trying to do too much at once", to heavy flying schedules, as well as to the fact that they were not able to plan their lives to the best advantage. Sleeping problems were also frequent, which they blamed on being overtired, lack of relaxation, diet, flying schedules and strange beds.

Numerous outomes related to unbalanced diet habits or irregular and hurried patterns of eating. One CA always ate standing up; at the time of interviewing she had for the last three days only eaten toast. Frequent use of diet pills occurs, although CAs were careful to mention that they did not like using pills themselves, CAs often referred to "other" CAs using sleeping tablets. Many CAs seemed to be utilizing vitamin pills as part of their diet but this was not acknowledged as a form of pill-taking. Numerous eating disorders were identified, e.g. over-eating and weight gain, or loss of

appetite. Again, some reference was made to anorexia or bulimia, but nobody admitted to suffering from the diseases themselves.

Often physical symptoms included backache, neck-ache, frequent headaches, feelings of tension, nausea, frequent bouts of influenza and gastric ulcers. Respiratory problems were also indicated, which were ascribed to perpetual exposure to "flu bugs". There was also evidence of severe ear infections. Menstrual problems were particularly identified and many CAs associated the severity of the complaint with an adjustment problem to flying; several felt that the menstural problems lessened with length of service as they adjusted to flying conditions. Many CAs also identified problems with skin, hair and nails which they felt were due to frequent changes in climate and altitude.

The following cases illustrate consequences and health-related (psychological and physical) outcomes of stress.

Person 15. She primarily sees her job as an accumulation of stress, to the point where her health deteriorates, e.g. teeth, diet, physical problems like a permanent back-ache, partly from tension and partly from sleeping in different beds all the time.

Person 17. She wants to be left alone. She cannot face passengers anymore and takes frequent breaks in the galley, which is her space. She feels so many demands are placed on her, that all she wants to do is be by herself. She cannot face the thought of leaving the air-line, but is feeling overwhelmed and helpless by all these demands. She used to be able to handle difficult passengers, but now she either cannot be bothered, or she fights back because she is intolerant. She has many health problems, headaches, backaches, menstrual problems.

Person 18. She feels that she is actually a normal person who does abnormal things, due to her erratic life style and flying schedules. She feels that she is in an existential vacuum, where she just has to survive sixteen hours, she cannot plan further than that.

Person 19. She reached a stage eight months ago when she felt so tired and irritable towards the passengers, "everything they ask you is too much". All she felt like doing was crying and crying. She gets tremendous support from her husband who flies with her, but she still could not sort out her life. Bad eating habits, junk food and no regular meal-times also contribute to her bad state of health. She has neck and backache, and a constant tired and "fuzzy" feeling. She feels that she is over a bad stage now and does not feel helpless.

Person 20. She hates herself because she cannot make her work a pleasure. Her life and work are totally out of control. She is perpetually tired and does not eat, sometimes for days at a time. She feels physically and emotionally worn-out and cannot help herself anymore.

Person 21. She describes how for "the last six months I have felt stresses and I do not know why", "I feel as if I exist in a haze". She has neck spasms, stomach pains, headaches and backaches, problem with her diet and eating habits. She takes diet pills. She feels that "alcohol and drugs are so easy to get into" and that she could have fallen into bad habits. "Some people drink before they fly so that they are able to smile".

Conclusion

This chapter presented an analysis of the stress process in the work of a CA, based on interviews with, firstly, supervisors and co-ordinators, and, secondly, CAs on both the internal and external services. As indicated earlier, these qualitative data are only descriptive and give no indication of the frequency with which particular behaviour or problems occurred in the sample. Data should not be considered in the same light as survey data, based on a rigid set of questions and allowing quantification of responses. On the other hand, field studies like this one serve important functions too,

providing information that could serve as the basis for more objective structured and quantifiable data-collection.

From the point of view of understanding individual CAs, their work experiences and, particularly, their experiences of job-related stress, the qualitative data could serve to alert management, in general, but human resources management in particular, to the existence of a wide range of problems. Even when a small number of CAs relate the same of similar problems, they warrant serious consideration. When a large proportion of them describe the same problems, such information demand remedial intervention.

CHAPTER 5

QUANTITATIVE RESULTS

This chapter will present the findings obtained
from quantitative data, both those based on content
analyses of qualitative information collected by inter-
viewing and those based on scales in the questionnaire
administered after the interviews (see Chapter 3). The
sample used in the quantitative analysis phase consisted
of 101 CAs from whom complete questionnaires were ob-
tained. The sample has been described in Chapter 3.

The first aim of the quantitative study was to in-
vestigate relationships between the chosen stressor
variables, i.e. Work Load, Stress Levels, Role Conflict,
lack of Participation, Hardiness, Potency, Social Sup-
port, Trait Anxiety and Trait Anger, and the health-
related outcome variables, i.e. Burnout, Wellness,
Rating of General Health, Somatic Complaints, Exhaus-
tion, Depression, Smoking, Drinking, Pill Consumption
and Propensity to Leave. These relationships were inves-
tigated by means of simple correlation coefficients.

A second aim of the quantitative study was to in-
vestigate the possible moderating effects of the Hardi-
ness, Potency, Social Support, Trait Anxiety and Trait
Anger variables on the relationships between various
stressor variables and various health-related conse-
quences. This was investigated by the use of the method

of sub-group analysis.

The presentation of quantitative results will start
with descriptive statistics for all variables.

Descriptive Statistics

Data

Table 1 presents the means, standard deviations and
Cronbach's co-efficient alpha reliabilities of the dif-
ferent variables included in the quantitative data.
Means and standard deviations are also shown for age and
length of service.

Discussion

Few bases of meaningful comparison are available to
use in interpreting the means and standard deviations in
Table 1.

Caplan et al. (1980) reported scores on the Par-
ticipation scale after dividing each participant's score
by the number of items in the scale (3); for comparative
purposes the mean of 9.28 in Table 1 could be expressed
as 3.09. These authors reported a mean of 2.88 for Par-
ticipation in a sample of 310 American men in a
stratified random sample (p.122), as well as means for
23 occupations (p.324); using such data as basis for

Table 1

Means, Standard Deviations and Reliabilities
of Variables (N=101)

Variable	Mean	SD	Alpha
Biographical			
Age	26.184	2.892	-
Length of Service	4.942	1.925	-
Stressors			
Work Load	15.816	2.698	0.70
Stress Levels	2.602	0.969	-
Role Conflict	10.379	3.428	0.80
Participation	9.282	2.739	0.67
Moderators			
Hardiness	8.767	2.521	0.91
Potency	83.505	13.921	0.83
Social Support	7.22	4.089	0.69
Trait Anxiety	31.932	5.396	0.87
Trait Anger	29.311	4.869	0.80
Consequences			
Burnout	19.981	7.553	0.95
Wellness	9.282	3.236	0.88
Exhaustion	10.019	3.574	0.81
Depression	1.515	1.800	0.72
General Health	3.357	1.943	-
Somatic Complaints	3.165	2.532	0.73
Smoking	4.291	7.996	-
Drinking	17.165	19.354	-
Pill Consumption	.757	3.756	-
Propensity to leave	8.320	2.450	0.73

comparison the CAs seem to be above average in this

respect. They were above the level reported by groups of

industrial workers but comparable to train dispatchers

(3.03) and air traffic controllers at large airports

(3.14) and at small airports (3.17), as well as program-

mers and scientists (both 3.13). Of course, standard

deviations cannot be compared, in view of the differences

in scoring. (Although the Somatic Complaints scale derived

from the same source, the same comparison was not pos-

sible. Mean scores were available on pp.133 and 329; however, on p.40 this scale was indicated as having 10 items only, compared to the actual 12 and it was not clear what the denominator was in calculating raw scores.)

Scott (1988) used some of the same scales on a sample of data-processing personnel at a South African financial organisation. She reported a mean of 15.13 for Participation, 3.75 for General Health and 2.10 for Somatic Complaints. The data-processers thus reported more participation, better general health and fewer somatic complaints, i.e. an overall healthier pattern.

The means published by Spielberger (1980) for 23-32 year old working females, are considerably lower than for CAs (Trait Anxiety = 17.99 and Trait Anger = 18.45). The means reported for Trait Anger amongst female naval recruits (30.10) are similar to those of the CAs. Lyons (1971) did not report the means scores for his scales, so no basis of comparison is available for the Propensity to Leave scale. Ben-Sira (1985) did not report the mean of his sample on the Potency scale, he reported correlations between scales and neither did Karasek (1979) for the Depression scale.

The alpha coefficients in Table 1 were all acceptably high, reflecting adequate internal consistency in the scales. Attention should be drawn to the reliabilities of the content analysis scales derived from the qualitative

data, viz. Role Conflict, Hardiness, Burnout and Wellness,
which were all quite high, probably on account of the
length of the scales. Reliabilities were not reported for
the Stress Levels content analysis rating, the General
Health ratings, nor for the Smoking self-report, since
each contained only one item. Pill Consumption was a
2-item index, as was Drinking, but in this case the score
consisted of the product of responses to the two items.

Product-moment Correlations

Data

Table 2 presents product-moment correlation coeffi-
cients between all variables. These indicate the strength
of the relationships only and no causal inferences can be
made. It should be noted that on Trait Anxiety, Trait
Anger, General Health and Propensity to Leave, a high
score indicates a low level of the construct.

Discussion

A few interesting significant correlations relating
to biographical information emerged. A high correlation
between Age and the Length of Service was to be an-
ticipated, as normally CAs join the SAA at a young age.
The older CAs tended to report more burnout, more exhaus-
tion and a lower general health. However, the older the CA
the more likely was she also to report herself as a hardy

Table 2

Intercorrelations Between Variables

	Biographical			Stressors			Moderators					Consequences								
	Age	Length of Service	Work Load	Stress Levels	Role Conflict	Participation	Hardiness	Potency	Social Support	Trait Anxiety	Trait Anger	Burnout	Wellness	Exhaustion	Depression	General Health	Somatic Complaints	Smoking	Drinking	Pill Consumption
Length of Service	.537[c]																			
Work Load	-.029	-.122																		
Stress Levels	-.133	-.111	.072																	
Role Conflict	.001	-.029	.075	.437[c]																
Participation	-.087	-.120	.081	.031	-.031															
Hardiness	.274[b]	.101	.037	-.587[c]	-.475[c]	.091														
Potency	.058	-.020	-.161	-.344[c]	-.385[c]	.243[a]	.445[c]													
Social Support	-.013	-.045	-.021	-.286[b]	-.653[c]	.059	.394[c]	.338[c]												
Trait Anxiety*	.082	-.110	-.139	-.343	-.461[c]	.167	.428[c]	.417[c]	.411[c]											
Trait Anger*	.015	-.087	-.095	-.066[c]	-.144	.260[b]	.090	.126	.083	.335[c]										
Burnout	-.176[a]	.027	.057	.519[c]	.654[c]	-.135	-.700[c]	-.515[c]	-.593[c]	-.564[c]	-.175[a]									
Wellness	.237[a]	.101	-.059	-.534[c]	-.641[c]	.001	.675[c]	.419[c]	.608[c]	.533[c]	.189[a]	-.787[c]								
Exhaustion	-.246[a]	-.053	.229[a]	.341[c]	.390[c]	-.045	-.408[c]	-.431[c]	-.165	-.477[c]	-.263[b]	.473[c]	-.426[c]							
Depression	-.035	.110	.060	.374[c]	.403[c]	-.126	-.509[c]	-.380[c]	-.314[b]	-.426[c]	-.014	.521[c]	-.417[c]	.376[c]						
General Health*	-.229[a]	-.141	.175[a]	.330[c]	.345[c]	-.153	-.475[c]	-.347[c]	-.257[b]	-.367[c]	-.097	.414[c]	-.455[c]	.354[c]	.377[c]					
Somatic Complaints	-.101	.036	.172	.395[c]	.409[c]	-.091	-.490[c]	-.389[c]	-.365[c]	-.487[c]	-.067	.495[c]	-.487[c]	.447[c]	.516[c]	.466[c]				
Smoking	.059	.198[a]	.013	.110	.031	-.147	-.081	-.057	.046	-.084	-.015	.139	.019	.042	.029	.036	-.058			
Drinking	.123	.097	.049	.054	-.064	.132	-.076	.122	.067	.038	-.058	.060	-.036	-.056	-.030	.037	.018	.265[b]		
Pill Consumption	.100	.041	.020	.214[a]	.074	.025	-.193[a]	-.111	.042	-.295[b]	-.216[a]	.167	-.147	.328[c]	.220[a]	.126	.279[b]	-.062	.065	
Propensity to leave	.078	.136	-.188[a]	-.482[c]	-.324[c]	-.011	.279[b]	.346[c]	.185[a]	.293[b]	.176[a]	-.365[c]	.405[c]	-.510[c]	-.321[c]	-.234[a]	-.287[b]	.048	.052	-.214[a]

a: $P < .05$ ($r < .173$)   b: $P < .01$ ($r < .253$)   c: $P < .001$ ($r < .320$)

* NOTE: On Trait Anxiety, Trait Anger, General Health and Propensity to leave, high scores indicate low levels.

personality and as experiencing wellness. These two sets of seemingly contradictory findings tend to underline the independence of pathogenic and salutogenic criteria. The length of service was associated with an increase in smoking.

A discussion of the remaining intercorrelations between classes of variables should, firstly, attend to correlations between members of the same class of variables, since it is unlikely that all of these members of a class would be independent. In Table 2 it was, for instance, predictable that the two biographical variables of Age and Length of Service would be highly correlated. More importantly, the intercorrelations of, respectively the stressors, moderators and consequences categories should be inspected. Whenever members of these categories show high intercorrelations, subsequent findings with respect to those variables cannot be interpreted separately, in view of the variance they represent in common.

Among the stressor variables, only Stress Levels and Role Conflict showed a highly significant intercorrelation, indicating a degree of redundance (19.10% common variance) between these two (r^2x 100).

Among the <u>moderator</u> variables Hardiness and Potency showed the highest level of common variance (19.80%). Trait Anxiety showed undersirably high common variance with both Hardiness (18.32%) and Potency (17.39%), as well as with Trait Anger (11.22%) and Social Support (6.81%). All of these intercorrelations were significant beyond the .001 level. Moderator variables should not, ideally, be intercorrelated in the same data set.

Among the <u>consequence</u> variables, Burnout, Wellness, Exhaustion, Depression, General Health, Somatic Complaints and Propensity to Leave, all showed highly significant in-tercorrelations, with from 61.94 to 12.53% of common variance. Conclusions on the degree to which these health outcomes and the single work-related outcome can be pre-dicted by other variables (as well as the effects of moderators on such predictions) will, consequently, not be independent. Among the three substance dependance vari-ables, Smoking and Drinking were correlated significantly with each other but not to any other consequence, while Pill Consumption showed significant correlations with Ex-haustion, Depression and Somatic Complaints; all of these were, however, lower than those between the previously discussed group of consequences.

The main objective of this phase of the study was to investigate the relationship between stressors and health-related outcomes. The discussion below will be in terms of each of the four stressors in turn.

Work Load showed significant correlations with Ex-
haustion, as was to be expected if both variables are
valid measures. It was also significantly correlated with
General Health, indicating that the higher the work load
the worse the CA tended to perceive her general health to
be. Propensity to Leave was the only other variable with
which Work Load correlated significantly, indicating the
higher a CA experienced her work load to be, the more in-
clined to leave her job she intended to be (or vice versa,
the more inclined to leave she is, the more likely would
she be to experience her work load as too high).

Stress Levels perceived by CAs correlated sig-
nificantly with all of the outcome variables, except Smok-
ing and Drinking.

Role Conflict showed even higher correlations with
consequences than did Stress Levels, but was uncorrelated
with the three substance abuse measures. Taking the scor-
ing directions of the scales into consideration, the cor-
relations of both Stress Levels and Role Conflict all in-
dicated decreases in health with increases in the levels
of both stressors.

Participation, however, showed not a single sig-
nificant correlation with any health-related outcome vari-
able. It seems safe to assume that a CA's level of par-
ticipation with others in decisions that affect her work,
has little common variance with variables that represent

her health. It should be noted that, as measured, Participation represents the reverse of a stressor; if the correlation coefficients had been significant, reversing their signs would have given an indication of the effect of lack of participation. Participation was also not significantly correlated with the only work-related outcome, viz. Propensity to Leave.

Next the correlations between the moderator variables and consequences should be inspected. Hardiness, potency, Social Support and Trait Anxiety all showed significant correlations with Burnout, Wellness, Exhaustion, Depression and General Health and Propensity to Leave. These correlations indicated that the more psychological health represented by the moderators, the more likely were CAs also to describe themselves as healthy on the outcome variables. Hardiness, Trait Anxiety and Trait Anger showed significant correlations with Pill Consumption, indicating less reliance on sleeping tablets and tranquillizers with healthier levels of the moderator variables. Trait Anger also correlated significantly with Burnout, Wellness, Exhaustion and Propensity to Leave, indicating trends towards positive outcomes with decreasing anger.

Lastly, the intercorrelations of stressors and moderators should be considered. Work Load showed no significant correlations with moderator variables. However, Stress Levels and Role Conflict both showed highly significant correlations with Hardiness, potency, Social Sup-

port and Trait Anxiety, but not with Trait Anger. Par-
ticipation correlated significantly with potency, Trait
Anger and Social Support.

Overall, it is notable that all of the significant
correlation coefficients were in the directions that could
have been hypothesized in terms of the constructs opera-
tionalized by the content analysis scales and the self-
report measures.

Sub-Group Analyses

The moderating effects of Hardiness, Potency, Social
Support, Trait Anxiety and Trait Anger were investigated
between the stressor of Work Load, lack of Participation,
Role Conflict and Stress Levels and the health-related
outcomes, viz. Wellness, Burnout, rating of General
Health, Somatic Complaints, Exhaustion, Depression, as
well as Propensity to Leave. In the case of each moderator
the sample was split at the median so that upper and lower
subsamples were created. Correlation between the stressors
(independent variables) and the consequences (dependent
variables) were calculated for each subsample. Fisher's
transformation (Howell, 1987) was used to convert each r
into r'. Z calculations were then performed to test the
differences between the two sets of r's. A significant
difference indicates that the moderator variable did have
moderating effects between the particular stressor and
consequence. The null hypothesis can then be rejected.

Discussion

Information obtained from the sub-group analyses indicated that certain variables did have moderating or buffering effects between the predictors (stressors) and criteria (health-related and work-related outcomes). In all, 20 sets of analyses were performed, involving a 140 combinations of predictor-moderator-criterion. Table 3 presents the results for the nine instances where significant moderator effects were found; the remaining results are not presented, in order to avoid reporting massive non-significant data. Nine out of 140 instances represents 6.43%, which is beyond the .05 level of probability. It should also be noted that in three instances the level of significance was $p<.01$. Nevertheless, it is clear that some of these findings may have resulted from chance and cross-validation of the results is indicated.

Trait Anxiety was the only variable included as a possible moderator variable which showed no moderating effect. After the fact, it could be argued that anxiety could be viewed better as an outcome than as a conditioning variable in the model presented in Figure 1. However, the scale that was used, viz. the Trait Anxiety scale seems less likely to do so than if it had been the State Anxiety scale.

The discussion below will be in terms of the other four moderators in turn.

Table 3

Tests for Moderator Effect between Predictor and Criterion
Variables in all Instances where such Effects were
Significant

Predictor	Criterion	Sub-group	r	r'	Z
Moderator: Potency					
Partici-pation	Depression	High	.192	.192	
		Low	-.311*	-.321	2.500*
Role Conflict	Burnout	High	.426**	.454	
		Low	.777***	1.033	-2.822**
Moderator: Hardiness					
Partici-pation	Depression	High	.222	.224	
		Low	-.309*	-.321	2.613**
Role Conflict	Exhaustion	High	.102	.102	
		Low	.487***	.532	-2.061*
Moderator: Social Support					
Stress Levels	Wellness	High	-.584***	-.670	
		Low	-.211	-.224	-2.168*
Stress Levels	Exhaustion	High	.478***	.523	
		Low	.097	.100	2.056*
Stress Levels	Propensity to Leave	High	-.602***	-.693	
		Low	-.190	-.192	2.435*
Moderator: Trait Anger					
Role Conflict	Burnout	High	.887***	1.380	
		Low	.584***	.668	2.829**
Role Conflict	General Health	High	-.643***	-.763	
		Low	-.192	-.194	2.261*

* p<.05
** p<.01
*** p<.001

Potency appeared to have a moderating effect in the relationship between Participation and Depression. In the case of CAs high in Potency, Participation and Depression were not significantly related but in the case of those low in Potency, there was a significant inverse relationship: CAs who experienced a lack of participation reacted with depression (or, those who were depressed experienced the lack of participation more strongly). These results are in the expected direction.

Potency also appeared to moderate the relationship between Role Conflict and Burnout. The correlation between Role Conflict and Burnout was significant in both the high and the low sub-groups, but significantly higher among those CAs who were low in Potency. In other words, CAs who were low in Potency and had high Role Conflict, were significantly more burnt-out (or, when they experience burnout, they also perceived more role conflict). Potency does not preclude a person from experiencing stress, an aspect which has been discussed in the literature review.

Hardiness appeared to play a significant buffering role between Participation and Depression; the pattern was the same as in the case of Potency described above. In the case of CAs high in Hardiness, Participation and Depression did not show significant effects on each other; in CAs low in Hardiness, however, lack of participation caused depression (or vice versa).

In a similar way, Role Conflict was unrelated to Exhaustion among CAs high in Hardiness, but among those low in Hardiness the association was highly significant; the more role conflict a low-hardiness CA experienced, the more did she also experience exhaustion (or vice versa).

In the qualitative study lack of participation in decisions about their jobs and the rule-bound, narrowly defined responsibilities emerged as a major source of stress for CAs. Yet, in the correlational data presented in Table 2, the Participation scale showed no significant correlations with any outcome variables. The findings reported above on significant correlations between the Participation scale and Depression in the sub-groups low in either Potency or Hardiness, but not in the high-scoring sub-groups, present a partial answer to that contradiction. The relationship between participation and strains appear to be more complex, depending on the strength or weakness of personality characteristics which condition the relationships by altering the appraisal of stressors or patterns of coping.

In view of the correlation of .445 (p<.001) between Potency and Hardiness (Table 2), it is not surprising that these two variables showed similar patterns of conditioning relationships between stressors and outcomes.

Social Support appeared to moderate the relationship between Stress Levels and three outcome variables,

viz. Wellness, Exhaustion and Propensity to Leave. In
all three instances, it was high levels of social sup-
port that made the difference; in the low Social Support
sub-group, none of the correlation coefficients reached
significance. Among CAs who experienced high levels of
social support, high stress levels were accompanied by
low levels of wellness, high levels of exhaustion and a
strong propensity to leave (note, strong Propensity to
Leave indicated by low score on scale). These findings
are peculiar, in that social support did not act to
reduce negative consequences of stress levels but seemed
to make the person more willing to attend to her lack of
wellness and exhaustion, as well as to make her consider
leaving her job more strongly.

The Social Support measure included various sources
of support; however, it might well be that support from
equally stressed co-workers and co-ordinators who are as
aware of numerous problems as the CAs themselves (see
Phase 1 of qualitative study, Chapter 4) and from
partners fed-up with the CA life-style, could all have
contributed to a heightened awareness of negative
aspects. The negative nature of "Sol-bitches" was, for
instance, mentioned in Chapter 4, where CAs supported
each other in airing their grievances against
"management" and "the system".

Social Support did not show moderator effects on
any other relationships. In view of its high correla-

tions with Burnout (-.593), Wellness (.608), Depression (-.314), General Health (-.257) and Somatic Complaints (-.365), it is clear that for these health-related outcomes it had only a main effect.

Trait Anger appeared to have a significant buffering effect on the relationship between Role Conflict and the two consequences of Burnout and General Health. In both the high and the low Trait Anger sub-groups the correlation between Role Conflict and Burnout was highly significant, but among the high Trait Anger CAs this relationship was so high (of the same order as the reliabilities) that the correlations were significantly different. In persons characterised by strong trait anger, role conflict thus presents an even greater danger of burnout than in persons less characterised by hostility. (Again, it could also be a matter of high burnout leaving persons more aware of role conflicts.

The correlation between Role Conflict and General Health was only significant for CAs high in Trait Anger, i.e. role conflict tended to reduce perceived health among hostile persons but not among non-hostile ones. It is possible that low levels of perceived health could also cause perceptions of role conflict but the former direction seems more likely. These results are anticipated in the literature review where the long term effects of anger on health outcomes were discussed.

CHAPTER 6

Conclusions and Recommendations

The present study has attempted to present the relationship between certain stressors, strains and the moderating effects of personality characteristics and social support in the work of a CA. The SSR received particular attention. This was, firstly, achieved by means of a qualititative study which attempted to capture real-life experience and, secondly, by quantitative analysis of operationalized constructs.

This chapter will briefly review the qualitative and quantitative findings. The limitations of the study will then be discussed. Lastly, will follow a series of proposals concerning the work of CAs.

Qualitative Findings

Stressors

The qualitative data identified a range of job stressors. Generally, the CA is exposed to a fairly high level of individual stress on the job, as indicated by the prevalence of such stressors as role conflict, demanding work schedules, broken equipment, lack of participation, poor relationships with management and colleagues, and home vs. work conflicts. Organizational stressors related to management control systems, such as

reward systems, promotion and career development, rules and regulations and the bureaucratic climate of the airline.

The SSR had some clearly defined stressful aspects, similar to those conflicts described by Shamir (1980). CAs appear caught in situations where they experience role conflict due to a number of conflicting expectations from management, passengers and their own needs. Positive aspects of the SSR are also experienced, for example, feedback from passengers and rewards gained from giving passengers a good flight.

The qualitative data also indicated the cultural antecedents of stressors present in the working life of a CA. These unique features are rooted in their transient life-style, the airline subculture, as well as in sex-role stereotypes.

CAs are capable of burning out when their resources diminish, and they consequently move towards the disease end of the health continuum. CAs who do not have the ability to buffer the stress, burnout as they progressively cope less and less with demands from particuarly their work, but also from their home life.

In addition, alienation from management and the formal support system exists. Hardy CAs are able to function independently from the formal system. However,

this style does not lead to organizational effective-
ness, as the needs of the individual and those of the
organization can be in conflict. Lower individual and
organizational performance results (Schein, 1982).

Health-related Outcomes

A wide range of short-term, physical strain symp-
toms were described, e.g. tiredness, sleeping problems,
eating problems, tension-headaches, back-ache, neck-
ache, skin problems and menstrual problems, and were
seen to be directly related to flying (Cone, 1986;
Mohler, 1985). Psychological strain symptoms, such as an
inability to concentrate, were also described. Short-
term interpersonal consequences, such as emotional
strain in personal relationships, inability to make
friends outside the airline, angry feeling expressed
towards colleagues, passengers and management were
elicited to.

Long-term consequences of stress were also iden-
tified. A typical pattern identified in the burnout
literature (Burke & Deszca, 1986; Glicken, 1983;
Golembiewski et al., 1983) became evident, which deve-
lops progressively, up until approximately four years of
service. Usually at this stage CAs rely more and more on
galley shifts in order to avoid passenger contact. They
find themselves "hating" passengers, wearing "plastic
smiles" and feeling as if they want to leave the air-

line, but feel trapped because they cannot. Early warn-
ing signs are identifiable and thus appropriate manage-
ment strategies to support the individual can be imple-
mented (Ivancevich & Matteson, 1980; Glicken, 1983).

Moderators

Indications gained from the quantitative study show
that a fairly large proportion of the sample possessed
high levels of hardiness or potency. These strengths
make a CA less likely to appraise stressors as threaten-
ing and allow them to develop effective ways of coping.
These CAs did not see themselves as highly stressed and
were able to cope with the demands made upon them.
Humour was described as a moderator variable too.
Lastly, social support received from colleagues and in-
timate relationships, was also identified as an impor-
tant buffer between stressors and strains.

Coping

CAs who cope with their stress appear to develop
styles of coping which enable them to function effec-
tively. For example, many CAs become involved in the
airline subculture and develop meaningful relationships.
Transformational coping as described by Strümpfer (1983)
is a healthy style of coping. Some CAs, for example,
found satisfaction in coping with difficult passengers
by giving them extra special treatment so that they

transform into happy people who enjoy their flight. Finding ways of controlling passengers and the "flying buddy system" are other such ways of coping. Many used transformational coping, for example, care of diet, physical exercise (jogging, aerobic exercises), and intellectual stimulation by studying for a diploma or degree during off days, in attempts to cope with the job stressors as described.

The non-copers used regressive coping behaviours to buffer the stressors. Some of these behaviours which were identified in the qualitative study were smoking, drinking, drug abuse and absenteeism (AWOL). Other means of regressive coping used by CAs, in attempts to cope with immediate stress, were seen in "acting-out" behaviours, such as kicking the bar-trolley when it would not work, going into the galley and screaming or swearing at a passenger who is out of earshot, "bitching sessions" with crew members, or frequent crying spells. In attempts to deal with passengers and their demands, some CAs use withdrawal behaviours, where they can shield themselves by reducing contact, for example, wearing a "plastic smile", or "operating in remote control" to give them emotional distance, or working galley shifts.

Some of these coping behaviours were at the expense of management. Hardy CAs with a strong SOC can function under the present management style by often bending or breaking the rules or disregarding a management direc-

tive. Absenteeism is also prevalent. They often get what

they want, and have learned to play the "system", as

evidenced by the great amount of activity in the

"crawlspace" of the organization (Ingram, 1986). As

noticed above, absenteeism is also prevalent.

Quantitative Findings

The aim of the quantitative study was, firstly, to

identify relationships between stressors and strain out-

comes to confirm findings in the qualitative study.

Results from the quantitative data indicated some strong

correlations in directions similar to those identified

in the qualitative study.

A Role Conflict Scale and a measure of Stress

Levels both correlated significantly with the health-

related outcomes (with the exception of the substance

abuse measures) as well as with Protensity to Leave.

Increases in role conflict and in stress levels were ac-

companied by decreases in health. Workload, showed sig-

nificant correlations with only Exhaustion and a rating

of General Health, as well as with Propensity to Leave.

In general, these findings on stressors and strains con-

firmed impressions gained in the qualitative study. Par-

ticipation, however, showed no significant correlations

with outcome variables, even though it was clearly iden-

tified in the qualitative study as a major source of

stress for many CAs. They felt that they were not in-

volved in decision making aspects of their job or that
their resources were not utilised effectively, as the
job had narrowly defined areas of responsibility.

The second aim of the quantitative study was an at-
tempt to identity any moderating effects of Potency,
Hardiness, Social Support, Trait Anger and Trait
Anxiety. The results indicated that, with the exception
of Trait Anxiety, these variables had a moderating ef-
fect between certain stressors and outcome variables.

Potency moderated the relationship between Par-
ticipation and Depression and between Role Conflict and
Burnout, while Hardiness did the same for Participation
and Depression, as well as Role Conflict and Exhaustion;
in all four instances significant relationships were
found in the sub-groups scoring low on the moderators,
but not in the high-scoring sub-groups. The findings of
Potency and Hardiness moderating between Participation
and Depression provided a partial answer to the con-
tradiction between the qualitative and quantitative
results on participation mentioned above.

Social Support appeared to have a significant
moderating effect between Stress Levels and the outcomes
of Wellness, Exhaustion and Propensity to Leave. In
these instances the significant relationships appeared
in the high support sub-group but were absent in the low
support sub-group. Social support seemed to strengthen

the tendency to report a lack of wellness and exhaustion, as well as to increase the propensity to leave, in the presence of high stress levels.

Trait Anger performed a moderating effect between Role Conflict and both Burnout and General Health. In the sub-group high in Trait Anger, Role Conflict had a much more significant positive relationship with Burnout than in the low sub-group. In the high sub-group Role Conflict had a highly significant negative relationship with General Health but a non-significant relationship in the low-scoring sub-group. In other words, role conflict tended to have a deliterious effect only among CAs characterised by a high level of hostility.

Critique of the Present Study

A number of criticisms may be levelled at the study with regard to the methodology, sample size and time span during which the data were collected. A methodological problem was that both the qualitative and quantitative data were collected over a 5-month period. As already stated this was necessary to prevent reactive stress after an air-disaster, from being included in the responses. However, other unknown factors may have had an effect between the beginning and the end of data collection.

A limitation that should be considered is that the sample size was quite small for the ratio of variables to subjects. With 101 participants to 19 variables in the quantitative phase of the study, this ratio was just over 5:1; ideally it should have been closer to 10:1.

With respect to the choice of variables a serious limitation was the high intercorrelations of scales (Table 2) which made it evident that findings were not independent. This fact rendered the results unfit for regression analyses. Although the names of scales or even the contents of items suggest that they measure different constructs, it remains necessary to determine empirically whether they will show low enough intercor-relations to warrant inclusion in the same study. Future research could therefore benefit from the experience of the present study. Particuarly with respect to the con-tent analysis measures derived from the interview data, the intercorrelations were unacceptably high. Their origin strongly suggests the presence of a degree of method variance.

Another aspect related to the research design, involved the placement of Trait Anxiety as a moderator variable. The results possibly indicate that Trait Anxiety is rather a consequence of stress and not a moderator and was thus misplaced in the research design.

Another criticism regarding statistical analyses could be levelled at the use of the sub-group method for investigating moderating effects. The main problem relating to this method, is that the strength of relationships is decreased and the probability of spurious results increases, due the splitting into sub-samples at the median, making them smaller. As was discussed in Chapter 3, a more sophisticated means of overcoming these difficulties in testing moderating effects, is by the use of moderated multiple regression techniques. Future research could investigate these areas.

Finally, a problem with generalizability occurs in this study, as it was not possible to cross-validate these findings to other groups of CAs (male or female). This too would possibly be an area for future research.

<div align="center">Recommendations</div>

General

Healthy organizations are able to create opportunities for growth and can adapt to changing needs. Organizational and individual needs are thus accommodated in a "fit" which results in optimal efficiency so that all parties pull towards the same goals.

The present study has identified a range of stressors which were perceived as stressful by a particular

group of CAs. The presence of these stressors means that
certain organizational and individual needs are not
being met. The findings of the present study identified
an "unhealthy" situation, which needs to be rapidly ad-
dressed. For scientific purposes it is necessary to keep
the need for corss-validation of the present findings in
mind. At the same time, there are no reasons to assume
that the identification of problems has been invalid or
that practical steps have to await a higher level of
statistical probability.

The review of the literature suggested that manage-
ment and staff may not be goal-directed and are often
out of tune with each other, where individuals feel
little sense of belonging and feel that they do not fit
the environment. Individuals subsequently either leave
and join an organization into which they can fit, or
they can stay but with little job satisfaction and with
conflict of interests. In such cases burnout could
progressively occur, or the individual could become a
plateaued worker, levelling off with little further
drive. The qualitative data suggested that many CAs who
have lengthy service burn out. Alternatively they cope
in ways that leave them unproductive when they are
promoted through length of service, rather than by com-
petence or need for achievement. The qualitative results
also indicated that many CAs, cope with their alienation
from organizational values by operating in the "crawl-
space" of the organization, which detracts from or-

ganizational effectiveness. Organizational effectiveness can thus be seen to be highly dependent on the fit of individual and organizational needs.

The onus for catering for such needs lies mainly in the area of organizational responsibility. The organizational management system has to develop strategies aimed at being constantly in touch with these needs, and responsive to change to ensure a healthy existance. Obviously, individual responsibility is also necessary to ensure that the individual is able to develop in conjunction with the organization.

The following section will attempt to present some practical solutions for remedying the situation. It must be pointed out, however, that any attempt to apply solutions as a "quick fix", will be short-sighted, cosmetic efforts that would only be addressing symptoms, which would leave the causal roots untouched. The importance of a careful analysis and integration of interventions with the total organizational system needs to be emphasized. The solution does not lie in mere "stress management" but in developing the whole organization as a healthy unit, through effective general and human resources management.

Organizational Stressors

A number of stressors were perceived by some CAs as related to the formal systems of the organization, such as management control through rules and regulations, communication and decision making, as well as management style.

Many of the stressors were seen as attempts to push CAs towards conformity as, seen for example, in the rigid regulations relating to dress requirements. Many CAs felt that little opportunity was left for persons to express their individuality. Management, as well as passengers, tended subsequently to treat CAs as anonymous, faceless persons, which affected their sense of self-worth.

Furthermore the rigid control systems were seen as repressive and stifling, to the point that individual creativity and innovation were eradicated. Organizational mechanisms need to be developed which would encourage the innovation and participation of CAs so that they would be able to co-operate with management instead of being self-centred and contrary to management's purposes. One such mechanism could be the implementation of a team-work approach, where CAs could be fully participative in the area of their work and take the ensuing responsibility. The appropriate defining of common goals, training and support could facilitate this

process. A secondary benefit would be that better relationships between colleagues could also be fostered. CAs could develop a strong sense of belonging to the group, as well as the larger organization. Furthermore, these effects would serve the purpose of facilitating communication between all the actors in organizational life. Severe problems in communication both up and down the organization have been identified.

Another area that was identified by the qualitative study relating to participation, concerned the plight of external CAs. Many CAs stated that although crew managed to work together in completion of job tasks, they felt that closer team-based psychological co-operation was absent, due the fact that their crew composition was different for each flight. There was no time to develop continuinty in relationships. Additionally, the problems related to transience in life-style were detrimental to their ability for forming good relationships with col-leagues. The qualitative data suggested that internal crew were able to form better support relationships as they were scheduled with the same crew on flights for a longer period of time.

Stressors relating to work load were identified in the present study. Many CAs who were highly qualified (e.g. ex-teachers, nurses etc.) experienced frustration in their type of work. The job was often seen as being pretty menial in terms of actual content; the only

satisfaction was obtained in passenger relationships. The job of a CA continues to attract a high calibre of person, despite the pitfalls of the job. Unfortunately the novelty and glamorous aspects of the job are the main basis for attraction. Some form of job enrichment, whereby the CAs self-worth and skills would be recognized, needs to be implemented. Such a strategy would widen the CA's scope and responsibility, so that initiative would be encouraged rather than discouraged. Many CAs begin to hanker for career development or the use of their respective skills. These findings would indicate that some form of job enrichment or additional responsibility is necessary, if the calibre of CA is to be maintained. Perhaps a lesson could be learned from the history of SAA, where, during its early days, service provided by CAs included a secretarial service during flight! It should be remembered, however, that if the relationship with passengers is the satisfying area of the job, concentration should be on enrichment in these aspects, for example, by improving CA's people skills. In-service training for such enriched performance should give CAs more of what they want, rather than something different. Additionally, specialised services e.g. secretarial skills could be provided by SAA.

The pool of manpower resources available within the ranks of CAs should be considered for development and promotion along with changes planed for the privisation of SAA. These qualified people possess a range of

skills, including marketing, nursing, legal skills, teaching and horticultural, all of which could be beneficial in certain circumstances. The present bureaucratic, rule-bound system does not allow CAs to use their skills. This was demonstrated by the comments of one CA, who was a highly qualified nursing sister by training, but had to call her superior to treat a sick passenger. The rules forbade her from acting in this capacity. Ironically, in actual fact her superior, who was designated this function, was not medically as highly trained as she was. These qualified CAs constitute a body of potential experts who are familiar with the organizational systems, so that they are in a position which suits them for promotion, rather than recruiting new people from the outside for future jobs.

Another suggestion relating to work-load is that a balance between pressure and stagnation needs to be more evenly distributed. At times CAs have to cope with highly pressurised and demanding situations, and at other times they are at a loss as what to do with themselves, for example, when on standby duty or during so called relaxation time at the Ilha do Sal. An obvious need for constructive activities is called for. The time spent at Ilha do Sal could be constructively used in non-job skills training, e.g. team-building exercises and training in time management, self-awareness and other forms of personal development, as well as a wellness orientation, Biokinetics, together with recrea-

tional oportunities. Such opportunities would, firstly, benefit the CA in that she could be taught coping skills for managing the problems relating to transience in life-style, and the abnormality of work schedules. Secondly, such arrangements would help create better relationships among crew members.

Organizational theory has indicated the importance of a performance appraisal system in the communication between managers and subordinates; however, indications gained from the qualitative data would suggest that any such management strategy would at present be rejected by CAs and will be, until the problems relating to a "shared value system" which have already been described, is sorted out. Management and the individual CA would thus be working towards the same goals.

The fact that many CAs are strongly aware of their own <u>stress levels</u> has been described. The literature review indicated that a certain amount of eustress is necessary for healthy functioning. However, a number of individuals identified in this study suffered from progressive phases of burnout, which could possibly lead to accident pronessness, especially when there is a high prevalence of acting-out type behaviours, as has been described previously (Alkov et al., 1985; Dunn, 1986; Kilpatrick, 1981).

Clearly the burnout levels which were identified amongst CAs in this study, ranged through a progression of stages, as described by Golembiewski et al. (1983). Initially, feelings of "stress" and dis-ease occur but such feelings increased to the point where the individual felt totally overwhelmed. A number of individuals in advanced stages of burnout were encountered during the present research. It was evident that such individuals were reluctant to use the official support system in the organization, as they were inherently distrustful of anyone from management. A referral system was devised, where individuals were in several cases referred to a psychologist, the SAA physician, an outside physician or some other support system. Additional referrals were made relating to health habits and exercise needs. Such individuals are in need of special individual counselling or therapy programmes (Glicken, 1983).

Ongoing intervention strategies which identify individuals who are burning out and not managing their lives, need to be implemented. However, devising an embracing "wellness programme" would be strategies-orientated, for the general support of all employees and would not only treat people with "problems". The overall aim of a such programme would be towards enhancing performance and effectiveness for both the individual and the organization. In this way findings of the present study impinge on the training facilities of the or-

ganization. CAs could be taught self-awareness or self-monitoring which could lead to the identification or an "early warning system" of stress symptoms. It would enable the individual to create a psychological and physical balance in their lives, which is absent in their present life-style. Furthermore, such a programme could provide a support group for CAs, as well as fostering better crew relationships. CAs are likely to "own" such programmes, due to their participative nature, rather than any direct approach from management. An early warning system could be of use not only to the individual but also the organization (Glicken, 1983; Ivancevich & Matteson, 1980), to provide "wellness" in the individual, as well as within the organization.

Kobasa (1985) emphasised that such programmes could be viewed as an important aid or resource for the individual to utilise as a buffering mechanism in the stress process. The success of such a programme would depend upon the "fit" of the individual to the prevailing climate in the organization. The organizational dystress symptoms described earlier would need to be addressed before or in conjunction with any such programmes (Murphy, 1984), otherwise CAs would reject them as a management ploy and consequently not "own" the process.

Apart from individual counselling and wellness programmes, a mentoring system could be devised. The

qualitative data indicated the problem inherent in the present system of co-ordinators, who supposedly operate in a mentoring capacity. However, CAs are reluctant to use this offical support system. If present problems with organizational values and climate were to be cleared, and co-ordinators were to be selected for and trained in counselling skills, rather than merely as a supervisory function, the system could form a beneficial support and proper mentoring function for CAs.

The other aspect of wellness, viz. physical health care is largely neglected amongst CAs. Many hardy CAs have an awareness of health/care and they realise the necessity for becoming more health-conscious. However, due to their erratic and pressurised life-style, most are unable, for example, to go exercing in a gymnasium. Many are involved in "loner" sports such as jogging and find it difficult to participate in regular sports activities. However, jogging is one of the healthiest kinds of sport from a heart-lung fitness point of view. Many CAs also clearly neglect to eat healthily. Many rely on "junk food" and suffer because of irregular eating patterns. This is one area where even the individuals with a high level of hardiness or potency fall short. Management has placed an emphasis on the outward appearances of a CA, e.g. CAs have to be attractive and look good, and not be over weight, but management have not provided facilities for a healthy diet, either on board on in the standby room. CAs receive meal al-

lowances, but part of the behavioural response due to their rebellious reactions to management strategies, is to try and cheat the "system". They spend their allowances on other things and often live on junk food, which does not promote a state of well-being. Dietary education and conselling need to be included in a health maintenance programme. Additionally it could also be part of the mentoring role to keep a check on CAs dietary habits, and not in a punitive style.

Another aspect relating to physcial care concerns the need for physical monitoring of CAs similar to the examinations held for flight crew. Many suggestions of bullimia, anorexia nervosa, substance abuse and sexual promiscuity were related. There were indications of a need for further research into the long-term health-related outcomes of stress, namely the diseases of adaptation.

Safety factors and CAs who are "at risk" need to be urgently investigated, due to the previously described stressors. Risk factors are evident for some CAs who might not be able to cope in emergency situations, due to their own burnout levels. Additional support groups need to be formed to facilitate any residue of feelings related to the "Helderberg" air disaster, which are still prevalent, even after 6-12 months. Furthermore support groups of this nature would enable the crew to cope with any future crises.

Work schedules were explored extensively by Porter (1988) and several suggestions relating to those problems were made by her. A point that needs to be emphasised and is related to the general perception of stress and transience in life-style, as was described in the present study, is that the CA needs as much support as possible in order not to feel abnormal when compared to people who work in ordinary hours and lead normal life-styles. The ensuing demands placed on the CA are major sources of conflict. Understanding instead of ridiculing behaviours is a far better strategy for management to employ when dealing with CAs in such matters; an attitude displaying a lack of understanding is, for instance, evident in the comment made by supervisors to the effect that, "Oh they are being childish" when referring to CAs' complaining behaviours.

CAs would experience a definite advantages in managing their personal lives if, for example, facilities could be provided for convenience, such as access to banking or gymnamsium or exercise facilities. These activities usually cause problems due to abnormal work schedules. CAs also would be advantaged if they were taught time management techniques where they could learn to prioritise different demands.

Role conflict has been extensively described in the qualitative study as a major source of stress and this was supported by the quantitative study. Conflict in

demands from passengers, management and home versus work issues pressurise the CA. CAs need to experience genuine support in these matters, which could then alleviate some of the stress.

Many CAs have a well-developed sense of service and need to help passengers enjoy their flight. However, a number of factors impede this process. Firstly, CAs appear to feel as if management does not care about them, and treats them anonymously. This has an effect on the CAs' treatment of passengers when they experience pressure. CAs fall back upon impersonal and distant ways of coping with the passengers, while the passengers themselves continue to demand a more personalized service. A mission which instills values relating a sense of care and quality of service shared by both management and CAs would be one of the ways of alleviating this strain.

CAs would appear to be in need of training in interpersonal skills and communication, and not only in mechanical strategies of "how to deal with a difficult passenger". Rather, an approach of genuine interaction with the individual is necessary. Many CAs would be able to drop the "plastic smiles" and passenger avoidance behaviour, if they had the necessary interpersonal skill and training.

An indication of the importance of interpersonal contact, and the first contact and impressions made with

the passenger was indicated in the qualitative study. Pre-flight activity is invariably pressurised and which is often exacerbated due to bad relationships amongst crew, as well as increased stress levels e.g. "a flight was bad before it started". The CA starts the flight feeling overwhelmed and unable to make contact with passengers. The first eye-contact, or lack of it, is likely to give subtle clues to the passenger. The findings from the qualitative data indicated that troublesome passengers very often started excessively demanding behaviours from this moment. The CA in process nonverbally, sent messages that she really wanted nothing to do with the passenger and did not want to be bothered. Some passengers treated in such a way, who are also perhaps anxious about flying and consequently overly sensitive, become overly demanding, perhaps with accompanying unruly behaviours and perhaps too much consumption of alcohol during the flight.

The question that arises from the qualitative data pertaining to service is, "What kind of service are the passengers looking for?" The answer should be sought in the range of different needs of passengers. CAs need to be trained to cope with specific types or personalities of passengers and, secondly. coping with the needs of such passengers in a genuine way. The CA cannot do this if she herself is feeling unsupported by management, and has feelings of low self-worth.

The aspects of SSR which were described as stress-
ful, could be alleviated by allowing CAs to experience a
sense of self-worth, where they are recognized for them-
selves, beyond the stereotype of a uniform and regula-
tion hairstyle. Backing from management in a good sup-
port relationship is also necessary. Indications are
that this aspect is severly lacking at present, as many
CAs feel that they are at the mercy of passenger com-
plaints. Furthermore, it is important to note that the
present management style is patronizing and tends to
spoonfeed the CAs with mechanical techniques of pas-
senger care who consequently cannot manage unexpected
events. Flexibility and adaptability are not qualities
emphasised in the present managment value system, but
they are inherently vital for CAs' coping ability under
stress and the transience of their life-style.

CAs need such support from within the formal system
of the organization. This attitude towards CAs is lack-
ing and has been described in terms of the often
judgemental attitudes that are adopted by management
towards CAs. Little understanding is displayed of their
stressors and need to let off steam and vent their
anger. CAs have found ways of venting anger, for ex-
ample, by kicking trolleys, swearing and acting out be-
haviours. These are usually directed at management or
the passenger. This is a safe way of letting off steam.
However, passengers could become sensitive to CAs who
are so stressed that they no longer direct their aggres-

sion subtly. The mentoring system needs to be able to listen and understand this behaviour empathically, thereby defusing these behaviours, which they judgementally describe as childish. A few co-ordinators have a natural ability for empathy, but the majority need to be trained in this aspect of support. Relationship building has emerged as one of the most important areas that could be used for an intervention between management, supervisors and CAs. Training in this area would then have a positive effect on passengers, who could also be related to, in a spirit of genuiness and care, which is after all what service is all about. What is necessary here is skill training of a kind similar to that given to counselling psychologists, marriage counsellors, even crisis counsellors.

Practical issues related to home versus work issues could be alleviated by paticipation in support groups, as well as by management support. These would serve as an indication for the understanding of the various stressors which affect the CA's performance which arise from both working and home lives.

Quality of life issues are thus very closely related to the concept of wellness as it has been defined in the present study. Management have a responsibility for providing facilities which would address the needs of all the actors in organizational life. This means that responsibility is carried over into concerns about

the demands and strains which occur outside of working
hours, especially those relating to the transience in
the life-style of the CA.

Individual Stressors

The present study has indicated a wide range of
stressors. These perceptions are based on individual
feelings, and a clear picture has emerged of what occurs
when CAs do not cope with stress. The individual ob-
viously, bears a responsibility for managing her life
and her "wellness", both psychologically and physically.
However, well-being becomes increasingly difficult if
organizational life is full of stresses and strains.

Central to the present research is the question of
why some persons experience burnout and are at the dis-
ease end of the continuum and others are at the wellness
side. It has been postulated that hardiness and potency
play a moderating role on stressors. This factor has
been partially proven in both the qualitative and quan-
titative data and opens up possibilities of new criteria
that could be utilised in the selection of CAs as well
as providing an area for training in coping skills.

The purpose of the present study was to identify
stressors and strains inherent in the job of the CA.
Hopefully the results and proposals have served this
function, as well as helping management towards a better

understanding of aspects of this occupation. This under-
standing would be a first step towards a more effective
management process where both the organization and the
individual CA needs are catered for.

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APPENDIX 1

INTERVIEW SCHEDULE

INTRODUCTION

Thank person for being willing to talk to you etc. Assure her of confidentiality - no information on her to manager or SAA.

1. Do you ever experience situations where you feel as if you are being put under a lot of pressure (show pressure of hands pushed together) or being pulled or torn from two sides (gesture with arms in opposite directions)? Do you experience what people call "stress" in your job?

   (Allow person to speak freely, in her own way, with as little direction as possible. Probe for illustrative experiences i.e. "critical incidents".)

2. Are there any other unpleasant kinds of stressful situations in your work situation?

3. Are there pleasant kinds of experiences in your job, which make you feel good about the job?

4. Relationships with   )
)
   passengers   )

5. Relationships with   )
)
   supervisor(s)   )   All of these areas

6. Relationships with) should be touched on,
)
   manager(s)) in a flexible sequence
)
   and relaxed way. Not

7. Relationships with) checklist like.
)
   flight deck)

8. Relationships with)
)
   other cabin staff)

9. Demands of equipment)

10. Work schedules)

11. Do racial differences)
)
    matter in your work?)

12. When passengers' needs or demands clash with SAA
    rules? (Allow to explain freely, then mention
    examples and ask for illustrative experiences.)

Examples

12.1 SAA expects you to treat all passengers alike but a
     passenger may expect to be handled as a special
     case.

12.2 Passenger may expect you to break SAA rules.

12.3 Do passengers have any control, power over you?

13. When passengers make incompatible demands? (As in 12.)

Examples

13.1 Service to more than one passenger at a time.

13.2 Serving a passenger in the presence of others who want something different or different treatment.

13.3 Familiar ("old") passengers vs. strangers.

13.4 Demands of whites vs. blacks or blacks vs. whites.

14. If a new hostess asked you for advice, from your own experience on how she could make life easier for herself, what advice would you give her?

15. Anything you want to add to points you have made? Anything else that comes to mind?

Self-Description Inventory

Explain about additional information that can be obtained faster by answering questions on paper - show inventory. Request co-operation. Will collect (agree on when). Go through instructions at top of inventory. Help person with Item 80.

Conclusion

Ask the person to discuss the interview as little as possible with colleagues, so as not to influence their answers when it is their turn. Least of all to tell them what she has told you.

Thank her for co-operation.

Reassure her of confidentiality.

APPENDIX 2

QUANTITATIVE SCALES DEVELOPED FOR INTERVIEW DATA

Role Conflict

Role conflict is defined as the experienced or perceived lack of congruence in the roles CAs are required to perform/fulfill and/or the experience of incompatible demands being placed upon the CA, specifically looking at four areas described below.

Instructions: Rate each item on a 4-point scale.

Scale: 1   2   3   4
                NONE   HIGH

Score: Sum of ratings on four scales described below. Minimum: 4, maximum: 16.

1. System vs. own needs

The paradoxical requirement of the "system" (as represented by management) for the CAs to offer an indivialised, personalised service to passengers whilst simultaneously treating CAs in an impersonal, authoritarian regimented manner (stereotypes, uniforms, bureaucracy, rules, regulations, "seeing us as numbers").

<u>Rating</u>: Given that all CAs are operating within this paradox, regardless whether reported by the individual concerned, to what extent is this a stress?

e.g. - system holds no future - I need more meaning to
       my job/career.
     - time pressure/racing vs. time, yet personal
       service required.

2. <u>Work vs. self</u>

The conflicting demands of work vs. self with work re-quiring me to be pleasant/friendly yet I don't always feel that way - can't be the real me/the facade has to be put up "to pretend". Relates to:

   i) dealing with passengers;
  ii) dealing with superiors on board;
 iii) dealing with management;
  iv) dealing with roster clerks.

<u>Rating</u>: To what extent is this an important stressor?

3. <u>Non-work demands vs. self</u>

<u>Rating</u>: To what extent do non-work demands prevent the person from being "the real me"? Outside demands from:

- home   - not enough time

- boyfriend   - can't be normal

    - going to functions   - out of "synch" with society-
      etc.   regard self as abnormal.
                           (affects relationships)

Non-copers finally "give in" - give up outside
friends/boyfriends; become entrenched/institutionalised.

4. Home vs. work

Perceived conflicting demands between running a home/
being a wife, lover, friend, mother or daughter and the
demands that the job place upon her, e.g. unusual hours,
demands and pressures against time available, e.g.
domestic chores, shopping etc; having to be pleasant to
family etc. when feeling overwhelmed by pressure.

Perceived Stress Levels

Instructions: Rate the measure of CAs self-report of
stress levels i.e. the individuals self-perception of
whether they are experiencing stress or not.

Scale: LOW   1   2   3   4   HIGH

Score: Minimum: 1, maximum: 4.

Hardiness

Score: Rate each item in each of three subareas
             separately and add up.
             Minimum: 19, maximum: 76.

1. Commitment: Skill and desire to successfully cope

   with stress, using all resources, including social

   support.

	LOW				HIGH
Low self-esteem	1	2	3	4	High self-esteem
Ineffective	1	2	3	4	Personal competence
Loneliness/Withdrawn	1	2	3	4	Use social support
Despondency	1	2	3	4	Perception of self-worth/meaningfulness in life/psychological success.

2. Control: The tendency to believe and act as if one

   can influence the course of events, use discretion:

   "plays the system."

	LOW				HIGH
Reactive	1	2	3	4	Proactive
Erratic/Disorganised	1	2	3	4	Planning/Organising day to day-future/ time management.
Blame placed elsewhere	1	2	3	4	Accepting Responsibility.
Conforming	1	2	3	4	Creative/initiative
Immobilisation/ overwhelmed	1	2	3	4	Perception of Potency empowerment.
"Petty" involve-ment/emeshment	1	2	3	4	Able to keep perspective, see the whole.
Rigidity	1	2	3	4	Flexible.
Unsure/ distractable	1	2	3	4	Confident/sure-minded.
Negative	1	2	3	4	Positive attitude to work.
Intolerance	1	2	3	4	Tolerance.

3. <u>Challenge</u>: Concept of challlenge is based on belief that change rather than stability is normative mode of life. This dimension reflects the person's ability to cope with change and novel situations by accepting such as a challenge or opportunity as opposed to a threat.

LOW				HIGH
Hankering toward stability/ predictability	1	2	3	4 Perception of job/ situation as novelty/exciting
Perception of unexpected as threat	1	2	3	4 Acceptance of unex- pected viz. demands as opportunity.
Acceptance/ conformance to rules/regulations not seeing any way out	1	2	3	4 Able to play the system make it work for them/ autonomous/captive flexibility.
Need for certainty	1	2	3	4 Tolerance of ambiquity.
Superficial rela- tionships/alienation	1	2	3	4 Ability to manage changing and have mean- ingful relationships/ quality/intimacy.
Becoming more closed/closing off from new experiences etc/barriers/defences.	1	2	3	4 Resourcefulness/ ability to use experiences for growth.

Social Support

For each item, rate on a 4-point scale, level of support perceived as being received and/or the most approriate for the CA concerned.

Scale: LOW   1   2   3   4   HIGH

Items:

1. Management

2. Supervisors

3. Spouse/partner

4. Co-workers

5. Friends

Score: Sum of scores. Minimum: 5, maximum: 20

Burnout

Burnout is viewed as a progressive deterioration in the person's well-being, affecting emotional exhaustion, depersonalisation and lack of personal accomplishment.

Instruction: For each item, rate on the 4-point scale which score best describes the individual.

Scale: LOW   1   2   3   4   HIGH

Score: Sum of ratings on nine points below.

            Minimum: 9, maximum: 36

POSITIVE					NEGATIVE
Concruence of feeling/expressive	1	2	3	4	Lack of congruence/ difficulty expressing feelings.
Self-motivated/ sufficient/fulfilled	1	2	3	4	Unfulfilled need for recognition/dissatis- fied with self and ac- complishments on job/ need for feedback. Feelings of low per- sonal accomplishment.

Enthusiasm	1	2	3	4 Emotional exhaustion as consequence of work (in situation previously enjoyed).
Caring (giving individual attention) Job satisfaction/ involvement.	1	2	3	4 Cynical attitude towards the work, the organisation and the passenger. Low morale, absenteeism, use of alcohol and drugs. Avoidance of passengers/ declining performance.
Able to choose one's friends	1	2	3	4 Overbonding with co-workers. Boredom/ hopelessness/ depression/sense of being trapped.
Good general health	1	2	3	4 Inability to handle mild illness. Tendency to be ill or have health problems. Frequent headaches, colds, use sleeping tablets.
Openess to people	1	2	3	4 Interpersonal friction/ bitchiness.
In control of life Coherence	1	2	3	4 Pervasive feelings of being overwhelmed, unable to cope, not being in control. Progressive "ripple effect", in all areas of life, "off-days", feeling not like usual self.
Maturity perspectives on life/events, able to handle conflict	1	2	3	4 Angry child behaviours: aggression and hostility, e.g. kicking trolleys, pettiness, avoidance of passengers, over reaction.

Wellness

Wellness reflects both physical and mental states of well-being.

Instructions: For each item, rate on the 4-point scale which score best describes the individual.

Score: Sum of ratingson four items below.

        Minimum: 4, maximum: 16.

Items:

LOW				HIGH
Existing from moment to moment	1	2	3	4 Perception of living a healthy lifestyle, e.g. exercising, eating patterns etc.
Inadequate sleep, feeling of tiredness, lethargy.	1	2	3	4 Adequate sleep, feeling of being rested, restored.
No form of recreation or hobbies.	1	2	3	4 Adequate recreation or hobbies.
Worthless, inadequacy.	1	2	3	4 Perception of leading meaningful existance, high quality life.

APPENDIX 3

SELF-DESCRIPTION INVENTORY

Instructions: There are no "right" or "wrong" answers in this inventory. Only your own experiences matter. Please complete it as honestly as you can. Don't leave out any questions.

For each question or statement below, choose one of the answers or alternatives provided, then circle the number above it. Her and there you have to fill in a number.

Don't spend too much time on any item, work fast and give your first impression.

Stressors

Work Load (4 items)

1. How often does your job require you to work very fast?

5	4	3	2	1	0
Very often	Fairly often	Some-times	Occasion-ally	Rarely	Never

2. How often does your job require you to work very hard?

3. How often does your job leave you with <u>little</u> time to get things done?

4. How often is there a <u>great deal</u> to be done?

<u>Source</u>:   Caplan et al., 1980, p.238.

<u>Score</u>:   Sum of ratings circled.

Minimum: 0, maximum: 20

Participation (3 items)

1. How much do you take part <u>with others</u> in making decisions that affect you?

5	4	3	2	1
A great deal	A lot	Some	A little	Very little

2. How much do you participate <u>with others</u> in helping set the ways things are done on your job?

3. How much do you decide <u>with others</u> what part of a task you will do?

<u>Source</u>:   Caplan et al., 1980, p.250.

<u>Score</u>:   Sum of values.

Minimum: 3, maximum: 15.

Moderators

Potency   (19 items)

Source: Ben-Sira, 1985, pp.405-406; p.400 for scoring

categories. Items 13 and 17 changed

slightly.

Score: Sum ratings circled. Reverse score for items

3, 5, 9. Maximum: 19, minimum: 114.

Instructions: For each question or statement below,

choose one of the answers of alternatives provided, then

circle the number above it. Here and there you have to

fill in a number. Don't spend too much time on any item,

work fast and give your first impression.

Scale:

1	2	3	4	5	6
Agree very strongly	Agree quite strongly	Just agree	Just dis-agree	Disagree quite strongly	Disagree very strongly

Items

(Mastery: Items 1-6)

1. I have very little control over things that happen
    to me.

2. I feel that I am being pushed around in life.

3. I can do about anything I set my mind to.

4. I often feel helpless in dealing with the problems of life.

5. What happens to me in the future depends mostly upon me.

6. There is really no way I can solve some of the problems I have.

(<u>Self-confidence</u>: Items 7-9)

7. I certainly feel useless at times.

8. All in all, I am inclined to feel that I am a failure.

9. I am able to do things was well as most other people.

(<u>Alienation</u>: Items 10-14)

10. Nowadays a person has to live pretty much for today and let tomorrow take care of itself.

11. In spite of what some people say, the lot of the average man is getting worse and not better.

12. It is hardly fair to bring children into the world with the way things look for the future.

13. Which political group one supports is more important than talent for achieving something in this society.

14. Having the right connections is more important than talent for achieving something.

(<u>Anomie</u>: Items 15-19)

15. Community leaders are indifferent to one's needs.

16. Little can be accomplished in this society because it is basically unpredictable and lacking order.

17. Life goals are moving farther away, rather than being realised.

18. Life is futile.

19. Nowadays one cannot count even on closest personal associations for support.

<u>Trait Anxiety</u> (10 items)

<u>Source</u>: Spielberger et al., 1980, p.4.

<u>Score</u>: Sum values circled, reverse scoring for items 1, 2, & 7. Minimum: 10, maximum: 40.

<u>Instructions</u>: Items 1 to 10 contain statements that people have used to describe themselves. For each statement, circle the number of the answer which indicates how you <u>generally</u> feel.

<u>Scale</u>:

1	2	3	4
Almost always	Often	Sometimes	Almost never

1. I am a steady person.

2. I feel satisfied with myself.

3. I feel nervous and restless.

4. I wish I could be as happy as others seem to be.

5. I feel like a failure.

6. I get in a state of tension or turmoil as I think over my recent concerns and interests.

7. I feel secure.

8. I lack self-confidence.

9. I feel inadequate.

10. I worry too much over something that really does not matter.

Trait Anger (10 items)

Source: Spielberger, et al., 1980. Items 4 to 7, reworded "angry" rather than "mad".

Score: Sum values circled.

Minimum: 10, maximum: 40.

Scale:

1	2	3	4
Almost Always	Often	Sometimes	Almost never

1. I am quick tempered.

2. I have a fiery temper.

3. I am a hot headed person.

4. I get angry when I'm slowed down by others' mistakes.

5. I feel annoyed when I am not given recognition for doing good work.

6. I fly off the handle.

7. When I get angry, I say nasty things.

8. It makes me furious when I am criticised in front of others.

9. When I get frustrated, I feel like hitting someone.

10. I feel infuriated when I do a good job and get a poor evaluation.

Consequences

Rating of General Health

Source: Garrity, Somes and Marx, 1978, p.78.

Score: Number circled. Minimum: 1, maximum: 10.

If the "ladder drawn below, with its 10 steps numbered, represents your general health, indicate the "step" on which you would place yourself currently. Circle the number of the "step" on which you would place yourself currently. Circle the number of the "step" you choose.

```
1. |_____|    The best your health could be

2. |_____|

3. |_____|

4. |_____|

5. |_____|

6. |_____|

7. |_____|

8. |_____|

9. |_____|

10.|_____|    The worst your health could be
```

Somatic Complaints (10 items)

Source: Caplan et al., 1980, pp.271-272.

Score: Count numbers for Items 1 to 8, add numbers

           indicated for Items 9 and 10.

           Minimum: 0, maximum: 13.

Instructions: For Items 1 to 10 - Have you experienced
any of the following during the past month on the job?
Make and X in front of those you have experienced during
the past month.

1. ____ Your hands trembled enough to bother you.

2. ____ You were bothered by shortness of breath when
          you were not working hard or exercising.

3. ____ You were bothered by your heart beating hard.

4. ____ Your hands sweated so that you felt damp and
          clammy.

5. ____ You had spells of dizziness.

6. ___ You were bothered by having an upset stomach or stomach ache.

7. ___ You were bothered by your heart beating faster than usual.

8. ___ You were in ill health which affected your work.

In addition, did you experience either one of the following during the past month?

9. ___ You had a loss of appetite.

```
     0              1                  2
   Never      Once or twice    Three or more times
```

10. ___ You had trouble sleeping at night.

```
     0              1                  2
   Never      Once or twice    Three or more times
```

Exhaustion (4 items)

Source: Adapted from or suggested by various sources, including Karasek (1979).

Score: Sum of values. Minimum: 4, maximum: 20.

Instructions: Same as for Potency Scale.

Scale:

```
    5            4              3            2            1
Very well   Fairly well   Somewhat   Not really   Not at all
```

1. "I find it very difficult to get up and going in the morning"; describes me:

2. "At the end of the day I am completely exhausted, mentally and physically"; describes me:

3. "I feel burned out by the demands of my job"; describes me:

4. "I am continually tired during the day"; describes me.

Depression (10 items)

Source: Karasek, 1979, p.307.

Score: Negative items count 1 each.

First term negative for items 1,4,7,8,9.

Second term negative for items 2,3,4,6,10.

Minimum: 0, maximum: 10.

Instructions: For Items 1 to 10, underline the answer which describes best how your life is. Complete the sentence: "My life is ..."

1. Boring vs. interesting.

2. Enjoyable vs. miserable.

3. Easy vs. hard.

4. Useless vs. worthwhile.

5. Friendly vs. lonely.

6. Full vs. empty.

7. Discouraging vs. hopeful.

8. Tied down vs. free.

9. Disappointing vs. rewarding.

10. Brings out best vs. doesn't bring out best.

Smoking (1 item)

Score: Actual count.

If you smoke, how much do you smoke? (If you don't smoke
write 0).

I smoke about _____ cigarettes per day.

Drinking (2 items)

Source: Kessler et al., 1987, p.58.

Score: Product of answers to Items 1 and 2.

1. About how often did you drink the last month - how many days out of 30?

_____ days.

2. When you drink, about how many glasses of beer of wine or tots of hard liquor do you have in one day?

_____ drinks.

Pill Consumption (2 items)

Source: Adapted from Kessler et al., 1987, p.58. Also

see Karasek, 1979, pp.307-308.

Score: Sum of Items 1 and 2.

1. About how often in the past month did you find it necessary to take some tablets or other drug to help you go to sleep - how many days out of 30?

_____ days.

2. About how often did you find it necessary to take tranquillisers in the past month - how many days out of 30?

_____ days.

Propensity to Leave (3 items)

Source: Lyons, 1971, p.103. Wording adapted:
             "hospital" to "company". Scoring changed cf.
             Bluen, 1986, p.156 and 352.

Score: Sum of values.

1. If you were completely free to choose, would you
   prefer to continue working for this company?

   1   2   3
   No   Not sure   Yes

2. How long would you like to stay with this company?

      1   2   3   4   5   6

      1 yr 2 yrs 3 yrs   5 yrs 10 yrs   more than 10 yrs.

3. If you had to leave work for a while (for example,
   because of a pregnancy or some other important
   reason) would you return to this company?

   1   2   3

   No   Not sure   Yes

APPENDIX 4

QUALITATIVE DATA

This summary indicates a range of responses obtained in answer to the questions used in the semi-structured interview. Additional qualitative information which grew out of the interview is also included.

Stressors

Climate in the Organization

* CAs do not trust management, they feel that they have been let down too often in the past.

* "Management treat us like children, we cannot use our initiative."

* No one listens to other people's opinions. Little communication exists between different levels.

* Management are authoritarian, "they tell us, never ask us."

* General climate does not foster good relationships, which ultimately affects the passenger.

* Hostility, back-biting and "bitchiness" are prevalent amongst some crew.

* Cannot "safely" take someone into your confidence, everyone will soon know about it.

* Rumour-mongering, active grape-vine - one has to be
  careful, you can't trust easily.

* Little team-work, small closed groups. Each person
  knows his/her place and function, but no co-
  operation as a team. There is not enough time to
  get to know each other on external flights, so
  people don't make the effort to build good
  relationships.

* Relationship building is difficult: "You try to get
  to know someone, and think you do, but six weeks
  later you bump into them and they don't even
  remember your name."

Life-style

* The life-style is exciting. I love my job and the
  novelty and thrill, new places and people, but
  you become hooked and then its difficult to
  leave the airline, even when you want to.

* Off-times are nice, because everybody else is working
  so the shops are not crowded and there are no
  traffic-jams, but the life-style makes me feel
  odd, out of synch and out of tune with
  "ordinary' people.

* Time pressure.

* Social isolation.

* Loneliness of hotel rooms.

* Loneliness of a hedonistic life-style.

* A lot of group pressure on young inexperienced CAs to
  join in the "partying life style'. Easy access
  to alcohol and drugs.

* Transient life-style, few commitments, live day to
  day, flight to flight; inability to make plans,
  short-term or long-term. Lack of meaning and
  purpose to life.

Role Conflict

Passengers

* Passengers demand special service and attention.

* Passengers treat CAs "like dirt", "flying
  waitresses", "flying mattresses".

* Passengers are in control "they can report me".

* CAs have to "smile" continually and present their
  best "face" at expense of their own feelings .

* Sense of self-worth, "What I feel doesn't matter".

* Passengers push me around, "They change personality
  in the air", "they become like Jekyl and Hyde".

* Passengers abuse me when there are delays, "Its not
  my fault." "I used to be helpful and defuse pas-
  sengers, now I fight back." "I'm beginning to
  hate passengers."

* Verbal abuse from anxious passengers.

* "I can't be myself", "use my brain", "the job is not
  a reflection of myself", "no personal space".

* "I can't face people anymore", "I try and work galley
shifts to avoid them".

Relationships

* "People outside the airline don't understand our
pressures."
* "Friends think I lead a glamour life, they're
jealous."
* "Boyfriends have got to be independent and understand
that I can't always attend special occasions
with them."
* "So much depends on me, I've always got to do the
telephoning, to keep contact with friends."
* "Life-style doesn't make it easy to keep a steady
boyfriend, or even being able to find a decent
boyfriend. Hello-and-goodbye relationships."
* "I feel so alone, can't make friends."
* "It's difficult flying overseas and leaving
boyfriends behind, especially if there has been
an argument that hasn't been reconciled." "So
much gets swept under the carpet."
* "Difficult to maintain long-term relationships."
* "Relationships are superficial, few intimate or mean-
ingful friendships."
* "You become a loner or a 'joller'."
* "Eventually you can only talk airline talk."

<u>Management</u>

* "They expect so much from us and don't give anything in return."

* "They don't understand me because they are not flight people."

* "They treat us impersonally, like a "number", a "pretty face", a "a uniform", yet we've got to give the customer "personalised" service."

* "All they're concerned about is how we look on the outside."

* "Everything is rule bound, we can't think for ourselves." "The "system" has no room for us."

* "They never listen to us, we don't even try anymore." "Now I do my own thing." "You've got to beg for everything."

* "The bureaucracy is stifling, everyone takes so long to make a decision."

* "So much buck-passing, we often don't know where we stand."

* "If we don't like it, we're told we're expendable and can leave."

* "They make so many promises, but you never get results." "We feel let down, don't know who to believe."

* "Some people seem to get special treatment from management, e.g. rostered for an overseas flight when they're not eligible and other inconsis-tencies, management 'favourites'".

*   "Management expect CAs to look good but little atten-
    tion is paid to dietary aspects in a CA's life."
    "She is punished if she gains weight; however
    little provision is made for availability of
    health foods." "Her life style and consequent
    time pressures steer her towards a reliance on
    'junk food'".

Work Schedules/Time Pressures

*   "Working hours are demanding, exhausting."
*   "There is never enough time." "I feel as if I never
    get out of my uniform."
*   "I'm always doing my face and putting make-up on."
*   "I can't organise my life to do all the things I need
    to."
*   "My social life is affected, I can't always arrange
    to attend special functions. My life is ruled by
    the roster check."
*   "I never get enough sleep, I can't sleep easily in
    strange beds."
*   "We are always racing against the clock. Not enough
    time for the passengers to give them the right
    kind of attention, especially on short flights.
    The passengers must just sit there and not even
    ask for food!"
*   "Can't eat proper meals."
*   No regular exercise. "I can't attend gym classes be-
    cause of my work schedules."

Job Factors

* The work is boring, not demanding, routine.

* Passenger contact makes each flight different.

* Passengers make up for the routine waitressing aspects of the job, but are demanding.

* Service is so important, I like to give passengers "extras", but only if they don't demand. If they demand, I give only so much and no more.

* Little personal responsibility, people hide within the "system', afraid to stick their necks out, "who me?" attitude.

* This is a dead-end job, no career path.

* I'm highly qualified (nurse, teacher etc.), they don't use me. So many resources and skills in the airline which management could use. I'm told to call my senior, usually I can't respect him or her, they only get there by length of service, not by competence.

* Low psychological success, I don't know if I do things well. Little individualised feedback. Only superficial performance evaluations.

* I get my reward from passengers.

* The job is physically demanding, constant sore feet, back, neck and head aches and fatigue.

* The lifting and pushing of equipment is strenuous, and I'm still expected to look good.

* Equipment such as service/bar trolleys is seen as second rate, non-professional and creates a bad image. Adds an extra strain to time pressure when equipment doesn't work. "What do you do when you run out of water, and you're thousands of feet in the sky, or the trolley only has three wheels?"

* Working with crew that you do not get on with, in such confined space is stressful - there is nowhere to go.

* Equipment is an added stressor, "you have to cope with the "extra' stress on top of the others."

* Anxiety exists about safety issues, after the Helderberg crash exists. Some crew are in need of support, "I still worry ... even now, but I won't tell management."

Ambiguity

* Passengers are unpredictable.

* You don't know where you stand with management, promises never materialise.

* Flights are unpredictable, delays cause stress.

* Standby system is unpredictable, you don't know whether to pack summer or winter clothes.

* You can't plan ahead because you don't know where you'll be, you've got to be flexible.

Moderators

SOC/hardiness/potency

* "I take control of my life", "I do my own thing, I don't care about management".

* "You've got to have the right attitude", "You got to be positive".

* "I plan everything in great detail".

* "I've got meaning in my life and know where I"m going".

* "You've got to be flexible about everything that comes your way".

* "Don't be petty, don't take things personally".

* "I make things work, I use my initiative although it gets me into trouble sometimes".

* "I get a tremendous challenge out of beating the system, or making things work".

* "I like my work, I enjoy the passenger contact", "I'm involved in community work even though I'm busy", "I make time for things".

* "I know the feeling that some CAs have, you begin to take it out on the passengers, everyone gets to that stage, but you can do things about it", "you make things happen".

* "You've got to know yourself and keep in touch, otherwise you go under fast".

* Set challenges, e.g. "I'm going to make this pas-
  senger smile", or "I'm going to get to know this pas-
  senger today".

Coping

Transformational Coping

* Health consciousness - attempts to eat the "right'
  kind of food, for example by packing a food pack
  containing salads and fruit, otherwise they rely
  on leftovers on board. They do not use meal al-
  lowances for food, but spend as little as pos-
  sible. Junk food is the cheapest and easiest.

* Planning to get regular exercise by jogging, "making
  time" for gym classes etc. and other health
  enhancing activities.

* Cognitive-restructuring by utilising the aloneness
  and freedom of their life-style positively and
  then perceiving themselves as independent and in
  control of their lives.

* The ability to reframe events and stressors and not
  see them in isolation, but in an overall
  perspective, keeps CAs sane, "having the right
  attitude", "don't let things get you down".

* Coping by being able to bend the rules and use their
  discretion.

* Feeling in control of themselves and by controlling
  "passengers" with the use of body language (eye
  contact, or "presence") or verbal comments.

* Humour is used frequently to deal with stress.
  Witticisms keep the passengers under control.
  "In" jokes between cabin crew also help vent
  their frustrations and relieve tensions. Manage-
  ment and passengers are the butt of these jokes.

* Flying partnerships (flying buddies) are commonly
  used as a support system.

* Many CAs are involved in personal development, e.g.
  studying for a degree or diploma.

* Religious beliefs also appear to be a strong source
  of coping for some CAs.

Therapeutic Avoidance Behaviours

* Many crew reduce their exposure to passenger contact
  when they feel pressures and tensions building
  up. They work the galley shift which reduces
  this contact.

* CAs will also not "see" of "hear" passengers when
  walking down the aisle, by avoiding eye contact
  and looking at the aisle.

* Some CAs see themselves as "loners" and will not as-
  sociate with airline personnel, their friends
  are all "outside" the airline.

Regressive Coping

* Frequent crying.

* Acting-out type behaviours such as kicking the serv-
  ice trolley, screaming and shouting and swearing
  in the galley when passengers are out of hear-
  ing, or "kill" the passengers with kindness.

* Direct passenger "punishment" occurs, e.g. not giving
  them their orders in time or "forgetting" about
  them.

* "Bitching sessions" ("Sol-bitch"): venting anger at
  management or indulging in character assassina-
  tions, where no constructive outcome is
  realised. Rather negativism fuels demotivation
  even further, and increases feelings of help-
  lessness.

* Blaming behaviour occur. Management are blamed for
  everything. The CAs do not own responsibility at
  all and become embroiled in pettiness.

* Depersonalization occurs when the CA masks her true
  feelings and wears a "mask" or "plastic smile"
  and behaves in an automatic way, "in remote
  control", so that "things do not get to them".

* Other avoidance behaviours occur interpersonally when
  the CA withdraws to hotel rooms and avoids
  people contact.

* Absenteeism.

* Some CAs overly depend upon the rules and will not
  display any initiative which might put them in
  jeopardy.

* Substance dependency occurs, including smoking,
  drinking and drug abuse, e.g. taking an al-
  coholic drink to "calm down" or as a crutch.
  Many CAs make us of vitamins and diet supple-
  ments.

Consequences of Stress

Psychological (short-term or long-term)

* Lack of energy, lethargy, "I don't try anymore."

* Anger and aggression directed towards management and
  the passengers, "Sol-bitch".

* Anxiety about performance, "I stick to the rules", "I
  don't know where I'm going".

* Alienation from others, "I sit in my hotel room", "I
  won't socialise with them."

* Lack of trust and inability to form meaningful
  relationships, "I just won't tell anyone any-
  thing personal", "hello-and-goodbye
  relationships". Emotional immaturity, "we bitch
  and fight all the time".

* Lack of career progress and demotivation, "there's
  nowhere to go", "I just do my own thing".

* Absenteeism (AWOL) due to inflexibility in the ros-
  tering system, or taking sick leave when they

have an important engagement, after failing to
secure official leave.

* Time-pressures and lack of certainty result in feel-
  ings of little control over their lives.

* Interpersonal friction with crew, management and in-
  timate relationships.

* Moodiness, susceptibility to irritability and "hyper
  sensitive'.

* Depressions.

Physical

* Lack of sleep and tiredness due to shift systems and
  lack of planning in life - "trying to do too
  much at once".

* Bad eating habits, and irregular, hurried or un-
  balanced meals.

* Use of diet pills, use of vitamin supplements.

* Irregular exercise, loner sports rather than "social"
  sports.

* Frequency of back and neck pains and headaches.

* Skin problems, dryness, pimples.

* Menstrual problems.

* Weight problems, loss of appetite or over-eating.

* Frequent gastric complaint, bouts of "flu" or ear-
  infections.

* Feelings of nervousness at take-off and landing.

* Diseases of adaptation difficult to identify because
  no medical examination or records were used.