SAA CABIN ATTENDANT^S EXPERIENCE OF ENVIRONMENTAL STRESSORS

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This dissertation is dedicated to my parents, Naude and Joanie Henning, whose continuous encouragement and unconditional love has made this study possible.

Something is happening here, but you don't know what it is, do you Mr Jones?

Bob Dylan, "Ballad of a thin man"

"This we know. All things are connected Like the blood Which unites one family

Whatever befalls the earth, Befalls the sons and daughters of the earth. Man did not weave the web of life; He is merely a strand in it.

Whatever he does to the web, He does to himself"

Ted Perry, inspired by Chief Seattle

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SUMMARY

Airline cabin attendants serve a critical role during onboard operations. They are at the frontline of passenger safety and services under a variety of circumstances, including flight illnesses and emergencies, decompressions, hijacks and other survivable incidents. In order to provide a worldclass service to passengers, it is crucial that cabin attendants are in an optimal state of physical and psychological wellbeing.

I joined the South African Airways in March 1990 as a cabin attendant, all bushy-tailed and bright eyed to "go the extra mile" for the customer. I enjoyed every moment of expanding my horizons, but soon realised that "a good time was not always had by all". From an early stage in my flying career, I was intensely conscious of the adversities that some cabin attendants seemed to endure. Disturbed social relationships, loneliness, substance abuse, chronic fatigue, depression, low morale, propensity to leave and absence without leave are problems often reported by cabin attendants. It seemed to me that my colleagues were facing a number of tribulations that the rest of the world was not even aware of. I was profoundly aware of the conflict between the environmental cues cabin attendants were exposed to, as well as of the consequent distuption of internal circadian rhythms. During the exciting and often exhausting eight years of flying, eccentric talk and behaviour frequently flustered me. What did it mean to "boil eggs" in your hotel room and why would you want to do it? What was a Dora pram" and who were Nora, Hilda and Chriselda? These questions motivated me to do an indepth study of the SAA cabin attendant's experience of environmental stressors.

A systems theoretical perspective formed the framework of the study. This approach provided a comprehensive description of the person-environment transactions. The result of the study indicated that the stressors cabin attendants experience are all related to the disruption of personal meaningful "regularities" or patterns. It seems that as humans, we have a need for a certain amount of regularity, predictability or stated differently, a certain amount of "lawfulness" in our world. The migratory lifestyle of airline cabin attendants seems to introduce disrupted circadian rhythms, -interpersonal relationships and -cultural patterns. From a systems theoretical approach, it can be stated that it is not solely the stressors in the working environment of cabin attendants that "cause" certain thoughts, behaviour or illnesses. The environmental stressors induce and facilitate certain responses that are already inherent in a person's unique emotional and physiological composition. In sum, the working experiences of cabin attendants involve various contexts that continuously interact with one another, creating an ever-changing kaleidoscope of different thoughts and behaviour.

This study does not present the reader with an explanation for the experiences or behaviour of cabin attendants. Instead, the study aims to provide an in-depth description of the different transacting contexts in the lived world of cabin attendants at SAA.

Furthermore, the proposed study will endeavour to:

- Render a long term contribution to the In-Flight Services of South African Airways, and
- Generate information for future research in this area.

Keywords:

Flight attendant Cabin attendant Airline cabin crew Work schedule stress Environmental stressor South African Airways Inflight services Aviation industry

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CHAPTER ONE

1. INTRODUCTION

"Would you rather be Einstein or Shakespeare? I'm not sure whose genius is the more awesome. I come, hesitantly, to believe we need both science and story to make sense of the universe" Stuart Kauffman, 2000

South African Airways, the standard bearer of our country, experienced turbulent times in the past decade. Despite financial losses, fierce competition and low staff morale, the airline managed to record a profit of 349 million for the fiscal year 2000. Presently, the company attempts to reposition itself as a world class airline by streamlining management and unlocking expertise. New aircraft have been acquired and recently a staggering amount of R600 million has been spent on upgrading interiors, lounges, uniforms and facilities. One wonders, however, whether the same amount of attention and care is being lavished on the 2 400 cabin attendants' physical and psychological well being.

1.1 MOTIVATION FOR THIS STUDY

In the Sunday Times newspaper (March 22, 1998, p. 12) a report with the following title was published: "SAA's rude cabin crew on flights from hell". The report is a summary of a ninepage document, which listed passengers' complaints about aggressive cabin attendants. According to this report, rude and inefficient cabin staff was chasing domestic and international customers into the seats of opposition airlines. The following two quotes are verbatim examples of some of the complaints:

COMPLAINT 1

"I have severe arthritis and battled to get up the stairs to the upper deck. When it was time to disembark, I asked the airhostess to help carry my hand luggage (one small case) down the stairs. She rudely asked why I could not do it myself! On my return flight, when I asked the steward for a refill of Scotch, his reply was: 'What – another one?' "

COMPLAINT 2

"Some of your crew were downright rude. Passenger X got sick during the night due to the turbulence and had to vomit. She tried to get to the toilets but found them occupied. The staff saw that X had a problem, but didn't help her find an empty toilet. Again, X vomited, this time on the floor in front of the galley. Instead of taking care of a sick person and helping her, your crew instructed Mrs. X to clean the floor by herself using two plates!".

According to the aforementioned article, SAA suffered a loss of R58-million in December 1997, and cannot afford to lose a single passenger. Competition in the airline industry is growing fiercer. In the Business Day of 11 September, 2001, it was reported that the planned listing of SAA on the stock exchange will be postponed for at least two years, because of its uncertain financial state and weak market conditions for international carriers. To stay competitive within this market, SAA needs to improve its customer services. Frustrated and aggressive cabin crew cannot render the world-class service that SAA claims to offer to its passengers.

In South Africa, previous research concerning the impact of work schedules on cabin attendants' physical and psychological health is limited to one study. Pamela Ann Porter (1988) did exploratory research on work schedule stress as experienced by female flight attendants on SAA's domestic routes. By means of unstructured interviews and a self-descriptive questionnaire, Porter investigated the nature of work schedule stress and its' relationship to the various aspects of health of female cabin attendants. Porter (1988, p.138) suggested: "... while the themes raised as requiring attention in the more theoretical arena may be of relevance and importance, a far greater need lies with the SAA to engage in practical research, geared towards explaining the realities and problems experienced by the employees and means of resolving such". From the results of the aforementioned study it was clear that the prime responsibility for ensuring an individual's wellness lies with that individual him/herself. However, if the efforts of

cabin attendants to improve their quality of life are not supported by company policies all their efforts will be futile.

Inadequate research done in this field, as well as an avid personal interest in the airline industry, served as motivation for me to explore this virgin territory.

The remainder of this chapter provides a brief overview of the study. To conclude, Bateson's (1972) famous phrase "the pattern that connects", is presented as an introduction to systems thinking.

1.2 OVERVIEW OF THE STUDY

In Chapter 2, the systems theoretical approach is presented as the framework of this study. The meaning of the term epistemology - and, more specifically, systemic epistemology - is discussed in detail. Fundamental systemic principles as they pertain to the study are reviewed. The chapter is concluded with a description of the researcher as part of a self-referential system.

Chapter 3 is a review of the research context and the existing literature on environmental stress. The dimensions of environmental stressors that have relevance to this study are briefly discussed. The physiological response of the body to stress is described in detail. Two complementing models, both depicting the physiological processes involved during the stress response, are presented. The chapter is concluded with a brief discussion of work schedule stress and the discipline of chronobiology.

The research process is comprehensively described in Chapter 4. A motivation for the use of interviews as a research method is given. Consequently, a seven-stage model of interview research is introduced. The three levels of qualitative analysis that were conducted, as well as the systemic rationale underlying this multilevel methodology, are discussed.

In chapter 5 the results and discussion of the first-level analysis are presented. The first-level analysis comprises individual descriptions of experiences, which are coded into categories according to well-defined criteria. These categories are discussed on the basis of selected quotes from respondents.

Chapter 6 presents the second- and third- levels analysis. The second-level analysis comprises the identification of relations between experiences. Specific coding categories are combined together, constituting a specific pattern category. The third-level analysis entails an integrated conceptual discussion indicating how the coding and pattern categories are related to the more general concepts of the systems theory.

In chapter 7, the final conclusions and recommendations are presented.

1.3 "THE PATTERN WHICH CONNECTS ..."

"What pattern connects the crab to the lobster and the orchid to the primrose and all four of them to me? And to you?" Gregory Bateson

In the first chapter of his book "Mind and Nature", Bateson (1972, p.16) asked the following question:

"Why do schools teach almost nothing of the pattern which connects? Is it that teachers know that they carry the kiss of death which will turn to tastelessness whatever they touch and therefore they are wisely unwilling to touch or teach anything of real-life importance? Or is it that they carry the kiss of death *because* they dare not teach anything of real-life importance? What is wrong with them?"

What Bateson is communicating to the reader is the ignorance or insensitivity of modern man towards the interdependency of all living creatures. We tend to divide the perceived world into separate objects that we see as firm and permanent, but which are really transient and everchanging. Official education taught me nothing about the indivisibility of all life, about relationship, pattern, partnership, and interdependency of all living things. Instead, I was taught everything about independence, linear cause-and-effects, competition and the disconnectedness of things. It was my parents, who during family hiking trips, made me aware of the deeper truth that, in nature, there is a pattern which connects all living things to one another. At this very basic level, my parents' teachings were my first contact with *systems thinking*, which formed the theoretical framework for this study. This awareness challenged me to be more mindful of some of the hidden effects of my own perceptions and actions on personal relationships as well as the natural environment, because there *is a pattern that connects*. In this study, I will attempt to identify the connecting patterns in the life experiences of flight attendants at South African Airways.

In the following chapter, certain fundamental systemic principles will be described. These principles are the patterns that connect different living systems to one another. It will be illustrated why these principles can successfully be applied to an understanding of the functioning of all living organisms, i.e. from humans in various contexts to ecosystems in nature.

CHAPTER 2

PRINCIPLES OF THE SYSTEMS THEORETICAL APPROACH

2.1 INTRODUCTION

The aim of this chapter is to provide the theoretical background from which this study was undertaken. Firstly, a motivation for the choice of a systemic approach is presented. Secondly, the term *epistemology* is defined. Furthermore, certain systemic principles are discussed as they pertain to this study. In conclusion, the importance of taking into account the position of the researcher is pointed out.

2.2 MOTIVATION FOR USING A SYSTEMIC APPROACH

"We need a psychology which allows its practitioners to, metaphorically spoken, keep themselves busy with the study of "Mother Earth" (that is the total human being in al the contexts of his/her existence) and not only with the colour and condition of her finger nails, that is the fragmented facts, and mostly trivial elements of human functioning." Jordaan & Jordaan (1984)

The aim of this study is to provide a comprehensive description of the person-environment transaction. An approach is needed that will include the whole phenomenon. Any particularistic, context-free effort to study human behaviour patterns will, because of the complexities involved, lead to a limited understanding of the complete context. According to Wapner (1987) the researcher may gain much broader insight when studying the environment and the person in the environment from a holistic perspective, since such a perspective acknowledges the fact that "every person is always inextricably embedded in some environment, that is, in some physical, chemical, biological, interpersonal, socio-cultural context" (p.1440).

A systems theoretical perspective meets the requirements of such an approach. The focus is on the underlying *processes and patterns* of human behaviour. Bateson (1973, p.31) emphasised that: "mental process, ideas, communication, organisation, differentiation, pattern and so on, are matters of form rather than substance." In other words, an adequate description of mental

processes, ideas, communication, etc. requires an account of the relationships *among* objects and events, and not just of the objects of events themselves. A sequence of actions over time, and not the individual action, creates a pattern. It is this *pattern of actions* in human behaviour that the researcher is seeking to uncover and reveal. Bateson (1979) was of the opinion that it is this dynamic patterning of phenomena that distinguishes the living (creatura) from the non-living (pleroma).

The value of this approach lies therein that it endeavours to provide a contextual framework within which the *extent, complexity* and *interdependency* of human functioning may be studied. In its totality, the environmental context forms what Keeney (1984) named "a unitary interactive system." Each transaction between individuals, or between individuals and their environment, forms a linkage in a intricate network of interconnections. Viewed over time, month by month, this network of transactions establishes a dynamic equilibrium as every individual strives to adapt to changing social and environmental conditions. According to Kerzer (1989) a systemic epistemology allows the researcher to take into account all the interrelationships between the structures and their meanings.

Because the person-environment transaction that forms the subject of this dissertation is complex and multidimensional, its study demands a theoretical framework that is able to accommodate complexity and multidimensionality. The systemic approach assumes a broader context in which relationships, patterns of relationships, patterns of patterns of relationships, etc. are taken into consideration. Hence, it was decided that systems theory is the paradigm of choice for this study.

Systems theory not only urges the researcher to take into account the complex interrelationships that may obtain between phenomena; it also points out the inevitability of complex interrelationships between the *observer* and that, which is being observed. If it is true that a part cannot be understood in isolation from the whole (since part and whole exert a reciprocal influence on each other), it follows that the *process of knowing or describing* cannot be understood in isolation from the larger psychological, socio-cultural and ecological matrix in which it is embedded.

Keeney (1983, p.3) emphasised that "any position, perspective, conceptual frame of reference, or idea is a partial embodiment of a whole we can never completely grasp." Bateson (1970, p.100) stated: "I surrender to the belief that my knowing is a small part of a wider integrated knowing that knits the entire biosphere or creation".

Many scientific theories have erred by assuming that complete objectivity is possible - in other words, by assuming that the scientist can "jump out of the system" so as to escape the assumptions or premises that necessarily guide and constrain all knowing and theorising. As a result, scientists with divergent sets of assumptions have often constructed very different theories to describe and explain observed phenomena. Because they were ignorant of the extent to which their theories reflected their own intellectual biases, each claimed special access to "objective reality" and, by implication, consigned rival theories to the realm of illusion. In psychology in particular, this approach to science gave rise to the disputes between the psychoanalysts and the behaviourists, the humanists and the determinists, etc. that have marked much of the history of this science.

As Fiedeldey (1991, p.102) pointed out, psychology is in need of a *meta-theoretical approach* that is able to deliver it from this intellectual impasse: "What is now required, is to make a move away from the development of more theories at the same level of abstraction as those already in existence, to a level which will enable conceptualisations that will explicitly include the assumptions that form part of the process that occurs during theory development."

Fiedeldey (1991, p.103) emphasised that the difference between a theory and a meta-theoretical approach is that "whereas a theory provides a framework for observation, description and analysis, a meta-theoretical approach also considers the principles which lead to any particular observation, description and analysis." Systems theory is an example of such a meta-theoretical approach, since it explicitly includes the processes of observation, description and analysis within the scope of that which is being observed, described and analysed. As such, it holds the promise of being a significant unifying force among the various rival theories in psychology.

To summarise: As was discussed above, systems theory is geared towards the description and analysis of complex networks of interrelationships. Since the experiences and perceptions of SAA cabin crew form part of such a complex network, systems theory is an appropriate conceptual framework for this study. However, systems theory also cautions that such a study is

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likely to be successful only if the researcher makes her own assumptions explicit and extends the scope of the study to include her own process of knowing. In other words, it states that scientific research, in order to be truly scientific, must be an *epistemological* enterprise. Consequently, the theoretical discussion below will begin with a definition and explanation of the term *epistemology*.

2.3 DEFINITION OF EPISTEMOLOGY

"We draw distinctions, that is, we pull them out. Those distinctions that remain undrawn are not." Bateson (1980, p.107)

Epistemology refers to the study of how a person understands the world. As a science, epistemology is that branch of philosophy that attempts to answer the following questions:

What *is* knowledge? *How* do we know what we know? What *can* be known and what *cannot* be known?

Keeney (1983, p.13) defined the concept as: "... the basic premises underlying action and cognition". What a person knows cannot be separated from how a person knows. Gouws, Louw, Meyer and Plug (1982) defined epistemology as the study of the origin, nature and boundaries of knowledge. Bateson (1979, p.228) defined **epistemology** as "how particular organisms or aggregates of organisms know, think and decide". Keeney (1983, p.13) summarised this definition: "...epistemology becomes a study of how people or systems of people know things and how they think they know things. The study of epistemology, in more general terms, becomes a way of recognising how people come to construct and maintain their habits of cognition".

According to Keeney (1983, p.18) "the most basic act of epistemology is the creation of a difference. It is only by distinguishing one pattern from another that we are able to know our world". The observer first distinguishes and then describes a pattern. When an observer describes a pattern that has been distinguished, this description is itself the drawing of a distinction:

"We draw distinctions in order to observe and subsequently, we draw distinctions in order to describe what we observe. The recursive operation of drawing distinctions upon distinctions again points toward the world of cybernetics where action and perception, prescription and description, and construction and representation are intertwined" (Keeney, 1983. p.24).

A systemic epistemology enables an observer to describe multiple versions of reality, recursively. Seemingly divergent approaches can be combined to obtain a more holistic view of phenomena. Bateson (1979, p.146) uses binocular vision as a metaphor for explaining double description:

"...two eyes, each giving a monocular view of what goes on and, together, giving a binocular view in depth". This recursive nature of systems theory enables the observer to get a higher-order perspective. Keeney (1983) uses the example of 'play' which is a higher-order distinction of a simple action, 'throwing a ball' (a lower order distinction):

"To move from one order of description to another within this system of analysing experience requires an act of double description: That is, a view from each side of a relationship must be juxtaposed to generate a sense of the relationship as a whole" (Keeney, 1983, p.41).

Through double description, that is the process of drawing distinctions upon distinctions, the researcher transcends the dualities of the Cartesian-Newtonian approach. The latter approach is reductionistic and does not take the interrelationships between elements into account. One approach may be seen as a higher order of another. Any epistemology is only a description of reality as observed through the eyes of a specific observer, and other observers who share the same truth. "Truth is impermanent, it exists only within the pattern which generated it, and 'runs out' when the pattern is transformed or disintegrates" (Auerswald, 1992, p.28).

Systems theory points out that it is important for a researcher to be aware of his/her own frame of reference, which is the conceptual grid or filter through which observations are initially enabled and consequently interpreted. This will lead to a deeper understanding of his/her own thoughts, perceptions and experiences and how they may affect the research process.

Certain fundamental systemic principles underlying the way of thinking in this study will consequently be discussed.

2.4 FUNDAMENTAL SYSTEMIC PRINCIPLES

2.4.1 System

- -

"Unless you confront the mutualness, the closure of a system, you just lose the system. It is the simultaneity of interactions that gives whole systems the flavour of being what they are". Varela (1976, p.27)

According to Schwartz (1997, p.26) "... a *system* is seen as a non-separable entity constituted of objects (components) in relations (interaction)". Schwartz (1997, p.30) stated further: "Systems are comprised of a unified pattern of events, and their existence, as well as their character are derived more from the nature of their organisation, than from the nature of their components". Two or more components in dynamic interaction comprise one emerging whole. In short, a system is a patterned organised whole of interacting components. As a pattern of organisation, any addition or subtraction alters the character of a system. Components of a system can be distinguished from each other, although functionally they cannot be separated. Functional organisation of a system refers to the inherent structure, that is the relation or connections, which exists simultaneously between these components within the system. A system always function according to it's own internal structure or organisation. It is the coherence of the components, the unique structure, which determines the identity of a system.

Living systems are integrated wholes whose properties cannot be reduced to those of smaller parts. In this regard Capra (1997, p.36) stated:

"Systemic properties are properties of the whole, which none of the parts have. They arise from the ordered relationships that is characteristic of that particular class of organisms, or systems. Systemic properties are destroyed when a system is dissected into isolated elements".

Bateson (1979) and Keeney (1983) emphasised that the identification of a system lies with the observer and that objective systems do not exist in themselves. According to Fiedeldey (1991, p.105) "...the researcher has the choice of arbitrarily drawing the lines or boundaries by which he or she conceptualises the system". However, as Bateson (1972, p.459) stated, the drawing of boundaries is not completely arbitrarily: "The way to delineate the system is to draw the limiting line in such a way that you do not cut any of these pathways in ways which leave things inexplicable". It is therefore clear that the researcher has the choice to draw the boundaries of the system, although some limiting lines might be better than others. In this study the person-in-environment system is the unit to be analysed (Wapner, 1987). In order to be more specific, the physiological -, cognitive- emotive-, perceptual- and socio-cultural subsystems are demarcated as the focus of analysis.

2.4.2 Subsystem

Mental process is always a sequence of interactions between parts. The explanation of mental phenomena must always reside in the organisation and interaction of multiple parts".

Bateson (1979)

The universe is understood as a hierarchy of systems, where each higher level of system is composed of systems at lower levels. The individual is a system, consisting out of several interacting subsystems, and on a different level is also a subsystem of a greater system, the organisation. An increasingly inclusive line of systemic integration implies an unlimited potential for a theoretical holism. In reality, interaction does not occur in such a hierarchic line, but can occur directly between an individual and a socio-cultural system. Keeney and Sprenkle (1982, p.10) described the interconnectedness and recursiveness of subsystems as follows: "It is like a set of self-organising Chinese boxes, each one neatly fashioned to fit inside the other, ad infinitum". A living system is part of a system is part of a system.

For the purpose of this dissertation two fundamental subsystems were distinguished namely, the *interpsychic subsystem* and the *intrapsychic subsystem*. It should be emphasised that these two subsystems are not on the same level of abstraction. In the same way that the tree is a subsystem of the wood, the intrapsychic system is a subsystem of the interpsychic system.

2.4.2.1 The interpsychic system

The *interpsychic* system refers to the socio-cultural context within which an individual functions. This is the external environment where information exchange/transaction occurs through language between people. Maturana (1987) identified language as the critical phenomenon in the development of social and cultural unity. It is known that the cohesion of insect communities is based on the exchange of chemicals between them, while social unity of human communities is based on the exchange of language. Humans are inseparably bound to each other and the world through language (Keeney, 1983). Although their realities differ, humans share what Capra (1987, p.322) named collective consciousness - that is, shared patterns: "As individuals we participate in these collective mental patterns, are influenced by them, and shape them in turn". These shared patterns of consciousness, contribute to the meaning that humans give to their perceptions and experiences of the environment.

2.4.2.2 The intrapsychic system

The *intrapsychic* subsystems represent the innermost being, the internal environment of an individual and constitute the perceptual-, cognitive- and emotive subsystems. The physiological subsystem is part of this system, although on a lower level of abstraction. The difference between these levels is similar to the difference between a mind and a brain. The aforementioned subsystems are *interdependent* and constitute the unique range of experience of an individual. Jordaan & Jordaan (1989, p.42) describe intrapsychic subsystems as the differentiation of consciousness, that is an individual's "ability of self-awareness, the ability to perceive, think, learn, remember and feel, to have motives and a self-image which is relevant to certain actions and patterns of actions".

The perceptual subsystem

The process of perception involves the receiving and processing of information. According to Bateson (1979, p.37) all perceptions are transformations: "In all thought or perception or communication about perception, there is a transformation, a coding between the report and the thing reported, the Ding an sich". The perceiving individual uses a method of questioning based on his/her own epistemology, to create the perceived image. This implies that different people can perceive the same experience differently, because they punctuate reality differently. The perceiver's epistemology will determine which distinctions will be drawn and which will not be drawn. The experiences of an individual become meaningful through his/her unique cognitive interpretation.

The cognitive subsystem

The neo-cortex is the part of the brain where cognitive activities take place. Plug *et al.* (1989) defined cognition as all the processes through which an organism attains knowledge about an object, or become aware of the environment. These processes include perception, recognition, imagination, evaluation, memorising, learning and thinking. Knowledge gained is only a description of reality, and not reality in itself. Korzybski cited in Bateson (1979, p. 37) stated:

"The map is not the territory". Cognition is merely representations of reality, and not reality in itself – "and is therefore limited by the generalisations that its receipt of information will never prove anything about the world or about itself" (Bateson, 1979, p.142).

Cognitive abilities free a person from the control that current events can have on one's life: "They enable people to conceive of objects, entities, environments, and events that have never existed and to combine such conceptions with memories of the past, expectations of the future, and current perceptions to guide actions that actually create imagined future possibilities" (Ford & Lerner, 1992, p.117).

The emotive subsystem

The emotional centre of the brain originated in the brainstem (Goleman, 1996). That implies that there was a feeling brain long before there was a thinking brain, which explains erratic and irrational behaviour. According to Goleman (1996) neuroscientists associate emotions with the limbic system in the brain. The limbic system is enriched with peptides, which are according to Capra (1997) the biochemical manifestation of emotions: "The entire group of 60-70 peptides

may constitute a universal biochemical language of emotions." Peptides create a psychosomatic network by mediating emotional states. This intricate network of peptides integrates the cognitive-, physiological- and emotive subsystems. This implies that all experiences and perceptions are coloured by emotions.

The emotive subsystem involves the experience of feelings, and is directed at a holistic experience of the environment. In this regard, Bateson (1979, p.38) remarked:

"The distinction between the name and the thing named or the map and the territory is perhaps really made only by the dominant hemisphere of the brain. The symbolic and affective hemisphere is probably unable to distinguish name from the thing named. It is certainly not concerned with this sort of distinction. It therefore happens that certain non rational types of behaviour are necessarily present in human life."

2.5 CYBERNETICS

"When we consider the extreme instability of our bodily structure, its readiness for disturbance by the slightest application of external forces and the rapid onset of its decomposition as soon as favouring circumstances are withdrawn, its persistence through many decades seems miraculous. The wonder increases when we realise that the system is open, engaging in free exchange with the outer world, and that the structure itself is not permanent but is being continuously broken down by the wear and tear of action, and as continuously built up again by processes of repair". Cannon, 1932

The aim of this section is firstly to give a definition of cybernetics. Secondly, a description of the basic cybernetic concepts of positive and negative feedback will be given. Thirdly, second order cybernetics will be discussed in terms of the self as an observing system.

2.5.1 Definition

Cybernetics is the science that studies mechanisms of self-regulation in machines and living organisms. According to Capra (1997) Norbert Wiener invented the word, which is derived from the Greek word *kybernetes* and means 'steersman'. Wiener (in Capra, 1997, p.51) defined **cybernetics** as "the science of control and communication in the animal and the machine". It

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was during the Second World War that Wiener and Ashby recognised the profound similarity between mechanical feedback loops and the dynamics of many biological and psychological processes (Perold, 2000). This definition postulates a resemblance between some aspects of people's behaviour and the behaviour of machines, but it does not imply a mechanistic view of humanity. Human behaviour, thoughts and feelings are much too complex too be reduced to the laws of mechanics. However, it is possible to identify feedback loops, i.e. circular chains of cause-and-effect in human behaviour. These cybernetic loops come in two basic varieties and will consequently be discussed.

2.5.2 Negative feedback loops

"To become accustomed to anything is a terrible thing".

Japananese Zen Master (in Bateson, 1972)

Negative feedback loops (also referred to as homeostatic feedback loops) operate to maintain the stability of a system. They correct deviations from the preferred state by instigating some contrary or compensatory action and therefore manifest themselves as oscillating variables. Certain variables in a system must vary to counteract the effects of unpredictable changes in the environment, thereby keeping critical variables within their limits of tolerance (see Chapter 2). An example of a negative feedback loop in the lives of cabin crew would be the isolation that crew attendants seek after a long flight with demanding passengers. A cabin attendant may want to withdraw from people to regain his/her emotional balance. After some time of peace and quiet the cabin attendant feels refreshed and ready to serve the next bunch of passengers.

2.5.3 Positive feedback loops

Positive feedback loops facilitates exponential change in a system by reinforcing deviations instead of compensating for them. A positive feedback loop is established when external fluctuations from the preferred state are amplified. An example of such a self-amplifying feedback loop in the airline industry would be the relationship between customer service and letters of appreciation that cabin attendants receive from passengers. Hard working cabin attendants receive letters of appreciation from passengers, which increase their motivation, causing them to render better customer service. The same positive feedback loop can also have a "snowball effect" in the opposite direction: cabin attendants rendering poor customer service,

receive complaints from angry passengers, causing them to react more aggressively towards dissatisfied passengers.

A *positive feedback loop* is not always "positive" in the sense of "being good". Both positive and negative feedback loops can be constructive or destructive.

2.5.4 Adaptability

The difference between living systems and mechanical systems is that most living systems are governed by multiple feedback loops. An interplay of negative and positive feedback loops, of stability and change, characterise healthy adaptation to changing environments.

Bateson (1972, p.17) suggested that "all change can be understood as the effort to maintain some constancy and all constancy as maintained through change". This implies that a variety, or in Batesonian terms, an ecology of behaviour patterns is necessary for successful adaptation. According to Stokols (1978) optimisation is the cyclical feedback process whereby people seek optimal environments for themselves. Optimal environments are those that maximise fulfilment meet needs or support the accomplishment of goals the individual has. O. Connor and Lubin (1990, p.46) stated:

"Not only do individuals adapt or cope with their milieu, but they also arrange or modify it to better suit themselves. In optimisation, humans actively orient to, operate on, and evaluate the quality and conduciveness of the environment as a context for future goals and activity".

Bateson (1972, p.381) remarked: "Corrective action is brought about by difference". This notion implies that flexibility and diversity of behaviour patterns is critical for the optimisation of the person-environment fit. With regards to friends, it is possibly easier for cabin crew to stick to SAA friends, particularly due to work schedule related problems, which make it difficult to maintain meaningful outside friendships. In this way, the system can get stuck in a series of positive feedback loops, which is destructive. It is therefore necessary that crew attendants spend time with people or organisations outside the airline system, which offer a stabilising effect, a negative loop in the whole system.

2.5.5 Flexibility: "the uncommitted potentiality for change"

Bateson (1972) used the phrase "an uncommitted potentiality for change" to define flexibility and rephrased the concept of stress as a loss of flexibility. If a system's capacity for change is large enough, reactions to stress will have adaptive value to the system. The uncommitted potentiality for change ensures that the system has the freedom to cope with and adapt to unpredictable changes in the environment. For any system to be healthy, whether it is health in a psychological, physiological or an organisational system, the wise expenditure of flexibility is a necessity.

Health in any system refers to a vital balance of diverse forms of experience and behaviour (O'Connor & Lubin, 1984). Stability arises in the way these experiences or behaviour sequences are patterned. Bateson (1972) compared a healthy system to that of an acrobat on a tightrope. The acrobat has to have the flexibility to be able move his arms freely, to keep a more basic variable (his position on the rope) constant. The angle that the acrobat's body makes with the vertical line of the floor is the critical variable that needs to stay within certain limits of tolerance. Within these limits, the acrobat moves to achieve balance or adaptation. If the acrobat moves too far to either side of the rope and this corner become too large, the limits of tolerance will be exceeded and he will fall. The moment the acrobat's arms are fixed or paralysed, he loses his flexibility and the slightest vibration of the rope will throw the acrobat off balance. Additional variables such as a sudden gust will disturb the acrobat's equilibrium.

Consider for example "social relatedness" as the critical variable - that is, the awareness of being connected to other individuals. A system needs the proper functioning of a negative feedback loop to keep the critical variable within safe limits of tolerance. The critical variable can exceed either its lower limit (social isolation) or upper limit (social suffocation) of tolerance. If a cabin attendant experiences feelings of intense loneliness (the critical variable moves too close to the lower limit of tolerance) he/she might look for the company of other people. Social interaction will heighten the critical variable to more comfortable levels of tolerance. If a cabin attendant experience feelings of social "suffocation" or claustrophobia (the critical variable moves too close to close to the upper level of tolerance), the cabin attendant might withdraw from people to gain some personal space and privacy. Withdrawal will lower the critical variable "social relatedness" to more comfortable levels of tolerance.

It seems that this negative feedback loop cannot function efficiently in the working environment of cabin attendants. They are often bereft from their flexibility with regards to social interaction. They do not always have the flexibility (freedom) to choose with whom they want to spent their time, especially during a 17 hour flight: *"I want to be with people that I choose, not just with anyone that is available"* (Porter, 1988, p.97). Like Bateson's acrobat, cabin attendant's arms are paralysed or tied behind their backs. Additional socio-cultural stressors can exacerbate this situation.

2.5.5.1 "A budget of flexibility"

A budget of flexibility in any system can be compared to a financial budget. There is only a limited amount of money available that needs to be budgeted carefully to cover the necessary expenditures. If unnecessary money is spent on movies, there will be less money available in the budget for the monthly groceries. Any surplus of money may serve as an emergency fund when money is suddenly needed for unexpected circumstances. In the same way, the budget of flexibility available to an individual is limited. In any system, flexibility should be applied to areas where it is most beneficial. In the case of stressed out cabin attendants, the budget of flexibility seems to be depleted. Using the analogy of Bateson's acrobat, the following question arises: What "paralyses the arms" of cabin crew and causes them to become rigid? In other words, why do cabin attendants experience a loss of flexibility? It seems that the effects of the rapid environmental change and the stressors accompanying it require so much adaptation or flexibility that there is not much left to be used for activities geared towards enhancing health, wellbeing and creativity. Instead of using whatever flexibility is available for health enhancing activities, it is used for regressive coping skills. This means that too much energy is recklessly spent on health impairing behaviour, for example negative thoughts, a sedentary lifestyle and substance abuse. In this regard, Bateson (1972, p.505) remarked: "Social flexibility is a resource as precious as oil or titanium and must be budgeted in appropriate ways, to be spent (like fat) upon needed change".

Loss of flexibility in one system has the propensity to diffuse to other systems, because systems are interdependent. Change in one system always permeates to another system. It can be stated that some cabin attendants experience a loss of flexibility in their working environment, which leads to a loss of flexibility in their personal lives. In the same way, the physiological wellbeing of an individual invariably reflects the psychological wellbeing of the same individual.

2.6 SECOND ORDER CYBERNETICS

At the beginning of this chapter, the importance of scientific research as an *epistemological enterprise* was emphasised. Schwartz (1997, p.22) remarked: "In second order cybernetics the system, an individual or a group, is defined as having the ability to reflect on its own operations on the environment and even on it self ". Therefore, second order cybernetics, involves the study of feedback loops within feedback loops. While cybernetics refers to observed systems, second order cybernetics refers to, as Von Foerster (in Schwartz, 1997, p.22) remarked: "the cybernetics of observing systems". This notion was acknowledge by Bateson as a paradigmatic advance. There is no objectivity in perceptions and experiences, because the perceiver is always part of the observing system. It was from the concept of second order cybernetics that the awareness of the importance of an epistemological approach in science developed. In this chapter, the epistemological circle is completed through a description of second order cybernetics.

2.6.1 Construction of reality

Maturana (1980, p.51) uses the analogy of the pilot who makes a blind landing to explain subjectivity in an observer's construction of reality:

"What occurs in a living system is analogous to what occurs in an instrument flight where the pilot does not have visual access to the outside world and must function only as a controller of the values shown in his flight instruments ... When the pilot steps out of the plane he is bewildered by the congratulations of his friends on account of the perfect flight and landing that he performed in absolute darkness. He is perplexed because to his knowledge all that he did at any moment was to maintain the readings of his instruments within certain specified limits, a task which is in no way represented by the description that his friends (observers) make of his conduct."

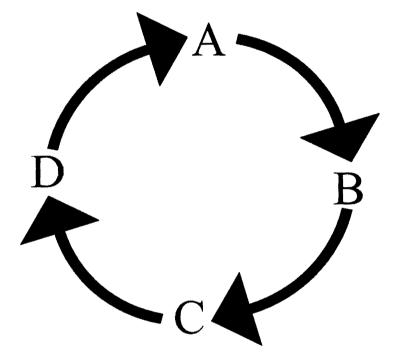
Maturana implies that humans are always making blind landings, although we are exchanging information with the outside world all the time. As humans, we can only create a map of the territory and generate trajectories, invisible to us. The connections of our trajectories show up on our instrument panel, which is our subjective reality. Bateson (1970, p.38) stated that all experience is subjective: "...our brains make the images that we think we 'perceive'". In this

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sense, one can speak of an observing system, which is formed by the observer and that which is observed. To study whole systems, one must approach their self-reference.

2.6.2 The self as an observing system

The organisation of whole systems is circular. Every subsystem interacts with every other subsystem, and any perturbation of one subsystem, will eventually affect the whole system. This circular organisation can by explained by the following example:

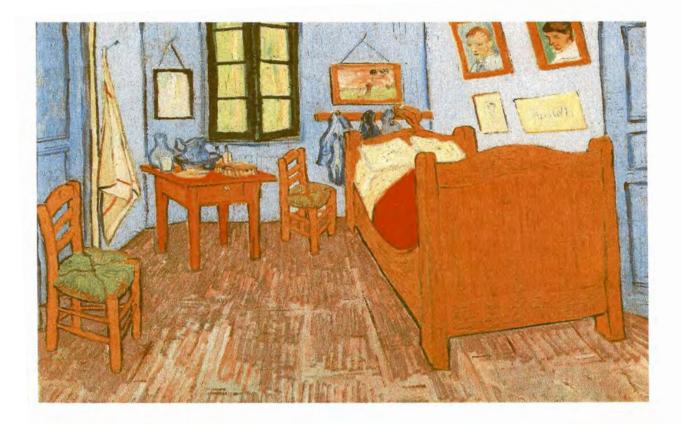


Initially, every subsystem interacts with every other subsystem, that is A with B, B with C, and C with D. Then, on a different level the interactions of the interactions can be described: A's interaction with B interacting with B's interaction with C interacting with C's interaction with D etc. This is where the complete circuit interacts with itself and becomes a self-referential system. In this respect Du Toit (1995) emphasised that the focus and outcome of research are determined to a great extent by the perspective, culture and background of the researcher. The researcher is recursively part of the researching system, his or her questions and hypotheses create the reality of the phenomenon being studied (Keeney, 1983).

"As human beings, we shape our environment very effectively because we are able to represent the outer world symbolically, to think conceptually, and to communicate our symbols, concepts, and ideas. We do so with the help of abstract language, but also non verbally through paintings, music and other forms of art". (Capra, 1987, p.321)

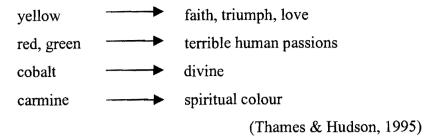
Any description of a perceived reality is self-referential. The patterns that a person observes around him/her are fundamentally based upon the patterns within the self. In this regard (Capra, 1987, p.320) stated: "Patterns of matter mirror patterns of mind, coloured by subjective feelings and values". Self- reference is the pattern that connects the empirical research report to the symphonic composition to the expressionistic painting.

The researcher research method research report is a self-reflecting system in the same way that the artist artistic method artwork is a self-reflecting system. Both the researcher and artist are creatively constructing a reality, or mapping a territory. To explain the concept more vividly, it is appropriate to use a famous painting by Vincent van Gogh, titled: "Vincent's room in Arles, 1889", (see next page) as an example of self-reference.



In this painting, Van Gogh symbolically expressed through colour and composition how he experienced and perceived his bedroom. Although the painting can be regarded as an accurate reflection of reality, it cannot be regarded as reality itself. The artist's emotional, cognitive and physiological constitution as well as his socio-cultural environment contributed to his unique representation, which could be one of many. The painting is a reflection of Vincent's own image.

The room had been opened out like a stage set. The artist differentiates between colour and form to communicate subtle messages. His distinct use of bright and vivid colours reveals the fact that to Van Gogh it was the colour, not the form that determined the expressive content of his pictures. In letters to his brother Theo, Van Gogh described his way of describing, he gave descriptions of his choice of hues and the emotional meaning he attached to them:



During the creative process, the painting paints the painter as much as the painter paints the painting. In other words, the painting transforms the painter, as much as the painter transforms the painting. Van Gogh (in Weaver, 1990, p.112) confirmed this: "Painting does me good and drives away, I think, the abnormal ideas. It is comforting, as music is comforting".

It is obvious that a recursive transformation process, that is a cybernetic circuit occurred within the artist – artwork system, the observing system. A parallel can be drawn to the context of the researcher, who is recursively part of his/her research process.

Vincent Van Gogh understood the pictorial language of the colour patch. Painting was a vessel for his personal emotion. A researcher should be familiar with the "*research tools*" and their eventual effect on the research results.

2.7 CONCLUSION

"What thinks is the total system....which is man plus environment". Bateson (1972, p.483)

The systems theoretical approach enables a researcher to study person-environment transactions as dynamic patterns of interdependent relations, and not as two independent entities. Recursive feedback processes within the person – environment system are emphasised. Because of the emergent properties of a whole system, human experience and perceptions gain meaning only when viewed in relation to the context. The researcher is part of the observing system: "Human knowledge is a gradual continuous human construction made in interaction with the environment". (Schwartz, 1977, p.25). Therefore, knowledge gained from a research project is a construction that reflects the characteristics of the observer, as well as the observed.

The next chapter will be a literature review on the nature of person-environment transactions, with regards to environmental stressors that cabin attendants' experience.

CHAPTER THREE

A LITERATURE OVERVIEW

3.1 THE RESEARCH CONTEXT

"Without context, words and actions have no meaning at all. This is true not only of human communications in words, but also of all communication whatsoever, of all mental process, of all mind, including that which tells the sea anemone how to grow and the amoeba what he should do next." (Bateson, 1979)

Miles and Huberman (1984b, p.92) described the research context as "immediately relevant aspects of the situation, as well as the relevant aspects of the social system in which the person is functioning. This implies that cabin crew's experience of environmental stress is not limited to their working environment, but is also the result of the broader socio-cultural network. Jordaan and Jordaan (1984, p.41) supported this viewpoint by stating that human experience, behaviour and problems cannot be properly known and understood "if they are divorced from the context in which they occur in everyday life". Within the research context, differentiations can be made between smaller contexts. A brief description will consequently be presented of the *physical* and the *socio-cultural environments* as these pertain to the working environment of flight attendants.

3.1.1 Physical environment

The Oxford English Dictionary, (1989) defined the term *environ* as "round about, in the neighbourhood". The environment is that which surrounds, envelops, the circumference; the objects or the region surrounding anything. Fiedeldey-van Dijk (1993, p.160) remarked that "*environmental research contexts*" generally mean the interrelationship between the respondents under study and the physical, natural, geographical and climatic environment in which they live, and with which they are familiar". Therefore, all identifiable components of the immediate environment that the respondents are in contact with, are part of the environmental context. The immediate environment of cabin crew in the aviation industry comprises pressurised aircraft cabins, air-conditioned hotel rooms, often reported by crew as impersonal. Noisy and crowded airports, foreign cities with unfamiliar faces all challenge the environmental adaptability of crewmembers.

Richards, Gottfredson and Gottfredson (1991, p.432) remarked:

"...settings rather than individuals, are the appropriate units of analysis for a wide variety of environmental research. No analysis based solely on individuals as the units of analysis can throw any light at all on the reliability, internal structure, or utility of a measure of setting characteristics".

In a study of the perception of environmental stress, it is the person-in-environment transactions that are important. Cabin attendants experience constant environmental changes. The variety of environmental settings that cabin attendants are exposed to introduce a great amount of potential stressors.

Altman (1981, p.5) referred to the tendency to regard person-environment transactions as the basic units of analysis in social research as "the emerging revolution in psychology" and stated:

"Traditionally, the environment has been treated as a primary class of independent variables, and as being distinctively separate from behaviour and thereby existing in its own right. Environmental factors have been considered to be important determiners of behaviour, but they have been viewed as being separate, different and independent from psychological processes".

Various authors support the importance of the relationship between people and their physical environment. Viljoen (1981) in Retief (1988) remarked that the interrelatedness between the environmental stimuli and the respondent's behaviour should be taken into account when observing the influence of environmental structures. Feldman (1975) cited in Fiedeldey-van Dijk (1993) described how a Roman architect, Marcus Vitruvius Pollio maintained that warm weather sharpened the intelligence of Southern peoples, while the cold weather of the Northern climates chilled the minds and produced overall sluggishness of thought among its peoples.

Ulrich (1991, p.225) stated that humans prefer natural environments above urban environments, and that natural environments are more beneficial for psychological well-being: "Content differences in terms of natural vs. human-made properties, rather than variations in stimulation levels, were decisive in accounting for the differences in recovery and intake/attention". Estranged from nature, the working environment of cabin crew is a high-technology aviation

environment. Aspects of the physical environment may place adaptive demands on cabin crew and could possibly contribute to feelings of distress.

3.1.2 Socio-cultural environment

The socio-cultural environment constitutes the social networks that exist within a specific culture, as well as between various cultures. Gouws, Louw, Meyer, and Plug (1982) defined the term **social network** as "a pattern of formal and informal relations between members of a group". A more comprehensive definition is proposed by Blau (1982, p.275) who remarked: "... social networks are composed of people's relations manifested in their interaction and, by implication, the roles and positions involved in and conditioning these relations".

The socio-cultural environment at South African Airways changed dramatically since 1990, when transformation processes regarding racial discrimination, were initiated by the government. The aim of the company was a more representative workforce in relation to the demographics of South Africa. Different culture groups have to work together in the confined space of an aircraft. These changes took place rapidly, contributing to a stressful working environment, which required tolerance and comprehension from all cultures involved. The values and beliefs, languages and religions, traditions and lifestyles of all employees needed to be accommodated.

Friendships amongst cabin attendants are appropriately referred to as "flying friendships", and are often characterised by high level of pettiness, backbiting and malicious rumour spreading. With regards to the aforementioned interpersonal problems, Porter (1988, p.96) concluded: the consequences of such anomalies ranged from indifferent acceptance, to high levels of frustration and disillusionment, possibly arising from frustrated needs for intimacy and meaningful social relationships". In a qualitative analysis done by Porter (1988) the perception of social support amongst female cabin attendants is highly correlated to perceptions of self, self-image, social meaningfulness and quality of life.

The next section will focus on the definition of environmental stress, and two theoretical perspectives that illustrate the concept.

3.2 ENVIRONMENTAL STRESS

3.2.1 Definition

Antonovsky (1979, p.9) wrote about the omnipresence of stressors and concluded that "the human condition is stressful". Early definitions of the concept of stress differentiate between two approaches, namely:

- The responses of the individual, and
- The situation that caused the disruption of behaviour.

Lazarus (1985) in Stokols and Altman (1987) was of the opinion that stress is inherently relational and cannot be reduced into separate personal and environmental components. Stokols and Altman (1987) stated that many stress researchers have overlooked the properties of physical situations, placing greater adaptive demands on the individual's coping skills.

For the purpose of this study it would be appropriate to present a relational, interactive definition. Stress can be defined as "a complex rubric reflecting a dynamic, recursive relationship between environmental demands, individual and social resources to cope with these demands, and the individual's appraisal of that relationship". According to this definition, stress is a process that occurs when there is an imbalance between the perceived environmental demands and the perceived capabilities of an individual. For stress to occur, an individual must evaluate this imbalance, and decide that the environmental demands exceed his/her capabilities to cope with this imbalance. It is this decision that results in the experience of stress, or as Bateson (1972) rephrased the concept: "a loss of flexibility" as discussed in Chapter 2.

If an individual completes a task successfully which initially had been perceived as being extremely difficult, the person's perception of his/her abilities to perform tasks of this nature will also change. It can then be concluded that the stress associated with our perceptions of particular demands will progressively lessen as we progressively improve our abilities to cope with the environment and become more flexible. Psychological perspectives on stress emphasise the role of interpretation of stressors in the stress response. The response of an individual to stressors is determined by the degree to which he/she perceives the event as threatening, harmful or challenging. Psychological responses to stress are well known to health practitioners: increases in general negativity, impatience, irritability, feelings of worthlessness and a decrease in problem-solving skills. In more severe cases emotional disturbances such as anxiety and depression are eminent. Health in mind and body are interrelated. The researcher decided to emphasise the often-neglected physiological aspects of the stress response. For the purpose of this study, only the physiological stress response will subsequently be discussed.

3.2.2 The physiological response to stress

The scope of this dissertation allows for only a cursory account of the various intricate processes involved in stress. The physiological systems involved in the stress response are discussed below, after which two complementing physiological models of stress are discussed.

3.2.2.1 Physiological systems involved in the stress reaction

The brain and autonomic nervous system, in combination with the endocrine (hormone) system, control the body's internal organs. The control of body temperature, the circulation of blood, muscle movement and the activities of the gastrointestinal tract are not conscious. The autonomic nervous system is divided into two parts, the *sympathetic* and the *parasympathetic nervous systems*, both of which supply nerves to several vital organs.

Sympathetic nervous system

The cells of the sympathetic nervous system are situated in the spinal cord from the 8th cervical to the 3rd lumbar segments (Williams & Wilkins, 1961). The inner part of the adrenal gland - the adrenal medulla - is also essentially part of the sympathetic nervous system. Sympathetic stimulation appears to prepare the body for emergencies. Environmental stressors directly disturb the homeostatic balance of the body. According to Cannon (1932) in Stokols and Altman (1987) the sympathetic nervous system is an autonomic emergency response system allowing humans to fight or flee from any challenging situation.

Parasympathetic nervous system

The cells of the parasympathetic nervous system are situated at three levels: the midbrain, the medulla oblongata and the sacral (lower) region of the spinal cord (Williams & Wilkins, 1961). The prefix "para" denotes a departure from the normal, alongside or near (Williams & Wilkins, 1982). The parasympathetic nervous system, alongside the sympathetic nervous system, serves a less prominent role during the stress reaction.

The brain: the hypothalamus

One of the essential functions of the brain is to regulate the internal environment of the human being. The brain adaptively mediates the influences of the external environment on the internal environment. In terms of hormonal function, the hypothalamus is the highest brain structure (Kapit *et al* (1987) and is directly concerned with the body's homeostasis and integration of internal activities.

Charles Sherrington, (in Kapit *et al.* 1987, p.101) a great English physiologist, named the hypothalamus the *"head ganglion of the sympathetic nervous system"*. This is so because of the marked effects of hypothalamic stimulation on the sympathetic nervous system. Strategically located in the base of the brain, underneath the thalamus (hypo- "thalamus") and above the pituitary gland, it plays a major role in orchestrating the stress reactions in the lower glands.

Through hypothalamic stimulation certain hormones in the adrenal glands are mobilised. These hormones are the defence mechanisms of the body and are considered to be essential for life. Hormones cannot be excreted at a constant rate, but need to be adapted to the specific needs of the body in the midst of a specific environment. It is the function of hormones to keep the body's homeostasis within the limits necessary to ensure survival.

The adrenal glands

The adrenal glands are paired organs located on top of the kidneys. Each adrenal consists of two separate glands, which have different structures, embryonic origins and hormonal secretion. The inner part is called the *adrenal medulla*, secreting the hormones adrenalin and noradrenalin.

The *adrenal cortex*, the outer part of the gland, secretes a variety of steroid hormones. Cortisol is the chief steroid hormone secreted by the cells of the adrenal cortex. Cortisol is an anti-inflammatory hormone, but also has numerous other effects on the body, many of which are

intimately related to body responses in the presence of environmental stressors. According to Kapit *et al.* (1987), the removal of adrenal glands in humans and animals may be fatal if they are exposed to sudden unexpected stress.

3.2.2.2 The Fight or Flight reaction: The adrenal medulla

The stressful situations with which cabin attendants are commonly confronted today are quite different from those which human beings have had to face for most of their evolutionary history. Our ancestors had to recognise the threats in their environments and act without delay to survive the perils of prehistoric times. Avoiding predators, eating the right foods and protecting territory were part of the daily life of primitive people. They lived in tightly knit communities, which had a complex social support structure. Yet, the sensory and perceptual system with which we recognise stressors or danger and the physiological changes which occur when an environment is perceived stressful are still very much the same. Evidence supporting this statement includes the physiological changes characteristic of the fight or flight reaction. Cannon (1932) described the fight or flight reaction as the body's autonomic emergency response system, allowing the human or animal to fight or flee from any challenging situation.

Consider, for example, the following scenario. A cabin attendant spends 3 days off after a long haul flight with multiple time zone crossings, trying to get "in synch" with the environment. The following day, the cabin attendant gets caught out on Standby, because a colleague booked off sick at the last minute. Overcome by fatigue, frustration and anxiety the crew member rushes to the airport to be in time for the departure of the flight. Once on board the aircraft, there is total chaos. The flight is overbooked with 20 passengers, all of them in need of assistance. To worsen things, special meals that passengers have ordered with their bookings have not been loaded for the flight, while mothers with babies demand diapers, baby food and headache pills. As if that is not enough, several families complain they want to sit together as their seats were not booked next to each other. Emergency equipment need to be checked and reported in working condition, while dinner must also be prepared before take off.

At this stage, the cabin attendant might experience an imbalance between the perceived environmental demands and his/her perceived capabilities to cope with the demands. The brain, specifically the hypothalamus, receives messages from the environment through the body's various sensory receptors, that is through the eyes, ears, skin and nose, where the sequence of events of the stress process begins. The hypothalamus responds in the same way than it did a thousand generations ago. That is, it does not differentiate between primitive cavemen trying to overtake one's cave, or noisy passengers demanding attention. On examining the effects of *hypothalamic stimulation* of the sympathetic nervous system, an interesting pattern emerges:

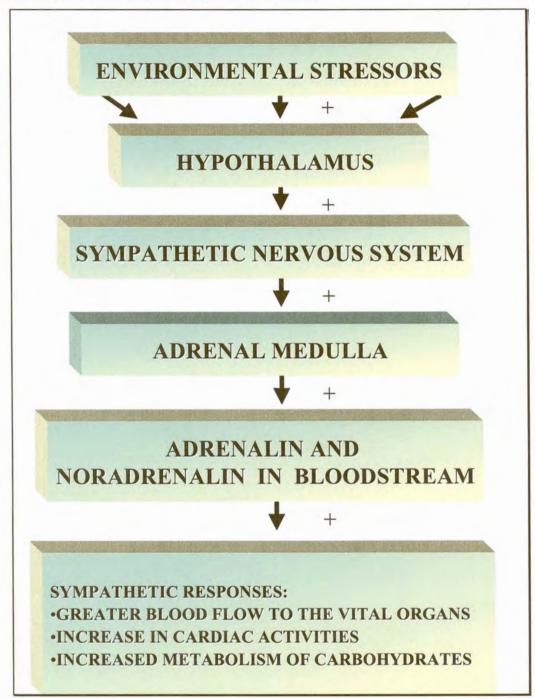
The sympathetic nervous system acts directly on the vesicles of the *adrenal medulla*, which upon stimulation releases the hormones *adrenalin and noradrenalin* into the blood. These hormones heighten the response readiness of the body. For example, air passages to the lungs dilate, making rapid breathing easier, the iris of the eye dilate the pupil, permitting more light into the eyes to enhance vision, the heart beats faster and stronger, and the liver releases glucose into the bloodstream, which makes energy readily available. Blood vessels constrict to peripheral areas of the body, where blood supply is not so much needed for survival, for example the digestive system. Consequently, more blood flows to vital organs, that is the heart, kidneys, brain and muscles, where it is needed most. Each time the sympathetic nervous system is strongly stimulated by the hypothalamus, the activity of the *adrenal medulla* increases, and more hormones are released into the bloodstream, perpetuating the cycle. In short, the function of the adrenal medulla is synergistic and complementary with the functions of the sympathetic nervous system.

The adaptive value that the aforementioned physiological stress response had for primitive cavemen is evident. However, angry red faces with dilated pupils, rapid breathing, gnarling teeth and growling noises are not the appropriate responses for cabin attendants trying to cope with demanding passengers. They need to stay calm, think clear and as often instructed during training, "kill" the passengers with kindness.

Cannon (in Stokols & Altman, 1987, p.576) stated that continuous exposure to this emergency response syndrome, might have detrimental long term effects for the individual: "...we do know that chronically increased levels of circulating catecholamines (adrenaline and noradrenalin) have direct links to cardiovascular diseases and high blood pressure".

On the following page, the physiological systems and processes involved in the fight or flight response are diagrammatically depicted in Figure 1.

FIGURE 1: THE FIGHT OR FLIGHT RESPONSE



3.2.2.3 The General Adaptation Syndrome: the adrenal medulla

The Fight or flight model mentioned in the previous section depicted a short-term reaction to stressful situations. Hans Seley (1956) cited in Stokols & Altman (1987) developed a model of the stress response describing a long-term reaction to stress. According to Seley (in Stokols & Altman, 1987) psychological and physiological stressors elicit non-specific physiological

reactions. The non-specific effects, which Seley called the *general adaptation syndrome*, include three stages: alarm, resistance and exhaustion.

Stage 1: Alarm phase

A variety of environmental stressors act on the brain, specifically on the hypothalamus to elicit the release of hormones, which in turn stimulate the release of corticotrophin from the pituitary gland, a pea size gland at the base of the hypothalamus. Corticotrophin acts on the adrenal cortex, stimulating the synthesis and release of cortisol. Cortisol stimulates the synthesis of glucose in the liver, which ensures adequate energy supplies for the brain and heart. In addition, cortisol reduces the uptake of glucose by muscle cells, sparing glucose supply for the heart and brain. This adaptation is necessary to mobilise the body to deal with the stressful environment.

Stage 2: Resistance phase

During the second stage, the organism seems to have adapted to the stressor, successfully resisting it. The increased release of cortisol occurs rapidly, within a few minutes. According to Kapit *et al* (1987) this increase sets up a feedback loop, stimulating the adrenal medulla activity and subsequent release of catecholamines (adrenalin and noradrenalin.). Once the cortisol level is sufficiently high, hormone secretion is decreased through the negative feedback effect of cortisol on the hypothalamus. This resists or reduces the cortisol level back to the normal condition. When stress is chronic, the brain overrides this control, with the effect that high levels of cortisol circulate in the blood streamIn short, cortisol and catecholamines function synergistically to promote the body's adaptation and defence mechanisms.

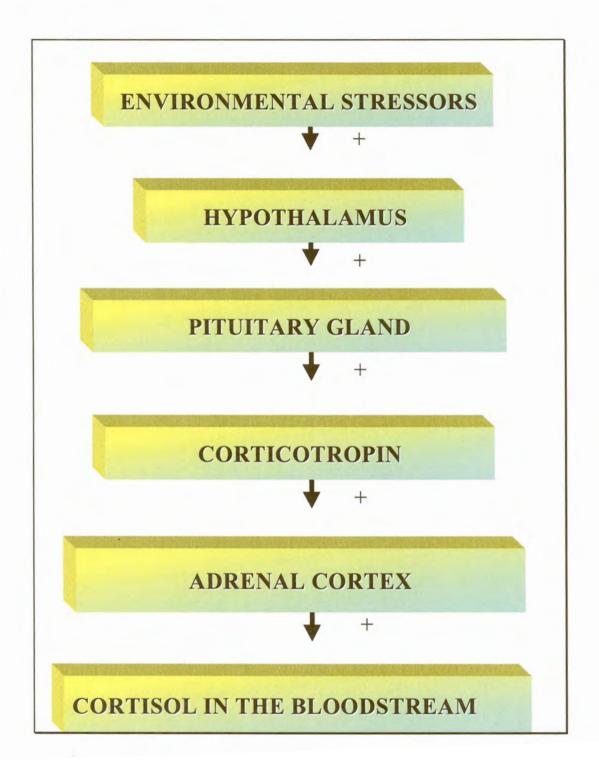
Stage 3: Exhaustion

Stress may be additive. The body has only a finite amount of adaptive energy, and when this capacity has been exceeded, the effects can be detrimental. Exhaustion occurs if the environmental stressor is sufficiently prolonged or so severe that the body's defences are completely depleted. Stokols and Altman (1987, p. 576) stated that during the exhaustion phase "...the adrenal glands are unresponsive to environmental demands, with various susceptible organs suffering breakdown or damage". In response to chronic environmental stressors, prolonged and excessive secretions of cortisol, can cause stomach ulcers by stimulating acid

secretion in the stomach, decreased immunity, because of a reduction in white blood cells, and high blood pressure as a result of vascular disorders.

The systems and processes involved in Selye's General adaptation syndrome, are diagrammatically depicted in Figure 2 on the next page.

FIGURE 2: THE GENERAL ADAPTATION SYNDROME



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3.3 DIMENSIONS OF ENVIRONMENTAL STRESSORS

Various dimensions of environmental stressors can be identified. Dimensions that have relevance to this study will consequently be summarised.

3.3.1 Perceptual salience

This dimension refers to the degree to which a stressor is easily noticeable. If a stressor is chronic, of low to moderate intensity and uncontrollable, it becomes less noticeable. According to Glass and Singer (1972) in Stokols and Altman (1987) habituation in response sensitivity and general awareness is a result of chronic exposure to many low level, ambient stimuli. Engine vibration and moderate turbulence become background stimuli to cabin crew, where as to a first time flyer, it might be a terrifying experience.

3.3.2 Type of adjustment required

Environmental conditions that are very intense, sudden and uncontrollable are more likely to lead to accommodation and emotion-focused coping, rather than efforts to deal with the stressor directly (Kiretz & Moos, 1974; Lazarus & Cohen, 1977). An example of such a sudden and intense environmental stressor would be an emergency situation where an aircraft tyre burst on impact during landing. Cabin crewmembers have to stay calm, keeping the passengers under control and follow the emergency procedures. Continuous exposure to these conditions, has psychological and physiological consequences, which may influence the health of cabin crew.

3.3.3 Predictability of stressors

Some environmental stressors are more predictable than other. Predictability may influence the way cabin crew chooses to cope with the stressor. If the number of days that cabin crew stays in a specific country suddenly changes due to changes in the flight schedule, crew might experience intense frustration. Technical defects of an aircraft result in flight delays, often for an indefinite time. Changes in passenger totals at the last minute before take-off may also challenge the coping skills of cabin crew. These examples demonstrate the unpredictability of events in the aviation environment.

3.3.4 Duration and periodicity of environmental stressors

Related to predictability is periodicity, which refers to the regularity and continuity of the stressors. It is important to differentiate between stressful life events and chronic sources of stress. Stokols and Altman (1987, p.574) remarked: "Life events are major incidents in the lives of people that typically require personal or social adaptive responses". The difference is that stressful life events occur within a certain time frame, while chronic stress is continuous, with no delineated time frame. Rapid environmental change, noisy and crowded aeroplanes as well as unresolved interpersonal conflicts with friends and family are examples of chronic strains that cabin crew seem to experience.

According to Stokols and Altman (1987) the extent of previous personal history with the stressor, as well as the length of current exposure to the condition, affect the human adaptation processes. This raises the question if cabin crew with longer years of service cope better with environmental stressors than crew with fewer years of aviation experience.

3.4 WORK SCHEDULE STRESS

Work schedule stress was identified as a main stressor in the lives of 75 female cabin crew members at the SAA by Porter (1988, p.126): "It was brought to mind that work schedule involve much more than just hours of work". The working environment of cabin crew involves a whole lifestyle. Kennedy (1986, p.5) in Parker (1988) suggested that work schedule stress is a major health hazard for cabin crew and that people are "*dying of their lifestyle*".

Psychological consequences of work schedule stress amongst female crewmembers as reported by Porter (1988), are irritability and quick temperedness. Negative self-perceptions were evident in those cabin attendants which experienced sleep-related problems and an inability to cope with the work schedule demands. Feelings of loneliness, of "being out of touch" and depression emerged as significant consequences of work schedule stress. Aggressive thought patterns were evident in those female cabin attendants who experienced high levels of stress (Porter, 1988). In the same study, some female cabin attendants reported more serious consequences, such as having experienced or being on the verge of a nervous breakdown. With regards to physiological consequences, the most frequently reported symptom was fatigue, being related to the non-routine nature of the work schedules and the subsequent disruptive effect on sleeping patterns. The body seems unable to adjust to the abnormal hours and flying itself. Enhanced levels of susceptibility to colds and influenza, menstrual problems, indigestion, constipation, headaches, insomnia, shoulder tension and blood pressure problems were reported by female cabin attendants (Porter, 1988). Seley (1982) cited in Porter (1988) described all these disorders as "disorders of adaptation". The results of the aforementioned study demonstrate that work schedule stress played a large contributory role in the physiological consequences.

Considering these results, it is necessary to reiterate that psychological and physiological subsystems are interdependent and mutually influence each other. Porter (1988) remarked that the responsibility lies with individual cabin attendants to engage in activities that minimise the negative side effects of this unique lifestyle.

3.5 CIRCADIAN RHYTHMS: THE CYCLE OF LIFE

"Slowly, as our physical reality became less wild and more technological, we needed to create a new psychic context for ourselves. But since we did this out of terror, we ended up dreaming a dream of a world in which we humans had complete control. We created techno-utopia".

Glendinnig in Sessions (1995, p.39)

3.5.1 The discipline of chronobiology

Chronobiology reasserts the ancient emphasis on the rhythm of life and is concerned with the rhythmic properties of any living organism. The most common rhythms exhibited by man have cycles of about 24 hours, and are termed *circadian rhythms*, from the Latin 'circa' – about, and 'dies' – day. Physiological processes in the body exhibit regular rhythmic fluctuations, which occur whether an individual is kept awake or allowed to sleep. These rhythms are controlled internally but are sensitive to fluctuations in the external environment. The disruption of these natural cycles, as seen in cabin crew, has negative effects on health and physical wellbeing. Renè Dubos (in Stringer, 1975, p.303) remarked:

"It is questionable that man can retain his physical and mental health if he loses contact with the natural forces that have shaped his biological and mental nature. Man is still of the earth, earthly, and like Anteus of the Greek legend, he loses his strength when both his feet are off the ground".

3.5.2 Cabin attendants and the circadian clock

The aviation industry is a technological advanced environment and provides a 24-hour client service. As humans, the circadian clock is our evolutionary heritage. We are programmed for periods of wakefulness and sleep, high and low body temperature, high and low digestive activity and increased and decreased performance capability. For example, the circadian rhythm of body temperature is programmed for the lowest temperature between 3 and 5 am on a daily basis, which is also the period of maximal sleepiness. When the circadian clock is moved to a new work/rest schedule or put in a new environmental time zone, it does not adjust immediately. This is the basis for the circadian disruption associated with jet lag. The body's internal physiological rhythms do not all adjust at the same rate, and therefore may be out of synch with each other for an extended period of time. According to Rosekind et al. (1991) it may take weeks for all the internal rhythms to come together in a synchronous 24-hour rhythm in the new time zone. It would be interesting to know which rhythms adapt faster and which rhythms take longer to adjust to a new time zones. In this regard, it is important to note that there are huge differences in individual physiological flexibility for adaptation of the circadian clock and the ability to tolerate sleep loss. There could be a range of individual responses for any particular environmental demand. It is therefore possible that some cabin attendants may report more difficulties in adjusting to the swiftly changing time zones.

Wiener *et al.* (1988, p.308) emphasised that additional stress results from the irregularity of the duty hours of cabin attendants: "There are wide daily variations in the number and timing of flights both within and between such trips, requiring crew to frequently alter their work and rest schedules". Moving from a day to a night schedule and back to a day schedule, can keep the clock in a continuous state of readjustment. In this regard, Monk (1994) cited in Porter (1988) remarked that all of the difficulties associated with the of moving the clock, such as poor sleep, sleepiness and effects on performance, will be affected until the circadian clock physiologically adapts to the new schedule or time zone. Another factor to take into consideration is the direction, which the circadian clock is moved. Shortening the period (for example, moving to a 21-hour cycle or day) is generally more difficult than lengthening the period (for example, moving to 25 or more hours), which is the natural rhythm of the circadian clock. Therefore, it

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can be more difficult to cross time zones in an eastward direction compared to westward movement.

3.6 CONCLUSION

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The aviation industry in which cabin crew operate introduces a great amount of potential environmental stressors. From the research literature it is clear that the inversion of rest and activity cycles from the normal day orientation is a major stressor for cabin attendants. Unfortunately, the technology for overcoming this human handicap lags far behind that for overcoming our lack of wings.

In the next chapter, the method of data collection and data analysis, as well as the rationale for the chosen method is explained.

7.4 "THAT REMINDS ME OF A STORY"

"The fountain of content must spring up in the mind, and he who hath so little knowledge of human nature as to seek happiness by changing anything but his own disposition, will waste his life in fruitless efforts and multiply the grief he proposes to remove".

Samuel Johnson

Bateson considered stories, parables and metaphors to be essential expressions of human thinking. He would never deal with any idea in a purely abstract way, but would always present it concretely by telling a story. Since relationships are the essence of the living world, one would do best, Bateson maintained (in Capra, 1989) if one spoke a language of relationships to describe it. This is what stories do. A story connects people from different contexts or backgrounds to one another. The following story is an ancient one, full of images and symbols, told by Bushmen from generation to generation. However, its meaning is as relevant to humankind today as it was to the Bushmen who created it centuries ago. The story is simple and describes a primitive man's experience of loosing "meaning" or "soul" in life:

There was once a man who lived happily by keeping cattle. One morning he found that his cows had no milk to give. (In other words, the story is telling us that he had arrived at a moment in his own life when his old ways no longer provided him with sustenance). He took them to better grazing grounds, but they still had no milk to give. He decided to keep watch on the cattle in their kraal. During midnight he saw a cord coming down from the stars, with beautiful young women with containers, who started milking his cows. When they saw him, they scattered immediately and ran up the cord as fast as they could. He managed to catch hold of one the girls, who still had her container with her. She said that she was happy to become his wife but on the following condition: she will fill the container full of starlight, and he must promise that he will never look in this container without her permission. He promised her that and they lived happily for months. One day, the man got irritated with the container and decided to look into it, while his wife was in the fields. He could not see anything in the container and perceived it as empty. That evening when she came home, she knew immediately that he had looked into her container and was very upset. He told her: 'You silly creature! Why have you made such a fuss about an empty container?' 'Empty?' she uttered, distressed. 'Yes, empty!' And at once she became very sad, turned her back on him, walked straight into the sunset and was never seen again on earth.

The problem here was not the fact that the man had broken his promise to his wife. Rather, the man could not see anything in the container, although it was full of starlight that the beautiful girl brought down for both of them. To him it was empty, without any meaning. This is an image of the moment in our lives when we can no longer see what we have naturally in our containers, the moment we experience a loss of meaning in our lives. It is not that we have empty containers, but rather that we have lost the capacity to see its content, to enjoy meaning and fulfilment in life and to live passionately. This loss was a loss of soul for the cattleman and implied a living death for him thereafter.

What cabin attendants at SAA "see" (experience) in their "containers" (working environment), should not be understood in terms of their visual sense of sight, but in terms of the understanding and the interpreting of their experiences. With regards to this, Capra (1987, p.320) remarked: "The patterns we perceive around us are based in a very fundamental way on the patterns within. Patterns of matter mirror patterns of mind, coloured by subjective feelings and values". The respondents imposed their own patterns or meaning, unconsciously, on their experiential world.

It is therefore not only the working environment that needs change, but also the cabin attendants' ability to make sense out of their working environment. This change incorporates a belief in the possibility of determining one's own fate and an attempt to make the most out of a situation. For all living things *growth* is a necessity of survival. Man survives not by adjusting himself to his physical environment in the manner of an animal, but by transforming his environment through intellectual and emotional growth. In this regard, Ayn Rand (1964, p.121) remarked:

"An animal's capacity for development ends at physical maturity and thereafter its growth consists of the action necessary to maintain itself at a fixed level. After reaching maturity it does not, to any significant level continue to grow in efficacy - that is, it does not significantly increase its ability to cope with the environment. But man's capacity for development does not end at physical maturity; his capacity is virtually limitless. His power to reason is man's distinguishing characteristic, his mind is man's basic means of survival - and his ability to think, to learn, to discover new and better ways of dealing with reality, to expand the range of his efficacy, to grow intellectually, is an open door to a road that has no end.

7.5 CONCLUSION

As mentioned in Chapter 2, it is not possible for a researcher to describe or understand the complexity of the interconnecting parts of any system or phenomena completely. Korzybski (1979-1950) emphasised that descriptions are simplified versions and not accurate presentations of real-life situations. With regards to this, Bateson (1979, p.100) stated: "I surrender to the belief that my knowing is a small part of a wider integrated knowing that knits the entire biosphere or creation". In agreement, Keeney (1979, p.47) remarked: "As one of Birdwhistell's (1970) students put it, it's (doing research on human behaviour) like trying to understand a drainage system from a 6-inch slice of river". However, this study has achieved it's objective if the reader was encouraged to think about the behaviour of cabin attendants in terms of various transacting contexts, circular causality or patterns that connect.

CHAPTER FOUR

THE RESEARCH PROCESS

4.1 INTRODUCTION

The purpose of this chapter is to provide an overview of the research process that is followed in this study. In the light of the literature review, a motivation will be given for the value of continuing with this study. A motivation will also be given for the use of interviews as the appropriate qualitative research method in obtaining the data. The way in which the respondents for this study were selected, as well as the sample characteristics will be described.

4.2 MOTIVATION FOR THE SELECTION OF THE SUBJECT OF RESEARCH

In the previous chapter a literature review on environmental stressors was given. The physiological of environmental stressors on the human body was described in detail. Work schedule stress was highlighted as a major stressor amongst female cabin attendants at SAA (Porter, 1988). There is an abundance of literature on cockpit crew of commercial airlines and their experience of stress. However, there seems to be a lack of research on cabin attendant's experience of environmental stressors in the South African context. In view of this, it was decided to continue with the study in order to obtain an in-depth understanding of cabin attendant's experience of stress in their working environment. Furthermore, a secondary aim is to generate information for future research in this area.

4.3 MOTIVATION FOR THE USE OF INTERVIEWS AS A RESEARCH METHOD

"... major emphasis should be placed on understanding the meanings or interpretations that people provide for the environments they encounter ...".

Winkel, 1991, p. 85

An important consideration in selecting the appropriate research method was that it should be compatible with the underlying principles of systems theory. The qualitative research interview is reconcilable with a systems theoretical approach and was used in this study to obtain data. Human conversation gives access to an individuals' lived world. Taylor and Bogdan (1984,

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p.77) confirmed this notion by defining interviews as "repeated face-to-face encounters between the researcher and informants directed toward understanding informants' perspectives on their lives, experiences, or situations as expressed in their own words". The researcher interprets and gives meaning to these words through the lenses of his/her own epistemology. In this way the self-referential observing system, which constitutes the researcher and the data, is created as described in Chapter 2. In this regard, Kvale (1996, p.105) was of the opinion that an interview is an appropriate method to study "people's understanding of the meanings of their lived world, describing their experiences ... and clarifying and elaborating their own perspective on their lived world."

Bateson (1979, p.24) stated: "without context, words and actions have no meaning at all". Lerner (1975, p.4) confirmed this remark by stating that the properties and features of any phenomenon cannot be correctly observed, "evaluated and taken into consideration without considering the multitude of connections and interactions which may form between individual phenomena and the medium surrounding them". In compliance with systems thinking, personal interviews enable the researcher to place the respondents' experience within a specific context. In addition to this notion, Harper (1998) remarked that aggregated interview information would meet Stokol's (1991) requirement for a composite representation of people and environment, of person-place interdependence.

Draw a distinction!

From a systems theoretical perspective, language is used to make distinctions in order to describe and know the world. Bateson (1972) referred to this process as the "mapping of territory", that is, how an individual constructs his/her own reality or assigns meaning to the lived world. Fiedeldey (1991, p.114) summarised this view as follows: "It is through this drawing of distinctions that we order our world, and the most important way in which we can order our world for another person is through language...we create our world in and through language". Systemic thinking is interested in how we name things, create them, and so influence what we experience. It is also interested in how we *don't* name things. Not drawing a particular distinction, that is not verbalising something, also has meaning. It implies that a respondent perceives some distinctions as less important and therefore does not include those distinctions in

a description. When a person constructs a map of a certain country, it is impossible to include all

the possible distinctions with regards to that country on the map. Only those distinctions that are important to the mapmaker are drawn.

Language freezes lived experiences into static nouns (Keeney, 1979). The qualitative research interview enables the researcher to obtain data on how cabin crew experiences environmental stressors. Through dialogue, the researcher aims to construct a map that incorporates all relevant interacting systems. Miles and Huberman, (1994, p.10) explain: "Qualitative data, with their emphasis on people's lived experience, are fundamentally well suited for locating the meanings people place on the events, processes, and structures of their lives: their perceptions, assumptions, pre-judgements, presuppositions and for connecting these meanings to the social world around them".

By conducting personal interviews in the working environment, where cabin crew sign on or off for flights, the researcher is able to identify patterns of meaning of their lived experiences. Patterns of meaning propose repeated experiences or feelings of respondents in their working environment. These patterns can be thematised and categorised. Kalnins (in Marshall & Rossman, 1989, p.105) remarked: "...the researcher must get close to the people whom he studies; he understands that their actions are best comprehended when observed on the spot".

It is important to emphasise that it is not possible for anyone to know the whole of reality, that is all the interacting components of a specific context. What a researcher observes is only a partial description, a partial arc of the complete picture. Therefore, researchers can only aim to uncover the connectedness of things, and the many intra- and inter-patterns of connections in the subject of their studies.

From the above discussion it is clear that verbal descriptions of the environmental stressors of cabin attendants are a legitimate source of knowledge and understanding. Rather than measuring or observing experiences of respondents, the qualitative research interview is an ideal method to understand how a person constructs his/her behaviour and experience in a specific context.

4.4 THE SEVEN STAGES OF INTERVIEW RESEARCH

Kvale (1996) suggested that interview research could be conceptualised in seven stages: thematising, designing, interviewing, transcribing, analysing, verifying and reporting. However, it is important to consider the fact that the relationship between the stages is recursive, and that the stages do not always follow each other chronologically. For example, after the verifying stage, it may be necessary for the researcher to go back to the interviewing stage. Furthermore, a researcher might already have the format of the reporting stage in mind at the thematising stage. Kvale's seven stages of the research interview are only one way, that is his way, *mapping* the research process. The seven stages will subsequently be discussed.

4.4.1 Thematizing the interview

During the first stage of interview research, the researcher has to obtain some knowledge of the subject matter to be investigated. Kvale (1996, p.49) remarked that an extensive knowledge of the research topic is necessary so that the researcher may be "...sensitive to the nuances of meanings expressed and the different contexts into which the meanings may enter". Pre-knowledge on the subject enables the researcher to give a hypothetical description of the research question. As was mentioned in Chapter 1, I was employed as a cabin attendant at the South African Airways for 8 years. Being part of the company equipped me with knowledge I would otherwise not be able to attain. This experience provides me with a frame of reference from which I could thematise the research interview.

4.4.2 Designing the interview

Kvale (1996, p.88) remarks that the goal of interview design is to obtain the intended knowledge. The researcher must design research questions that will enable respondents to describe their lived world as it is experienced in every day life. In this exploratory study, the aim was to get spontaneous responses from cabin crew with regards to stressors in their working environment. Cabin crew should be allowed to respond according to their own personal experience.

4.4.2.1 Pre-design of the interview guide

Kvale (1996) was of the opinion that the researcher should have an implicit structure, whether or not this structure is translated into actual questions. In this case, the researcher was an employee at SAA and therefore has some pre-knowledge from which to derive a structure. This structure provides the framework for the interview, as well as the subsequent analysis.

The pre-constructing of a semi-structured, open-ended interview guide seemed most suitable for this study. This would allow the researcher to listen attentively to what the respondent is saying, without thinking what question should be asked next. The advantage of this type of interview is that the interviewer has more flexibility in addressing issues that were not anticipated when the interview structure was created. New dimensions can be integrated in the interview guide. Furthermore, the semi-structured open-ended interview does not constrain and limit the natural and spontaneous flow of the conversation. The researcher may probe or encourage the respondent to elaborate on the original question. It is important to mention that the possibility always exists that the type of questions that the interviewer asks, as well as the way in which it is asked, can mould the responses and eventually the final results attained.

A draft interview guide, structured around potential stressors, is attached as Annexure A.

4.4.2.2 Sampling design

Quantitative research in the social sciences requires a sample size large enough to allow statistical generalisation from the sample to the target population. A quantitative design is often based on randomness. Qualitative research however, is done with small samples of people who are studied in-depth. The researcher decided to make use of purposeful sampling. Respondents are selected to take part in the study with a certain purpose in mind, while others are purposefully left out of the study. Patton (1990, p.169) was of the opinion that "...the logic and power of purposeful sampling lies in selecting information-rich cases for study in depth". The sampling design is therefore not based on randomness. The selection of information-rich cases was ensured by the researcher's thorough knowledge of the verbal abilities of selected cabin attendants.

The researcher decided that the sample must comprise respondents who have been employed by SAA for at least 3 years or more. This would ensure that selected respondents have been exposed to the stressful environment long enough to experience the long-term effects of flying. In this sense, some homogeneity is built into the sampling design. It was also decided that the interviews should be conducted at the Inflight Services Building, where cabin attendants do international and domestic standby duties, where flight briefings are done before a flight, and where cabin attendants interact socially after signing off from a flight.

4.4.2.3 Sample size

Sample size was determined by redundancy. The word "redundancy" is used in the technical sense, meaning *repetition* or *pattern*. According to Patton (1990, p.184) "there are no rules for sample size in qualitative inquiry". The sampling should be terminated when no further categories of experience emerge, that is until a sufficient saturation point had been reached - in other words, when each new respondent repeats what others have said.

Contrary to popular belief, quantitative and qualitative research does not oppose each other. The principle for determining sample size in qualitative research does not differ from the principle followed in quantitative research. With regards to quantitative research, the greater the variance in the population the greater the sample should be to be statistically representative. The same principle holds for qualitative research: the greater the variance of respondents' experiences (that is, the greater the variance in the population) the more interviews should be conducted (the greater the sample) to reach a point of saturation.

Initially, 3 pilot interviews were conducted to establish (a) whether the research questions are relevant to the context and (b), whether the questions are stimulating enough to obtain the intended knowledge. After the completion of 12 interviews, it was decided that sufficient information had been collected in order to obtain a meaningful analysis of the data. All the respondents participated on a voluntary basis. A summary of the sample's biographical information is attached as Annexure B.

4.4.3 Generating data

The data-collection process consisted of the main interviewing phase only. Prior to the onset of this study, I had numerous informal discussions with my airline colleagues to establish what kind of issues should be covered in such a questionnaire. A pilot study was therefore not necessary.

The researcher conducted all the interviews. This ensured consistency and better control over the data-collection process. However, it opened up the possibility of interviewer bias, especially since I have been a cabin attendant at SAA myself. I tried to become aware of my own perceptions and assumptions about the stressors involved in flying. This notion is an example of a self-referential observing system as described in Chapter 2. However, the fact that I was not employed by SAA at the time of this study gave me enough emotional and cognitive distance to counteract bias.

The interviews took place from the 13th to the 17th of March 2000. I allocated 50 minutes for each interview, of which 10 minutes was to be used for briefing and 10 minutes for debriefing of respondents. Briefing included obtaining informed consent, guaranteeing confidentiality and permission for direct quotation. I budgeted 30 minutes for the actual interview, although in practice some interviews exceeded the allocated time and took 45 minutes. The respondents indicated a real need to talk about their experiences. Only one potential respondent refuse to take part in the study, as she said that she feels too fragile to talk about her experiences, and that she is afraid she would lose her composure.

To achieve the qualitative equivalent of validity, that is correspondence, it is necessary that the researcher understand exactly what the respondent is saying. This implies that there should be an agreement between the researcher and the respondent about the understanding of the message conveyed. Throughout the interviews, I tried to apply what Kvale (1996) defined as the self-correcting interviewing method – that is the immediate interpretation of respondents' meanings, as well as immediate feedback to the respondent. This method ensures correspondence between the researcher and the respondent. This self-correcting interviewing method is an example of a negative feedback loop as discussed in Chapter 2.

The interviews were recorded on audiocassette, but if a respondent didn't wish to be taped, I took hand-written protocols. Patton (1990, p.348) remarked that: "In addition to increasing the accuracy of data collection, the use of a tape recorder permits the interviewer to be more attentive to the interviewee".

4.4.4 Transcribing

Kvale (1996) stated that, in interview research, the reader is dependent on what the researcher says the respondent is saying. Reliability and validity in the transcription stage of the study should be sought by using more than one transcriber and adopting a clear, written editorial policy (Kvale, 1996).

Interviews were transcribed within days of being recorded. The written presentations of the interviews are as literal as possible, where laughter and crying are also indicated.

For readers who would like to verify the content, the original tapes (where the interview was recorded) are available.

4.4.5 Analysing

It is primarily through the analysing stage of a study that knowledge is derived. The definition of the word **"analyse"** according to the Oxford Dictionary (1983) is "to find or show the essence or structure of..." or "to examine minutely the constitution of..."

Robert Pirsig (in Zen and the Art of Motorcycle Maintenance, 1987, p.75) describe sand-sorting as a metaphor for the way in which humans draw distinctions, or gain knowledge, in their lived world:

"All the time we are aware of millions of things around us. From all this awareness we must select, and what we select and call consciousness is never the same as the awareness around us because the process of selection mutates it. We take a handful of sand from the endless landscape of awareness around us and call that handful of sand the world. Once we have the handful of sand, the world of which we are conscious, a process of discrimination goes to work on it. The handful of sand looks uniform at first, but the longer we look at it the more diverse we find it to be. Each grain of sand is different. No two are alike. Some are similar in one way, some are similar in another way, and we can form the sand into separate piles on the basis of this similarity and dissimilarity. Shades of colour in different piles – sizes in different piles – grain shapes in different piles – subtypes of grain shapes in different piles – grades of opacity in different piles – and so on, and on, and on. You'd think the process of subdivision and classification would come to and end somewhere, but it doesn't. It just goes on and on."

This metaphor appropriately describes the data analysis method that was used in this study. At first, the data appeared to be the same. However, under closer study, unexpected themes emerged in great diversity. Differentiation of themes became an enjoyable assignment as different patterns presented themselves. Certain themes could be subdivided into smaller categories, which again made further subdivision possible. This method will subsequently be discussed in detail.

Data analysis was done with the aid of recommendations made by Taylor and Bogdan (1984), Patton (1990), Bogdan and Biklen (1992), Miles and Huberman (1994) and Groenewald (1995). The process of data analysis can be summarised in three levels:

- First-level analysis, which comprises experiences of respondents
- Second-level analysis, which emphasise relations between experiences
- Third level analysis, which links reality and theory, by mapping lived experiences on a theoretical framework.

4.4.5.1 First-level analysis

According to Groenewald (1995), the aim of the first level of analysis is to describe the perceptions and experiences of the individual respondents in this study. The researcher gain

access to the respondents lived world through a shared language, as discussed in Chapter 4. In systems theoretical terms, the researcher describes the respondent's construction of his/her experience of environmental stressors at work. This explorative level of analysis comprises 4 steps:

Step One: Exploring the data

The transcribed interviews, referred to as protocols, are read and reread until a sense of the totality of the data is obtained (Taylor & Bogdan, 1984; Patton, 1990; Bogdan & Biklen, 1992). During this step it is important to keep track of themes, hunches, interpretations and ideas - "you should record any important idea that comes to you as you read through and think about your data" (Taylor & Bogdan, 1984, p.131).

Step Two: Defining and preliminary labelling of meaningful units of data

The researcher continues the analysis by creating a list of preliminary coding categories or a category system. According to Patton (1990, p.383) such a system is critical; without categorisation there is chaos: "Simplifying the complexity of reality into some manageable categorisation scheme is the first step of analysis." Meaningful units of data are identified as a coding category. Different themes that emerge from the data, are sorted under a particular topic which represents the coding category.

Step Three: Labelling of meaningful units of data

After studying the protocols, the preliminary labels are listed and those that can be grouped together are labelled (Groenewald, 1995). Initially, the data appear to be without pattern. However, under closer scrutiny, a tapestry of different patterns emerged. The task of the qualitative researcher is to look for convergence in this tapestry of patterns. This means the researcher must find out what things fit together by looking for recurring regularities in the data: "These regularities represent patterns that can be sorted into categories" (Patton, 1990, p.403).

Internal homogeneity and external heterogeneity were used to judge these categories. Internal homogeneity refers to "...the extent to which the data that belong in a certain category hold together ... in a meaningful way". External heterogeneity refers to "the extent to which differences among categories are bold and clear" (Patton, 1990, p.403).

After the analysis of 12 protocols, 18 coding categories were identified. All 18 coding categories with descriptions and selected quotes are presented in the following chapter. The coding categories are displayed in descending percentages. The frequencies give an indication of the general incidence of a specific category. Due to the small sample size and inapplicability of generalisation, the frequency of each theme should not be equated to the importance of the theme of the relevant category. The identification of the coding categories and a description of the criteria used to identify these coding categories are presented in Chapter 5.

4.4.5.2 The second-level analysis: Establishing and labelling of pattern categories

With the description of the coding categories the focus was placed on identifying the structure of the respondent's perceptions from within their own worlds. However, with the description of pattern categories, the focus was placed on identifying and describing the main themes underlying these coding categories (Groenewald, 1995). In short, the researcher describes the relations between experiences. The pattern categories that emerged from the data will be identified and discussed in detail in Chapter 6.

Step one: Developing and labelling pattern categories

The researcher reads repeatedly through the descriptions of the coding categories, which are then grouped together on conceptual grounds. These groupings are then given a label that meaningfully describes these selected coding categories and can be referred to as pattern categories. According to Groenewald (1995) pattern categories are organised summaries of information that allow the description of the essential structure of the experience of the phenomenon.

Step two: Description of pattern categories

First-level analysis, that is coding categories, introduces summarised sections of data. Second level analysis presents a higher order of categorisation, which is the description of pattern categories. According to Miles & Huberman (1995) pattern coding is the grouping of those initial summaries into a smaller number of themes. The pattern categories are described by specifying which coding categories contribute to a specific pattern category. The description of the pattern categories involves the explanation of the interrelatedness between the various coding categories that compose a certain pattern category. This description of pattern contributes to the understanding of the general structure underlying the phenomenon under study (Groenewald, 1995).

Pattern categories portray the relations between experiences of the respondents. Various relationships can exist between the coding categories. It is therefore possible that a single coding category may be placed in more than one pattern category.

Step three: Establishing the validity of the coding and pattern categories

The validity of the coding categories was established by means of communicative validation. Communicative validation refers to an agreement through dialogue, which can take place between researchers that analyse the same material (Sykes, 1990) or between the researcher and the interviewees. During the process of establishing intercoder reliability, a co-researcher who is a registered psychologist with specialisation in environmental psychology was involved. The researcher and co-researcher discussed interpretations of the data and its validity in depth.

Since the construction of the pattern categories is the researcher's subjective reality, it is important to establish the validity of the labelling and description of the various pattern categories. The researcher established validity by referring back to the original protocols of the respondents to ensure that the pattern categories accurately represented the coding categories, that is, the first-order descriptions of the respondents. This clarification ensures more precise ways of verifying the pattern, and strengthens its external validity (Miles & Huberman, 1994).

4.4.5.3 The third-level analysis: Conceptual discussion

According to Kvale (1987) the validity of a study is strengthened by the ability to interpret its results in the context of a theory. The aim of third-level analysis is to demonstrate how the various coding and pattern categories are integrated and related to the constructs of the systems theoretical approach. In other words, the lived experiences of cabin crew are mapped on a systems theoretical framework during the third level of analysis. The researcher progresses from the empirical data to a more abstract conceptual level of thought (Groenewald, 1995). The categories on the third level of analysis will be identified and discussed in detail in Chapter 7.

4.4.6 Verifying of analysis results

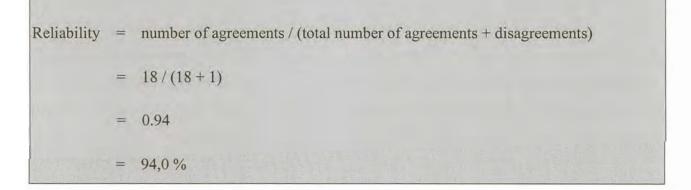
It is possible that there can be more than one interpretation for the same description or experience. Some interpretations are however, more valid than others. Invalid qualitative interpretation, that is, results that are not truthful or plausible may be brought about through differences in culture and/or language. When respondents describe an experience in a language which is not their own, to a researcher from a different cultural background, the essence of the experience could be forfeited. Kvale (1996, p.229) suggested that the "holy trinity" of quantitative research – reliability, validity and generalisability - are not suitable concepts for qualitative research. What the respondents say about their experience of environmental stressors in the airline cannot be expressed in validity coefficients. However, this does not mean that the results of this study are not valid. The positivistic meaning of validity needs to be redefined when qualitative research methods are applied.

Conversation can be transformed into defensible knowledge through the quality of craftsmanship during the research process. The researcher as a craftsman must check for representivity, rival explanations, triangulation of sources and method, get feedback from informants and follow up on surprises (Miles & Huberman, 1994, cited in Kvale, 1996, p.242). Validity is heightened through the continual checking on credibility and trustworthiness of the findings. Through it all, it should be remembered that there is no single, absolute truth in social research.

According to Kvale (1996), the credibility of the researcher is an important source of validity. During the interviews, I gained the trust of the interviewees because they were familiar with me as their former colleague. In addition to credibility, Kvale (1996) stated that knowledge might also be tested for its pragmatic validity. Knowledge is conversation *and* action. The question to be asked is then: "What contribution can the knowledge gained through this study make to the lives of SAA cabin crew, as well as to environmental psychology?" Pragmatic validation will be sought by converting the findings into concrete recommendations for inclusion in the Life Skills programme of Ab Initio/new recruits training.

4.4.6.1 Reliability of coding categories

The reliability of the coding categories was established with the use of intra- and inter-coder reliability. The intracoder reliability of the coding categories was established by categorising all the protocols in the following manner. Firstly, the researcher identified 18 coding categories. Two weeks later the protocols were analysed again without consulting the coding categories of the first analysis. During the second analysis a total of 19 categories were identified, of which 18 overlapped with categories identified during the initial analysis. The additional category in the second analysis was "Disturbed social relationships". The researcher decided that the aforementioned category could be integrated in the category "Absence from home on special days" and was omitted from the analysis. This comparison was made according to the reliability formula of Miles and Huberman (1994, p.64):



The similarity between the first analysis and the second analysis is 94 %. This implies that 18 categories from the first analysis were accurately identified in accordance with the labelling and description of the categories identified during the second analysis.

The co-researcher was asked to analyse five randomly selected protocols according to the same method of data-analysis. No coding categories were provided to her. The co-researcher identified 19 coding categories from these five protocols.

When the analysis of the researcher and the co-researcher were compared, 19 coding categories were found to be similar. The co-researcher identified three more separate categories. The categories "Stress releasers", "The effect of flying on partners" and "Racial issues" were identified as distinct categories by the co-researcher.

Reliability	-	number of agreements / (total number of agreements + disagreements)
	=	19 / 19 + 3)
	=	0.904
	=	90.4%

An inter subjective consensus of 90% was obtained and was considered to be indicative of the reliability of the results obtained by the chosen method of analysis.

4.4.7 Reporting

The last stage of interview research is the compilation of a scientific report on the findings of the study. The aim of research is to make a valuable contribution to existing knowledge within a specific context. The findings of this report aim to convey to readers an understanding of cabin crews' experience of environmental stressors at work. The results can be integrated in a psycho-

educational workshop or a Life Skills module as part of the Ab Initio training. New recruits at SAA need to be aware of the possible hazards of flying as a career and a lifestyle. According to Patton (cited in Kvale, 1996, p.249) the ultimate test of the credibility of an evaluation report is the response of the decision-makers and information-users to that report.

4.5 CONCLUDING REMARKS

In this chapter the researcher presented a detailed description of the research process that was followed in this study. Bateson (1979) remarked that the map is not the territory. This implies that there could have been several descriptions of the same research method and results – as many as there are people. The co- researcher and I agreed that what my map said about the qualitative results was more or less the same as what her map said about the same results. We co-constructed a reality, which was valid for this specific study. In spite of the fact that there could be many differing but equally valid descriptions of cabin crews' experiences of environmental stress, there could also be a co-constructed understanding of it.

In the following chapter the results of the first-level analysis, that is the identified coding categories, will be discussed.

CHAPTER FIVE

RESULTS AND DISCUSSION OF THE FIRST- LEVEL ANALYSIS

5.1 INTRODUCTION

The aim of this chapter is to present the results of the first-level analysis. The first-level analysis comprises the presentation of the 18 coding categories. The discussion of each category is accompanied by applicable quotations from the interview transcripts. The order in which the coding categories are presented, does not reflect the importance of that specific category, but rather the number of times that a category occurred in the set of protocols. The general incidence of a coding category was calculated and is presented as a frequency next to the title of each category.

5.2 DISCUSSION OF CODING CATEGORIES (CCs)

As mentioned in Chapter 2 (p.18), the researcher and the data form a self-referential observing system, which draws new distinctions, that is, creates new meanings. After careful scrutinising of the protocols, the researcher constructed 18 coding categories. These categories will consequently be discussed.

5.2.1 CC 1: ABSENCE FROM HOME ON SPECIAL DAYS [f = 10]

Criterion: Remarks regarding the fact that due to flight schedules, cabin crew cannot spend important days like birthdays, religious holidays, weddings, funerals or anniversaries together with the important people in their lives.

Respondent # 1: "I never seem to be at the right place at the right time. I am always going to work when others are coming home or enjoying weekends. It never seems to work out that you're home when something happens. There is no glamour to that"

Respondent # 4: (F) "What stresses me most of flying, is not being there when you are needed".

Respondent # 6: (M) "You are never home for special occasions, that is weddings, funerals or whatever the case may be. So people seems to eventually distant themselves from you because you are never around".

Respondent # 2: (M) "It is very uncertain. You go away and you feel you are missing out on a lot of things. So many things happened within the space of time in which you were away. You feel you are losing out on a lot".

Respondent # 5: (M) "Sitting in the hotel room, I mostly think what is going on back home. If it is someone's birthday, I wonder if they all get together. That frustrates me".

Respondent # 7: (F) "You have irregular working hours. For me it's time to decide if I'm going to fly when my child is born, am I going to be there when my child gives his first steps, am I going to fight to have the day off to be at my child's birthday?".

Despres (1991) cited in Bielfeld (1997, p.98)) was of the opinion that "a home is experienced as the locus of intense emotional experience, and as providing an atmosphere of social understanding where one's actions, opinions and moods are accepted". The social networks built in and around a home give a sense of acceptance and belonging. The inability to plan family activities such as birthdays, religious and special holidays is described by cabin crew as extremely disruptive. The unfulfilled social need of crewmembers to share special occasions with loved ones is evident. Some respondents seriously questioned whether life has any meaning if one is never able to share in the celebrations and rituals of milestones reached by meaningful others. Cabin attendants are preoccupied with thoughts about friends and family back home. It seems that this separation, this constant being away, gives rise to feelings of intense isolation. Sudden flight delays and changes in flight schedules contribute to these negative emotions. The frustration of being powerless to change the immediate circumstances due to flight schedules seems to be unbearable in some instances. Guilt feelings also appear to become a burden, where a crew member cannot give much needed support during a funeral; wedding or birthday of a loved one. Cabin attendants also fear that people outside the airline may think of them as undependable and untrustworthy.

5.2.2 CC 2: LONELINESS [f = 8]

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Criterion: Statements that reflect respondent's feelings of isolation from meaningful relationships. Also included are statements indicating the anxiety and frustration that respondents experience when they are alone in the hotel room away from home.

Respondent # 12: (F) "Loneliness feels dark. As if your umbilical cord with life and everyone you love has been cut off. I get terribly lonely in the hotel room on long overseas flights. The room becomes very small and impersonal. There is nothing in it that is mine. I miss my books, my music, you know".

Respondent # 12: (F) "London during winter makes me feel lonely. The rain never stops pouring, and the skies are always grey".

Respondent # 3: (M) "Perth is bad. It's like Bloemfontein by the sea. There is nothing to do after five in the afternoon. Only empty street from my window. That is why I always have the TV on. It's voices from a box, but at least they are there".

Respondent # 7: (F) "I feel very much lonely, very depressed from loneliness, and homesick. Last Sunday I wasn't aware that the shops were open – I was so homesick. O, on hearing the church bells ringing, I just wanted to cry my eyes out. Some of my money I actually used for telephone calls to phone home. I just had to speak to somebody that I know".

Respondent # 2: (M) "I t is your duty to make yourself fit. If you don't fit, you're an outcast. So I made myself fit. I am an easy-going person and it is easy for me to adapt to the environment".

The duties of cabin attendants do not allow them to spend quality time with important people. The majority of respondents were concerned about their feelings of detachment and isolation from meaningful relationships. One respondent used descriptions of subdued colours to express her experience of loneliness. Some cabin attendants seem to take responsibility for their own happiness, by reaching out to other members or getting involved in community activities, thereby encouraging social contact. Certain international cities seem to awaken the experience of loneliness more often than others. Perth in Australia is an infamous destination because of the scarcity of activities it offers to cabin attendants. The absence of external stimulation seems to make some members aware of a void within themselves and a lack of content in their lives. I could almost feel the forlornness and intense distress in the voices of the cabin attendants quoted above.

Porter (1988) stated that the majority of female cabin attendants in her study reported that their work schedules placed additional demands on them. This seems to be especially true in terms of the effort required to maintain meaningful relationships with partners, friends and family outside the airline. These female cabin attendants reported declining social activity, loss of contact with friends outside the airline, perceptions of lack of understanding by partners, friends and family, as well as consequent feelings of isolation, loneliness and sometimes withdrawal (Porter, 1988).

5.2.3 CC 3: IMPERSONAL WORKING ENVIRONMENT [f = 7]

Criterion: Statements regarding the lack of empathy amongst crew, as well as the superficial involvement in each other's lives. This category also includes remarks concerning unappreciative passengers.

Respondent # 11: (F) "If you go to somebody and say that you need help, he will not look at you as a human being. Everything works on a pension number".

Respondent # 6: (M) "A few years ago, there was a hostess that walked around in the old Inflight Services Building with her eyes open wide. She became funny. everybody laughed at her. Not in her face, but behind her, because she became funny".

Respondent # 2: (M) "Everybody is in their own little world, pursuing their own interests".

Respondent # 1: (F) "Because we work in such a confined environment, we want our own breathing space once the work is done".

Respondent # 12: (F) ".....they all seem to be so close to each other – accepting each other and joking with one another, a very happy community. But that is just a smoke screen. In reality, crew never become involved in each other's lives, apart from gossiping. You are just a pension number".

Respondents # 10: (F) "The passengers makes me want to cry. I am trying so hard to please them. I go out of my way and still they don't appreciate what I do. This I can't handle any more".

Respondents seem to be alienated from their colleagues, and there is a need for personal recognition. Despite complaints of loneliness, some cabin attendants still prefer not to socialise after a flight. It is also clear that there is no genuine empathy between colleagues. Contact with passengers is also as temporary as the duration of the flight. Several respondents mentioned that passengers view cabin attendants only as faceless "glorified waitresses" with inferior mental abilities. This creates an "us and them" attitude with the cabin crew, an "in group vs out group" situation, where the passengers belong to the "out group" and are also given nicknames.

5.2.4 CC 4: SEPARATION ANXIETY BEFORE FLIGHT DEPARTURE [f = 6]

Criterion: Statements concerning the anticipation of loneliness and loss before leaving on an overseas flight were sorted under this theme. Statements expressing the fear of leaving loved ones behind, as well as remarks describing anxiety attacks before a flight, were also included.

Respondent # 12: (F) "Before an overseas flight I feel anxious, lost, as if I'm not going to see my husband again. As if I'm saying goodbye for the last time ...it's terrible. Lately I cry until we get to the airport where my husband drops me off".

Respondent # 6: (M) "I become silent and I must tell you that I usually start sweating under my right arm. The sweat literally run down my right arm."

Respondent # 11: (F) "If I don't know anybody on the crew, then I almost always become anxious. You know that feeling that you get when you write exams, but you haven't studied? I am like that".

Respondent # 7: (F) "I feel anxious and incompetent. I feel insecure in that I am scared. I think the biggest thing is the fear of the unknown. That gets to me".

It is significant to note that the majority of the respondents who suffer from separation anxiety are females. Only one male respondent said that he becomes anxious before an overseas flight. This might be because he felt more comfortable talking about his feelings than most male respondents, or it might be because females are more dependent and prone to emotionality. Apart from one or two colleagues that permanently fly together, if they are lucky, crewmembers often do not know with whom they will be working on a flight. This uncertainty of not knowing what to expect, seems to increase anxiety. Some respondents also described physical symptoms resembling the typical physiological responses to danger described in Chapter 3. To constantly brave these anxieties can be detrimental to a person's health and detracts from job satisfaction.

5.2.5 CC 5: THE HOTEL ROOM [f = 6]

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Criterion: Statements concerning any experiences of the hotel room - in other words, thoughts, behaviour and feelings that crew members associate with a hotel room - were categorised under this theme.

Respondent # 12: (F) "The room becomes very small and impersonalthere is nothing in it that is mine. I miss my books, my music, you know....".

Respondent # 6: (M) "I sat in the window of my room on the 28^{th} floor and considered suicide. Then I climbed back into the room."

Respondent # 9: (M) "I draw the curtains so that it is dark all around me and silent. Then I sleep. And they say we have an exciting and glamorous job! (laughs)."

Respondent # 2: (M) "I don't like sitting in a hotel room. I guess I feel claustrophobic. I need to get out and get some fresh air".

Respondent # 8: (M) ".....there were no water, no air conditioning, no lights and all those kind of things. It is the same thing in the hotel in New York. The rooms were not ready. We had to wait 3 hours for our rooms, then they still didn't come and fix the TV's".

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The physical environment has a role to play in structuring what people do, what they feel and the sorts of meanings that are associated with a specific physical environment (Sixsmith, 1986). In general, cabin attendants seem to associate a hotel room with seclusion and solitary activities. The room is never personalised territory, that is, an extension of the self, as it is normally the case in one's own room. There are no personal possessions with which one can identify. It might be that some crew experience a frustrated need for self-expression in their hotel rooms, especially on longer flights. Not one respondent referred to "my" room when talking about their hotel rooms. It was always referred to as "the" room, detached from anything personal. The television is an important means of killing time, and it causes great frustration if a set malfunctions.

In short, the hotel room is often experienced as a forlorn place of impermanence, a place of limited personal freedom and privacy.

5.2.6 CC 6: DEPRESSION [f = 6]

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Criterion: Statements of despondency, tearfulness and sorrow were categorised under this theme. Respondents often exhibited symptoms of distress, such as spontaneous crying, while discussing matters related to this theme with the interviewer.

Respondent # 10: (F) " I don't know why I feel so depressed. I think my brain is chemically unbalanced. When I'm on a flight I just take it slow. Whenever I come to this place, I am totally depressed".

Respondent # 6: (M) "My psychiatrist confirmed that I'm suffering from depression. He also explained that my depression is a result of my drinking problem. I also started smoking 4 years ago. (Silence). I'm not really coping anymore with the stress in the airline. But I'm trying ...(crying). Respondent # 12: (F) "Lately I cry until we get to the airport where my husband drops me off for the flight".

Respondent # 6: (M) "According to the new licensing regulations, we as crew are not allowed to use anti-depressants, which of course only makes the problem worse".

There are so many factors interacting and mutually influencing one another in the cabin crew's working environment, that it is impossible to identify a single factor that induces depression in cabin attendants. Each individual has a different situation, with unique responses to that situation. One male respondent acknowledged the existence of a recursive relationship between his depressed moods and drinking patterns. Of great concern is management's prohibition of the use of anti-depressants by cabin attendants and the effect thereof. This regulation seems to decrease cabin attendant's trust and loyalty towards the management of SAA, as they do not provide the much needed the support. It also seems that some attendants apparently have coping skills to deal with the stressors, and do not suffer from any mood disturbances.

5.2.7 CC 7: THE INFLUENCE OF FLYING ON MEANINGFUL RELATIONSHIPS [f = 6]

Criterion: Remarks describing the influence of flying on a cabin attendant's spouse, partner, children or friends were categorised under this theme.

Respondent # 9: (M) "Yes, sometimes my wife cries when I'm leaving, but it is very seldom. Most of the time she gets depressed. But the stress I take is okay. I'm not happy at all about it. (Sigh). But what can you do, it is a way of life you have to live. She accepted it."

Respondent # 2: (M) "The pressure from my girlfriend is stressful. Not pressure, but she constantly reminds me that she misses me when I'm gone. We bought a house, but we don't spent time in it together to do certain things".

Respondent # 2: (M) "I would also like that my friends remember me, remember my birthday. I always have to say 'Hi, I'm going to be here, don't forget me. I am still around'

Cabin attendants have to put in more effort to maintain any relationship of value, as people with more normal routine work tend to forget about their flying friends and their flight schedules. These flight schedules are subjected to sudden changes, which means that a flight only returns a day or two later. Cabin attendants are consequently accused of being unreliable and disloyal partners or friends. In general it seems that cabin attendants who are secure in their relationships with family and friends have less concerns and anxieties about them. Although they do miss them for the duration of the flight, they are still able to enjoy their time away on their own.

5.2.8 CC 8: POOR PHYSICAL HEALTH [f=5]

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Criterion: All statements concerning physical ailments like migraines, chronic fatigue, the propensity to fall ill and burn out symptoms is included under this category.

Respondent # 12: (F) "Yes, without a doubt has flying affect my health. My immune system took the hammering. I constantly have a sore throat, or a sinus problem. If there is a virus going around, I am sure to fall ill".

Respondent # 11: (F) "Yes, definitely. My feet and back suffer mostly. I also suffer from migraine when I'm under stress".

Respondent # 10: (M) "No, I've been flying for twenty years now, and I cannot say that my health has been affected. I am fortunate to be very healthy".

Respondent # 4: (F) "No, I don't see any changes in my health".

Five of the twelve respondents complained of physical ailments, while the rest are enjoying good health. It seems that some respondents have naturally strong constitutions, while others have a predisposition for certain illnesses. Most of the complaints appear to be the cumulative effect of inadequate sleep. As described in Chapter 4, prolonged exposure to mental stress eventually decreases the immune system's ability to fight diseases.

Porter (1988) remarked that several female cabin attendants experienced problems with the inferior condition of their hair, skin and nails. In Porter's study, menstrual problems were frequently reported and related to disconcerted hormonal functions. With regards to these facts, the researcher refers the reader to Chapter 4, where the function of the adrenal gland and how it affects natural bodily cycles such as sleep and wakeful patterns, as well as certain hormonal fluctuations were discussed in brief.

5.2.9 CC 9: SHOPPING EXPERIENCES [f =5]

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Criterion: Remarks regarding shopping experiences in various domestic or international cities were sorted under this category.

Respondent # 12: (F) "This is a lifestyle, not a job. You get hooked on shopping. It's an addictive lifestyle".

Respondent # 1: (F) "And coming to think of it, it is not bad if the shops are close to the hotel, because then you always walk around and shop till you drop".

Respondent # 10: (F) "I spoil my child every time I go away on an overseas flight. I bring her something. When I look at it now, I'm making up for not being there by bringing gifts. It doesn't really work with presents".

Respondent # 4: (F) "I just love my shopping".

Shopping is a favourite (therapeutic?) activity with which cabin attendants kill time in foreign cities. Buying presents for friends and family, gadgets and goodies for the household thousands of kilometres away, seems to bring loved ones and home closer. Thereby, a symbolic continuity between the familiar/ beloved and the exotic/unknown is created. Some

of the cabin attendants with the responsibilities of children, tend to "wrap up" their guilt feelings about not being home in a staggering amount of gifts. In some cases, the "shopaholic syndrome" is evident. The shopping experience seems to be a way to relieve tension.

The need to buy that some respondents reported seems to be so overpowering that it become addictive. Not surprisingly, an interest in shopping is a female affair. Not one of the male respondents referred to shopping as an exciting experience.

5.2.10 CC 10: FEELINGS OF HOSTILITY TOWARDS THE PASSENGERS [f=5]

Criterion: Statements concerning feelings of aggression towards the passengers were sorted under this theme. This includes remarks with regards to verbal abuse as well as physical abuse.

Respondent # 9: (M) "So yes, I once did hit two or three passengers. They want to assault me and I'm not waiting for someone to hit me, I moer them first. Everybody saw what happened and passengers wrote reports. I was right and they were wrong."

Respondent # 7: (F) "I think it is a whole build up, you know. Especially when you are caught out on Standby and you didn't plan to go away from home. That is where the anger comes from most of the time. Anger directed towards the passengers, which is of course, unfair".

Respondent # 12: (F) "Some are horrible, expecting wonders from you, others can be quite nice. You just have to kill them with kindness!".

Respondent # 9: (M) "I asked the passenger why he is insisting on having a first class service, as he is a business class passenger. He said to me 'fuck off'. I said to him, 'no, you don't talk to me like that. He said 'buggeroff', leave me alone, I know what I'm entitled to and you can do buggerall about it. I'll write a letter.' I said 'fine, do It'".

Arguments between cabin attendants and passengers mainly arise because of special meals that have not been loaded for the flight, seating arrangements or poor client service in general.

Anger towards management or the roster office, is often projected on the passengers. Some passengers, commonly those that have had too much to drink, seem to deliberately provoke confrontation with certain cabin attendants. For irritated, fatigued cabin attendants, already on the brink of a nervous breakdown, such provocation is hard to counteract. It seems that some cabin attendants experience a great amount of frustration and anger, which is taken out on the passengers. Aggression, in the appropriate context, has "survival value" for humans, but definitely not in an environment where customers need to be taken care of and service is imperative for the survival of the company.

Porter (1988) remarked that pessimistic attitudes and perceptions of "everything going wrong", accompanied by aggressive thought patterns were evident in those cabin attendants that experienced high levels of work schedule stress. In this regard, Porter (1988) commented that emotional strain was frequently reported in the form of irritability, quick temperedness and general feeling of being "uptight".

5.2.11 CC 11: CREW ECCENTRICITIES [f = 4]

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Criterion: Remarks concerning the idiosyncratic language that cabin attendants use to communicate with one another were sorted under this category. This language is unique to cabin attendants at SAA and includes nicknames for passengers and cockpit crew. Also included in this category are eccentric personal mannerisms that some cabin attendants display.

Respondent # 12: (F) "You hear the typical language that crew mostly use, you know. It is the airline lingo. There are nicknames for some of the interesting characters, as well as for the passengers who behave in a certain way. For instance, I have just spoken to Edwin, but the crew call him Edwina Charlotte. Then there is still Molly, Wolkop and Dolla".

Respondent # 12: (F) "Passengers are categorised into 3 groups: Nora, Hilda and Chriselda. That is, you're a Hilda if you are a demanding and irritating passenger. Nora is even worse, asking for rooibos tea with lemon all the time, and Chriselda is an absolute nightmare to serve".

Respondent # 8: (M) "We are an abnormal bunch of people, otherwise we would not be able to survive".

Respondent # 6: (M) "There are so many eccentric people in the airline. Many that are just otherwise. Not all of us, but many of us".

Respondent # 9: (M) "Oh, very funny people here. Years ago, one guy was grounded because he became koekoes. He stayed in his Combi in the parking area at the old Inflight Services building. That is where he slept, ate and lived when he was not flying. He used to talk to himself. On the aircraft, after he did the safety announcements, he talked to the passengers over the PA, chatting away and saying up rhymes for them. He was actually very entertaining, always wanting to please the passengers".

Cabin attendants perceive their community as different and enigmatic with a certain amount of exclusivity. They spent a great deal of time in each other's company, have to work together as a team on board and share the same frustrations. There seems to be several cabin attendants that are conspicuous for their individuality, sense of humour and flamboyancy. These are cabin attendants that have been in the airline for a long time. They probably needed to develop certain behaviour patterns to cope with their unique trials and tribulations at work, as well as in their personal lives. In general, the respondents portrayed a cohesive group identity. The migratory lifestyle possibly encourages the free spirited attitude of most cabin attendants.

As the preceding quotations illustrate, cabin attendants tend to categorise or stereotype passengers. It seems that this differentiation serves the purpose of gaining control over large numbers of passengers on board. That is, the categorisation of passengers prevents an information overload on the part of cabin attendants.

5.2.12 CC 12: ACCUSATIONS OF INCOMPETENT COLLEAGUES [f = 3]

Criterion: Remarks expressing the frustration of working on board a flight together with lazy and/or incompetent colleagues were sorted under this theme.

The term "flying friendships" expresses the superficial nature of relations between cabin attendants. They spend many days together away from home, and start sharing their personal lives with one another. It seems to be easier to have friendships with colleagues than trying to work on meaningful relationships outside the airline. If a cabin attendant is not flying on a permanent roster with another cabin attendant, he or she never spent enough time with a colleague to build a meaningful relationship. These are professional relationships, and have little personal depth.

5.2.14 CC 14: COMING HOME AFTER AN OVERSEAS FLIGHT [f = 3]

Criterion: Statements concerning the positive experience of the return flight, after being away from home for several days.

Respondent # 4: (F) "The passengers can give me whatever trouble they want. They can stand on their heads, I don't care. I am going home! I find that when I'm going home, I go that extra mile for the passengers, because I think I am never going to see you again. Stuff you".

Respondent # 7: (F) "You should see me so early for pick-up. I don't want any mistakes to happen. I just want to get home".

Respondent # 8: (M) "It is always nice to come home. It's a challenge to see what my wife has changed while I was away. You have to take the leadership as father and husband back from the women. I always look forward to what she will be telling me. What went wrong and how she coped with it".

It is clear, that during the return flight, cabin attendants feel excited and anticipate a happy reunion with loved ones. Most cabin attendants seem to experience home as some form of stability in an ever-changing social and physical environment. In this regard, Sixsmith (in Bielfeld 1997, p.90) stated that "home appears as a profound centre of meaning and a central emotional and sometimes physical reference point in a person's life which is encapsulated in feelings of security, happiness and belonging".

It seems that most married male cabin attendants do not experience any trouble when resuming their responsibilities back at home. They actually look forward to re-assuming the reins. In general, cabin attendants behave more friendly and service-oriented towards the passengers during the return flight. With the exception of a few cabin attendants, this friendly attitude is however, still toned with some underlying aggression. It is not a sincere or genuine friendliness, but rather a false smokescreen to finish the job as soon as possible and get home.

5.1.15 CC 15: SUICIDAL TENDENCIES [f = 2]

Criterion: Remarks concerning a respondent's wish to die were included in this category. Expressions of the attractiveness that death holds, because it is perceived as a way out of misery, were included under this theme.

Respondent # 6: (M) "It happened a few years ago. I took a bottle of Whiskey and sat in the window of the hotel room on the 28^{th} floor. I wanted to end it all. Then I climbed back into my room. I then decided to see a psychologist".

Respondent # 3: (M) Three years ago I swallowed about 140 pills. Sleeping pills and dehydration pills. Fortunately my landlord found me on my bed in time and contacted an ambulance. If he didn't find me, I wouldn't have been here today".

Of the twelve respondents who were interviewed, two admitted to intense feelings of despondency and despair. These two respondents reported destructive or self-mutilating behaviour. They find themselves in a painful situation, as they believe they cannot change their own destiny, and have constant thoughts about death and ways to kill themselves. The prohibition on the use of any anti-depressants makes the situation even more serious, as these cabin attendants are of the opinion that nobody cares to support them.

5.2.16 CC 16: SUBSTANCE ABUSE [f = 8]

Criterion: All remarks that describe the abuse of alcohol or excessive pill consumption in order for cabin attendants to deal with stress were included under this theme.

Respondent # 2: (F) "So, I know from myself, that I drink quite frequently when I'm away. I feel that it makes me relax. Especially when we get together to have lunch or dinner. It is always a ritual to meet and have dinner. So obviously you start to drink".

Respondent # 5: (M) "Generally, most cabin crew are heavy consumers of alcohol. It might be because they have time on hand to socialise".

Respondent # 10: (F) "I think that there is a lot more drug abuse than we really know about. And alcohol, I suppose....(silence). Because it is so available".

Respondent # 6: (M) "Because I have drinking problem, I try not to go out with the crew for meals. I know that if I do, I will just drink again to forget about my worries".

Respondent # 12: (F) "I always go to the nearest gym, or take some time to go shopping, or read".

Cabin attendants exhibit a variety of strategies to deal with their stress. Some opt for the intoxicating effect of alcohol and drug abuse in order to unwind. Boredom and the availability of both alcohol and drugs encourage such behaviour. According to Bateson (1979), Bernard Smith - the non-alcoholic representative of Alcoholics Anonymous - came close to the truth when he said, "the AA member was never enslaved by alcohol. Alcohol simply served as an escape from personal enslavement to the false ideals of a materialistic society".

More effective ways of dealing with stress that cabin attendants reported are exercising, selftalk and religious activities. The avoidance of social activities out of fear of an uncontrollable drinking binge seems to intensify feelings of loneliness in those respondents who confessed having a drinking problem.

5.2.17 CC17: RELIGION [f = 2]

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Criterion: Remarks describing spiritual practices, or the need for such practices, were sorted under this category.

Respondent # 12: (F) "There is a small church in High Street Kensington, close to the hotel where we stay in London. I walk there whenever I feel down or miss home. There is something about the place that is comforting. It is always warm inside the wooden doors, and it reminds of home".

It seems that some respondents associate a cathedral with the intimacy and warmth they experience with family and close friends in a homely environment. A church building and the activities taking place there are experienced as a trusted, predictable and familiar environment, where visitors seem to experience a sense of belonging and relatedness. Silence and peacefulness enable some respondents to do self-reflection and counter feelings of self-alienation. The predictability and patterning of religious rituals seems to counterbalance the unpredictability of the SAA lifestyle. This notion is an example of a negative feedback loop as discussed in Chapter 2. The effect of external fluctuations (rapid changing physical environment or sudden changes in flight schedules) is minimised through the predictability of planned or expected activities

5.2.18 CC18: PHYSICAL EXERCISE [f=2]

Criterion: All statements referring to sporting activities that cabin attendants are involved in, were sorted under this theme.

Respondent # 6: (M) "I used to play tennisjust loved it... But it is impossible to take part in tournaments on week-ends, because I'm always away and cannot commit myself".

Respondent # 12: (F) "I try to find the nearest park, the "lung of the city", and go for long walks. In London, I like jogging in Hyde Park under those lovely old trees, watching couples strolling along the pathways with their dogs.....I always go to the nearest gym ..." The non-routine work schedules does not allow cabin attendants to take part in competitive team sports. Non-competitive exercises include individual-orientated sports like jogging and going to a gym. Exercising in a natural environment seems to enhance relaxation and psychological well being.

5.3 CONCLUSION

The handful of sand that Pirsig (1999) described in his book "Zen and the Art of Motorcycle Maintenance" is an appropriate metaphor for the way in which the researcher categorised the data obtained from the interviews. Pirsig (1999) described the formation of separate piles of sand on the basis of their similarity and dissimilarity in colour and form. Various themes or "piles of sand" were identified by the researcher from the cabin attendants' vast landscape of experiences, and categorised into eighteen different experiential themes. Quotes that best ascertain and describe the identity of a theme were included in a coding category. This first order "piling process" is unique to the researcher, since of her construction of reality is based on her unique personality traits and previous experiences.

In Chapter 6, this process of categorisation and sub-division will be continued towards the second-level analysis, that is, the formation of eight pattern categories. The third-level analysis, that is, the conceptual discussion will also be covered in Chapter 6.

SECOND-LEVEL ANALYSIS: PRESENTATION OF PATTERN CATEGORIES AND THIRD-LEVEL ANALYSIS: CONCEPTUAL DISCUSSION

6.1 INTRODUCTION

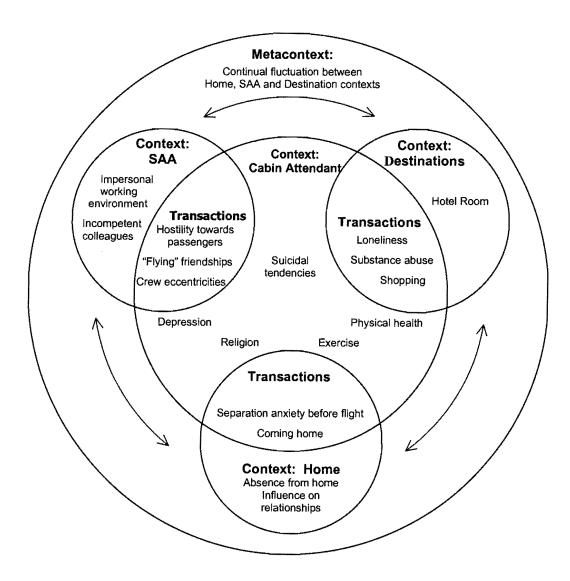
As discussed in Chapter 5, the descriptions of respondents' experiential world differ because each person constructs his/her own reality differently. It is however possible to identify some regularity in the respondents' descriptions of their experiences. Second-order analysis describes the relations between individual experiences. The closest we can get to the truth (in this study it is the essence of the experience of stressors in the working environment of cabin attendants) is by studying the patterns that bind ideas together (Bateson, 1979). The study of the relations between coding categories comprises the second-level analysis. The identified pattern categories are the product of this analysis. These pattern categories are based on the main themes underlying the coding categories, which were described during the first-level analysis.

Since various relationships may exist between the coding categories, a single coding category may be placed in more than one pattern category. The overlapping of the various coding categories constituting the pattern categories is the result of the coherence and interconnectedness of the pattern categories

Finally, the third-level analysis will be discussed. The pattern categories, which have been discussed during the second-level analysis, share underlying meanings, again giving rise to patterning on a higher level. The conceptual discussion will indicate how the various coding and pattern categories are integrated and how they relate to the more general concepts of a systemic epistemology.

Figure 3. A schematic representation of the different transacting contexts in the lives of cabin crew

The different elements in the diagram refer to the coding categories that were identified during the first-level analysis. The eight different contexts refer to the pattern categories that were identified during the second-level analysis. These different contexts are in continual fluctuation and are schematically presented as follows:



6.2 PRESENTATION OF PATTERN CATEGORIES

6.2.1 PC1: CABIN ATTENDANT

Constituting coding categories:

CC6: DepressionCC8: Poor physical healthCC15: Suicidal tendenciesCC17: ReligionCC18: Exercise

This pattern category comprises the experiential or the lived world of the cabin attendant. As indicated in the diagram, the cabin attendant is in constant transaction with three main contexts, namely Home, Destinations and SAA working environment. The coding categories Religion (CC17) and Exercise (CC18) can be described as activities that cabin attendants pursue to relieve stress. It seems that the time spent alone in silence, whether jogging in a park or meditating in a church, provides the freedom for cabin attendants to do self-reflection and gain a fresh perspective on their personal lives. For some cabin attendants, sanctuaries seem to provide special spiritual experiences. Surrounded by the uncertainty of the swiftly changing physical and social environment, a stony or granite cathedral symbolises constancy and timelessness, providing a psychological anchor to some cabin attendants. During such times of tranquillity, it seems that a cabin attendant experiences a heightened sense of self. In addition to this, some cabin crew reported an awareness of being connected to a higher reality, thereby lifting feelings of depression (CC6). With regards to this, Capra (1987, p.329-330) remarked: "At these rare moments in our lives we may feel that we are in synchrony with the whole universe. These moments of perfect rhythm, when everything else feels exactly right and things are done with great ease, are high spiritual experiences in which every form of separateness or fragmentation is transcended".

The interview data suggests that Depression (CC6) and Poor physical health (CC8) mutually reinforce one another. The more depressed a respondent feel, the poorer his or her physical health seems to be and the poorer a person's health, the more likely he or she is to be depressed. This "snowball effect" may escalate up to where a cabin attendant has thoughts of suicide or actual attempts to commit suicide as described by Respondent #6, in Chapter 5,

section 5.1.15. Porter (1988, p.120) remarked that "with regards to the specific facets of wellness, as measured, work schedule stress demonstrated a significant relationship with high levels of exhaustion, depression, psychosomatic complaints and low levels of general health". In Chapter 3, section 3.2.2 the physiological processes involved in a person's adaptation to a stressful environment were described in detail. It was also mentioned that continuous exposure to a stressful environment might have detrimental effects on a person's physical and psychological health.

6.2.2 PC2: CONTEXT: HOME

Constituting coding categories:

- CC1: Absence from home on special days
- CC7: Influence of flying on meaningful relationships

The central theme in these coding categories is the relationship patterns cabin crew experiences at home. Bielfeld (1997, p.75) defined home as "a place of refuge, providing a person with roots and a sense of stability and permanence". Home is a place where meaningful relationships with significant others are experienced in a relative predictable environment. For cabin crew, such predictable social circumstances are not always possible, due to their work schedules. Sixsmith (1986, p.291 in Bielfeld 1997) was of the opinion that "it is familiarity with other people, their habits, emotions, actions etceteras, indeed the very knowledge that they are there, which creates an atmosphere of social understanding".

Continual absence from home on days of significance like birthdays or anniversaries seems to create a disturbance in meaningful relationships at home. Respondents often described a feeling of being "disconnected" with their family and friends. Husbands, wives, partners, children and friends of cabin attendants may interpret their absence from home on special days as a sign of dwindling love or disinterest in the relationship, which seems to become a basis for distrust and suspicion. The contrary may also be true. When there is already so much unhappiness in a relationship, a cabin attendant may utilise flight schedules to escape from an unpleasant home environment.

6.2.3 PC3: TRANSACTIONS WITH CONTEXT: HOME

Constituting coding categories:

CC4: Separation anxiety before flight departure

CC14: Coming home after an overseas flight

The coding categories constituting this pattern category refer to the ceaseless cycle of departing from and reuniting with family and friends. It appears that the intensity of anxiety experienced by cabin attendants upon departure from home equals the intensity of the excitement and joy they feel upon their return. The symptoms of anxiety that some cabin attendants seem to experience before international flight departures varies from tearfulness and general restlessness to severe perspiration and intense misery (CC4). Respondent #6 described this experience as follows: *"Ek raak baie stil. Dan begin ek sweet onder my regterarm. Die druppeltjies hardloop letterlik onder my arms af. Dan begin ek maar net weer drink en vergeet van die sorge wat voorlê".* These symptoms are induced or intensified by anticipated thoughts and feelings of "being disconnected" from meaningful relationships, from emotional and physical closeness to another person. Bielfeld (1997) remarked that home is not just a physical structure that provides shelter, but is a place where one's emotional needs can be met.

During my own employment as a cabin attendant as SAA, I noticed that I experienced significantly less separation anxiety before flight departures when circumstances at home were pleasant and stable. I also noticed that cabin crew who enjoyed secure relationships, characterised by mutual trust and confidence that the family are able to cope in their absence, experienced less anxiety and uptightness before and during a flight. As humans, we seem to have an innate need for relative permanence and continuation in our social environment.

6.2.4 PC4: CONTEXT: DESTINATIONS

Constituting categories:

CC5: Hotel room

As mentioned in Chapter 5, section 5.2.5, the physical environment has a role to play in structuring what people do, how people feel and the symbolic meanings they attach to it. The interview data suggests that the majority of cabin attendants spend the greater part of their stay in international cities alone in their hotel rooms. The respondents associate a hotel room with a shelter where there is limited personal freedom and privacy. Cabin attendants experience the hotel room as a place of transition, deprived from any personal possessions that give a sense of warmth and belonging. Mostly, the hotel room is associated with solitary activities such as reading, watching television, attempts to sleep and often tormenting thoughts of what is going on back home. In this sense, it seems that cabin attendants do not experience a hotel room as "home away from home".

6.2.5 PC5: TRANSACTIONS WITH CONTEXT: DESTINATIONS

Constituting coding categories:

CC2: Loneliness CC9: Shopping experiences CC16: Substance abuse

The relations between these coding categories have a negative undertone, and if I were to colour this slice in the circle named "Context: Destinations" in Diagram 1, I probably would have chosen black. Despite the excitement that foreign destinations could offer a person, some cabin attendants' accounts tell a very different story. The saying "if you're tired of London, you're tired of life", seems to apply to the lives of some cabin attendants. Intense feelings of loneliness (CC2) and "not belonging" were reported by the majority of the respondents, and such feelings may increase the incidence of substance abuse (CC16). On the long run, a cabin attendant's habit of substance abuse seems to have self-alienating effect. The cabin attendant feels "cut off" from him or herself as well as from other people. Feelings of loneliness are thereby intensified. There seems to be a recursive relationship between

Substance abuse (CC16) and Loneliness (CC2). In some cases, Shopping experiences (CC9) appears to be an attempt to alleviate feelings of loneliness and alienation.

This pattern category reminds me of the words of a familiar country song:

"I've been to Nice, and the Isle of Greece where I've sipped champagne on a yacht,

Moved like Harlo in Monte Carlo and showed them what I've got...

I've been to paradise,

But I've never been to me"

6.2.6 PC6: CONTEXT: SAA WORKING ENVIRONMENT

Constituting coding categories:

CC3: Impersonal working environment

CC12: Accusations of incompetent colleagues

The central theme in this pattern category is the lack of empathy cabin attendants demonstrate towards each other and experience from the side of management and the roster office. Respondent #12 described this context as follows: ".... They all seem to be so close to each other - accepting each other and joking with one another, a very happy community. But that is just a smoke screen. In reality, cabin attendants never become involved in each other's lives, apart from gossiping. The data suggests that the impersonal working environment (CC3) elicit frustrations between colleagues, which eventually manifests itself in accusations of incompetence between cabin attendants (CC12).

6.2.7 PC7: TRANSACTIONS WITH CONTEXT: SAA WORKING ENVIRONMENT

Constituting coding categories:

CC10: Hostility towards the passengers

- CC11: Crew eccentricities
- CC13: "Flying" friendships with colleagues

In their working environment, cabin attendants interact with colleagues and passengers in the confined space of an aircraft for periods of time that can last for up to seventeen hours.

Despite the fact that cabin attendants spend a lot of time together, they do not seem to share deep friendships and emotional closeness with one another. Aggression towards passengers (CC10) could possibly originate from frustrated needs for intimacy and meaningful relationships. Temporary friendships with colleagues (CC13) - or "flying friendships" as one respondent called them - could possibly contribute to Loneliness (CC2), Depression (CC6) and Substance abuse (CC19). Cabin attendants that abuse alcohol or drugs may damage relationships with family and friends. It appears that cabin attendants experience disturbed social meaningful relationships at work and often at home.

Some respondents reported that in their working environment, individuality gets lost. Respondent #6 remarked "*I am only a number, a pension number*". It could be for this reason that some cabin attendants attempt to define or restore their identity by conspicuous mannerisms, language and behaviour (CC11).

6.2.8 PC8: METACONTEXT

The seven above-mentioned contexts are all embedded in a larger metacontext. A *metacontext* is a context of contexts. The metacontext identified in this analysis is characterised by a continual alternation between contexts. The various person-context transactions described above are to a large degree influenced by the fact that cabin attendants are continually alternating between contexts. One's experience of coming home to loved ones, for instance, is surely affected by the knowledge that this reunion is only a prelude to the next farewell.

Life experiences of cabin crew are more complex than Figure 6.1 suggests. It is not only the adjacent circles or contexts that connect with one another, but also the non-contiguous contexts that interconnect with on another. For example, the context "Destination" can transact directly with the context "SAA working environment", such as when cabin attendants behave in a hostile manner towards passengers (CC10) and colleagues, because of their own frustrations after spending many days in another city away from home (CC5). Another example might be that a cabin attendant's continual absence from home on special days (CC1) may give rise to depression (CC6), which may motivate the crewmember to abuse alcohol (CC16), causing poor physical health (CC8) over a period of time. Poor physical health (CC8) may aggravate Depression (CC6), thereby creating a self-reinforcing cycle. A

systems theoretical approach allows the researcher to telescope in and out the bigger picture to describe the transactions within the smaller contexts, as well as the transactions of these contexts with the metacontext.

6.3 THIRD ORDER ANALYSIS: CONCEPTUAL DISCUSSION

The aim of the third order analysis is to obtain an integrated understanding of the underlying patterns in experiences of cabin crew in their working environment, and will be presented in the form of a conceptual discussion. The researcher will attempt to indicate how the various coding and pattern categories are integrated and related to the more general concepts of a systemic epistemology.

6.3.1 Positive and negative feedback loops

The results from the first-, and second-level of analysis suggest that recursive relationships exist between certain coding categories and/or pattern categories. This means that various categories may reinforce each other mutually, creating negative or positive feedback loops as discussed in Chapter 2. The following *positive feedback loops* have been identified:

- The categories Depression (CC6) and Poor physical health (CC8) seems to reinforce each other. The more depressed a cabin attendant feel, the poorer his/her physical health seems to be. Poor physical health in turn seems to give rise to depression. When a cabin attendant experiences ill health, it is not possible to do physical exercises in an attempt to alleviate depression in a natural manner. He or she is often too tired or weak to engage in activities that may uplift feelings of despondency. Such physical immobility seems to exacerbate the depressed mood of a cabin attendant. As discussed in Chapter 4, prolonged mental stress or depressed moods eventually decreases the immune system's ability to fight diseases, causing more serious illnesses and more misery.
- Unhappy circumstances at home can motivate cabin attendants to request more flights in order to escape an unfortunate environment where they experience conflict with and alienation from family members and friends. Being away from home more frequently and for longer periods at a time only reinforces feelings of estrangement and intensifies existing conflict between a cabin attendant and family members. This situation further

provokes the cabin attendant to request flights in an attempt to "flee" circumstances at home.

- A self-amplifying loop exists between the coding categories Substance abuse (CC16) and Depression (CC6). Alcohol and drug abuse seems to intensify feelings of depression. The more depressed cabin attendants feel, the more they tend to escape this reality by abusing alcohol or drugs. In turn, depressed moods escalate - reinforcing the positive feedback loop.
- The same snowball effect exists between the coding categories Depression (CC6) and Loneliness (CC2). The more depressed a cabin attendant feel, the more he/she withdraws from colleagues, friends and family. Withdrawing behaviour prevents a cabin attendant to develop intimate relationships and enjoy the companionship of colleagues, friends and family.
- Productive, efficient and caring cabin attendants receive letters of appreciation from passengers. This acknowledgement and expression of appreciation motivates cabin attendants to render even higher standards of customer service, causing more letters of appreciation to reach management. This specific positive feedback loop is constructive, while all the aforementioned positive feedback loops are destructive.

As discussed in Chapter 2, negative feedback loops or homeostatic feedback loops instigate some contrary or compensatory action, thereby "balancing" the system. From the results of the first- and second-level analysis, the following negative feedback loops were identified:

- For some cabin attendants the practice of Religion (CC17) counteracts Loneliness (CC2). Cabin attendants experience a sense of belonging and relatedness through religious practices. Feelings of detachment are minimised and cabin attendants can engage in solitary activities with renewed inspiration.
- Cabin attendants sometimes seems to withdraw from other people after a strenuous flight. Seeking social isolation assist cabin attendants to regain their "balance" to prepare for the next flight.

6.3.2 Matching of flexibility of interacting systems

Bateson (1972) went on to say that in a healthy human ecology, there is a match between the flexibility of the people and the flexibility of the civilisation. Matching flexibility between interacting subsystems create a complex higher order system that is open-ended for slow change. In this study, the interacting systems are the cabin attendant and his/her working environment. In the following paragraph I will attempt to describe the contrast between the flexibility of humans and the flexibility of high technology in the airline industry.

Humans were clever enough to invent technology to help them overcome their lack of wings. These high technology aircraft had been designed with a great amount of flexibility. The steel-winged giants in the sky can adapt to a variety of environmental factors, for example fluctuations in weather conditions, loss of engine power or sudden loss of altitude. In contrast, we have not been clever enough to prevent the disruptive effects of disturbed circadian rhythms or to correct dysfunctional communication patterns in interpersonal The healing of emotional wounds cannot be accelerated by technology. relationships. Advances or "growth" in technology cannot be compared to growth in human affairs, which has a time of its own. In this sense, there is a limited amount of matched flexibility between the high-tech working environment as a system and the cabin attendant as a system. From the respondents' descriptions of their experiences in their working environment, this manenvironment system does not portray a picture of health. In this regard, Bateson (1972, p.503) remarked: " It appears that the man-environment system has certainly been progressively unstable since the introduction of metals, the wheel, and script". In the light of the results of this study, it seems appropriate to comment that the invention of "the wing" added to the instability of the man-environment system.

6.3.3 Quidquid recipitur, ad modum recipientis recipitur ("Whatever is received, is received according to the manner of the receiver"):

The cabin attendant in transaction with the various contexts can never be a detached observer of reality. The type of experience that a crewmember spontaneously shared with the researcher is not determined by the working environment only, but also personal characteristics. Each respondent's description of the stressors in his/her working environment is a unique construction of reality. In this regard, Dell (1985, p.7) remarked: "Forces and impacts cannot and do not determine, specify or instruct the behaviour of an object. They are merely the historical occasion for the system to continue its structure-determined behaviour". In short, it is not solely the stressors in the working environment of cabin crew that "cause" thoughts and behaviour. From a systems theory perspective, it is more correct to state that the stressors induce and facilitate certain responses that are already inherent in a respondent's personality structure. Capra (1987, p.290) confirmed this statement: " A living organism is a self-organising system, which means that its order in structure and function is not imposed by the environment but by the system itself". It is possible however, that the stressors in the working environment of cabin crew can encourage certain experiences and inhibit others.

In sum, the working environment serves as a catalyst for the stressful experiences, while a cabin attendant's reactions are determined by his/her own emotional and physical composition.

6.3.4 Disrupted personal meaningful patterns

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Throughout the process of analysis, it seems that some cabin attendants experience a relative lack of personal meaningful patterns. Perold, (2000, p.16) stated: "It is true that human beings are born with a deep-rooted belief in the "lawfulness" of their world, or in the regularity of causes and effects. It is probably also true that this belief may be destroyed – at least as far as certain types of contexts are concerned. This might be achieved by repeatedly exposing a person to a context in which sequences of events are completely devoid of pattern or regularity. Eventually, the person may learn that it is futile to try to predict the outcome. The context will have become predictable in its unpredictability." In systems thinking, pattern, redundancy, meaning and information can be regarded as synonyms. Where there is pattern or redundancy, there is regularity, predictability, meaning or information: "From a tree visible above ground, it is possible to guess at the existence of roots below ground. The top provides information about the bottom. From what I say, it may be possible to make predictions about how you will answer. My words contain meaning or information about your reply" (Bateson, 1972, p.131).

Three different disruptions in personal meaningful patterns will be discussed in this section. Disrupted circadian rhythms, disrupted interpersonal relationships and disrupted cultural patterns are distinguished.

6.3.4.1 Disrupted circadian rhythms

Disrupted circadian rhythms seriously affect the physical and emotional health of some cabin attendants. Lynch (1972) pointed out that changes in circadian rhythms imposed from the outside - by rotating shifts or flights across time zones, for instance - often result in fatigue, bodily upset and mental stress. Research done by Singer (1985) cited in Porter (1988) concluded that proper adjustment of the body clock never occurs, and that there is only distortion of rhythms, never adaptation. The body is not allowed to function according to its own internal wisdom for growth and healing, because its cyclical "lawfulness" is continually disrespected.

6.3.4.2 Disrupted interpersonal relationships

The irregularity of cabin attendants' work schedules makes it difficult for cabin attendants to establish meaningful *interpersonal relationship patterns*. Some cabin attendants seem to experience relationships that are completely devoid of any pattern. The knowledge of the state of a certain relationship creates expectations about how future interaction and behaviour within that relationship will be like. However, these expectations are more than often not met in the lives of cabin crew. What is experience as true and real in a personal relationship is not valid anymore the following day. That is, relationship patterns cannot be predicted with certainty. Physical presence and closeness to meaningful people on a regular basis build familiarity, trust and loyalty. These relationship patternings seem to acquire a sense of learned helplessness in their personal relationships, and do not take the trouble anymore to nurture these relationships. The personal relationship context has therefore become predictable in its unpredictability.

6.3.4.3 Disrupted cultural patterns

Cultural norms and values form the context in which interaction between individuals takes place. Cabin attendants from traditional African ethnic backgrounds seem to experience a disruption of *cultural patterns* in their lives. In accordance to affirmative action policies, SAA needed to correct the grossly uneven demographic distribution with regards to race. Potential employees from cities as well as rural areas were targeted for recruitment. Cabin

attendants realise those familiar and known values and behaviour from an often native and rural lifestyle cannot be put into practice in a first-world environment. In a sense, a cultural evolution is taking place in the lives of cabin attendants from an unsophisticated, rural environment where they are being moulded and trained into a new culture. The new environment is experienced as unpredictable and without meaning. This inconsistency is evident from the following remark that a respondent jokingly made during the interviews:

Respondent # 5 (M) "Aish! Yesterday I bought these expensive Gucci shoes in London. Tonight, back home in Kwa-zulu Natal, I'll be slaughtering a beast with my family, dancing with my new Gucci shoes around the fire!".

The conflict between the western and ethnic cultures seems to deplete the budget of flexibility of some of the crewmembers. For them, the new culture has become predictable in its unpredictability, and adaptation to these changes will require a great amount of flexibility.

6.4 CONCLUSION

The results of the second-order analysis were presented in the form of eight pattern categories. During the conceptual discussion, the interrelatedness of the coding categories and pattern categories were integrated and related to more general concepts of systems thinking.

These results cannot be viewed as all encompassing, although certain aspects of the findings correspond with previous research by Porter (1988), as indicated in the pattern categories. It is impossible for any researcher to give a complete description of reality. However, with this study, I intended to gain a more comprehensive understanding of the experiences that cabin crew have in their working environment:

"We social scientists would do well to hold back our eagerness to control the world which we so imperfectly understand ... Rather, our studies could be inspired by a more ancient, but today less honoured motive: a curiosity about the world of which we are part. The rewards of such work are not power but beauty" (Bateson, 1972, p.269).

CHAPTER 7

CONCLUSIONS AND RECOMMENDATIONS

"Our evolution continues to offer us freedom of choice. We can consciously alter our behaviour by changing our values and attitudes to regain the spirituality and ecological awareness we have lost."

Fritjof Capra

7.1 INTRODUCTION

In Chapter 2, the aim of this dissertation was defined as the development of a holistic description of the manner in which cabin attendants at SAA experience their working environment. It is not in the scope of this study to present the reader with an explanation for their behaviour or experiences. Three different levels of analysis, progressively more abstract, formed the framework of analysis. At each level of analysis, experiences or concepts were grouped together on the basis of certain criteria so as to form meaningful categories. The first-level analysis comprised cabin attendant's individual descriptions of their working environment. The individual's experience is based on his or her construction of reality, that is, individual meanings or patterns. The second-level analysis comprised shared meanings - that is, patterns of patterns of experiences. The third-level analysis relates the coding and pattern categories to some general concepts of systems theory.

7.2 SUMMARY OF RESULTS

The results from the first-level analysis indicated that cabin attendants experience "Absence from home on special days" (CC1) as a major stressor in their working environment. Ten out of the twelve respondents mentioned this theme during the interview. Loneliness (CC2) was mentioned by eight of the twelve respondents, indicating a high incidence of unfulfilled social needs amongst cabin attendants. Depression (CC6) and Suicidal tendencies (CC15) were also reported too frequently - that is, [f=6] and [f=2] respectively. Management should take these results seriously and implement support strategies with care and sensitivity.

The results of the second-level analysis indicated the interdependence between the various contexts that constitute the lived world of a cabin attendant. The stressors that cabin attendants experience in their working environment may be exacerbated or alleviated by their circumstances at home or their physical and/or psychological well-being. The experiences described - that is the stories told by cabin attendants during the interviews, were presented as an ecology of relationships. In short, the working experiences of cabin attendants involve various contexts that continuously interact with one another, creating an ever-changing kaleidoscope of different colours, patterns and designs

The results of the third-level analysis reiterate the fundamental systemic principles according to which all living things function. Certain positive feedback loops in the working experiences of cabin attendants were identified. The dilemma of matching of flexibility of interacting systems (the cabin attendant interacting with the high-tech working environment) was discussed. The results suggested a disruption of personal meaningful patterns in the lives of cabin attendants.

7.3 RECOMMENDATIONS

According to Stokols (1991), research "findings" should be able to suggest intervention points not only at the individual level, but also at community level. In this study, it is the community level that is of interest, specifically the SAA cabin attendant community. As primary safety officers on board an aircraft, cabin attendants perform a vital function. Hancock (in Porter, 1986) stated that: "The failure of flight attendants to accomplish specific tasks can have catastrophic consequences, however, such individuals are subjected to many long term stresses and are still expected to perform at 100% efficiency". The following suggestions are proposed to enhance the quality of life of flight attendants:

7.3.1 Psycho-educational workshop

The problems of shift work are inherent in the nature of the airline industry. It is not feasible to remove all the difficulties associated with work schedules. However, it is possible to reduce some of the negative effects of work schedules through education or awareness programmes to cabin attendants. The results of this study can be integrated into a psychoeducational workshop for cabin attendants. New recruits, as well as some of the "old bags", might not always be educated as how to cope with the effects of their work schedules. The primary aim of such a workshop should be to equip cabin attendants with the skills to enhance the psychosocial quality of their lives. Cabin attendants, especially new recruits, need to be provided with information on topics such as eating, sleeping and recreational patterns. The secondary aim should be to make cabin attendants aware of their capacity for change or adaptation by thinking in terms of a budget of flexibility, as discussed in Chapter 6. Such information may empower individuals to take up the responsibility for managing their lifestyles.

7.3.2 Limited years of flying

The emotional and physical problems reported by cabin attendants, for example severe depression, loneliness and chronic fatigue, usually develop over a period of time. It is suggested that a legal limit be placed on the number of years that cabin attendants are allowed to fly. This strategy might reduce the long-term effects of flying on physical and psychological health. For example, employees can be contracted to work as cabin attendants for two years, where after they are given the choice to leave the airline or to apply for a position in another department. The consequent high turnover of cabin attendants will put more pressure on the human resource staff. However, I propose that with a shorter flying career, cabin attendants are less likely to develop serious health related difficulties. It is hypothesised that the Inflight Services of South African Airways will experience less absenteeism and crew shortages on flights. There will be more commitment to the company, improved levels of customer services and a consequent increase in revenue. This strategy has successfully been implemented at an airline company in Dubai.

7.3.3 Recommendations for future research

It was mentioned in Chapter 1 that insufficient research exists with regards to the well being of cabin attendants. From the results of this study, it can be concluded that further research in this field is necessary and the opportunities vast. Investigations could focus on psychological and/or physiological differences between cabin attendants who are able to cope and those who struggle to do so. A comparative study between the "survivors" and the "non-survivors" could render useful information for selection and training purposes.

7.4 "THAT REMINDS ME OF A STORY"

"The fountain of content must spring up in the mind, and he who hath so little knowledge of human nature as to seek happiness by changing anything but his own disposition, will waste his life in fruitless efforts and multiply the grief he proposes to remove".

Samuel Johnson

Bateson considered stories, parables and metaphors to be essential expressions of human thinking. He would never deal with any idea in a purely abstract way, but would always present it concretely by telling a story. Since relationships are the essence of the living world, one would do best, Bateson maintained (in Capra, 1989) if one spoke a language of relationships to describe it. This is what stories do. A story connects people from different contexts or backgrounds to one another. The following story is an ancient one, full of images and symbols, told by Bushmen from generation to generation. However, its meaning is as relevant to humankind today as it was to the Bushmen who created it centuries ago. The story is simple and describes a primitive man's experience of loosing "meaning" or "soul" in life:

There was once a man who lived happily by keeping cattle. One morning he found that his cows had no milk to give. (In other words, the story is telling us that he had arrived at a moment in his own life when his old ways no longer provided him with sustenance). He took them to better grazing grounds, but they still had no milk to give. He decided to keep watch on the cattle in their kraal. During midnight he saw a cord coming down from the stars, with beautiful young women with containers, who started milking his cows. When they saw him, they scattered immediately and ran up the cord as fast as they could. He managed to catch hold of one the girls, who still had her container with her. She said that she was happy to become his wife but on the following condition: she will fill the container full of starlight, and he must promise that he will never look in this container without her permission. He promised her that and they lived happily for months. One day, the man got irritated with the container and decided to look into it, while his wife was in the fields. He could not see anything in the container and perceived it as empty. That evening when she came home, she knew immediately that he had looked into her container and was very upset. He told her: 'You silly creature! Why have you made such a fuss about an empty container?' 'Empty?' she uttered, distressed. 'Yes, empty!' And at once she became very sad, turned her back on him, walked straight into the sunset and was never seen again on earth.

The problem here was not the fact that the man had broken his promise to his wife. Rather, the man could not see anything in the container, although it was full of starlight that the beautiful girl brought down for both of them. To him it was empty, without any meaning. This is an image of the moment in our lives when we can no longer see what we have naturally in our containers, the moment we experience a loss of meaning in our lives. It is not that we have empty containers, but rather that we have lost the capacity to see its content, to enjoy meaning and fulfilment in life and to live passionately. This loss was a loss of soul for the cattleman and implied a living death for him thereafter.

What cabin attendants at SAA "see" (experience) in their "containers" (working environment), should not be understood in terms of their visual sense of sight, but in terms of the understanding and the interpreting of their experiences. With regards to this, Capra (1987, p.320) remarked: "The patterns we perceive around us are based in a very fundamental way on the patterns within. Patterns of matter mirror patterns of mind, coloured by subjective feelings and values". The respondents imposed their own patterns or meaning, unconsciously, on their experiential world.

It is therefore not only the working environment that needs change, but also the cabin attendants' ability to make sense out of their working environment. This change incorporates a belief in the possibility of determining one's own fate and an attempt to make the most out of a situation. For all living things *growth* is a necessity of survival. Man survives not by adjusting himself to his physical environment in the manner of an animal, but by transforming his environment through intellectual and emotional growth. In this regard, Ayn Rand (1964, p.121) remarked:

"An animal's capacity for development ends at physical maturity and thereafter its growth consists of the action necessary to maintain itself at a fixed level. After reaching maturity it does not, to any significant level continue to grow in efficacy - that is, it does not significantly increase its ability to cope with the environment. But man's capacity for development does not end at physical maturity; his capacity is virtually limitless. His power to reason is man's distinguishing characteristic, his mind is man's basic means of survival - and his ability to think, to learn, to discover new and better ways of dealing with reality, to expand the range of his efficacy, to grow intellectually, is an open door to a road that has no end.

7.5 CONCLUSION

As mentioned in Chapter 2, it is not possible for a researcher to describe or understand the complexity of the interconnecting parts of any system or phenomena completely. Korzybski (1979-1950) emphasised that descriptions are simplified versions and not accurate presentations of real-life situations. With regards to this, Bateson (1979, p.100) stated: "I surrender to the belief that my knowing is a small part of a wider integrated knowing that knits the entire biosphere or creation". In agreement, Keeney (1979, p.47) remarked: "As one of Birdwhistell's (1970) students put it, it's (doing research on human behaviour) like trying to understand a drainage system from a 6-inch slice of river". However, this study has achieved it's objective if the reader was encouraged to think about the behaviour of cabin attendants in terms of various transacting contexts, circular causality or patterns that connect.

CHAPTER FIVE

RESULTS AND DISCUSSION OF THE FIRST- LEVEL ANALYSIS

5.1 INTRODUCTION

The aim of this chapter is to present the results of the first-level analysis. The first-level analysis comprises the presentation of the 18 coding categories. The discussion of each category is accompanied by applicable quotations from the interview transcripts. The order in which the coding categories are presented, does not reflect the importance of that specific category, but rather the number of times that a category occurred in the set of protocols. The general incidence of a coding category was calculated and is presented as a frequency next to the title of each category.

5.2 DISCUSSION OF CODING CATEGORIES (CCs)

As mentioned in Chapter 2 (p.18), the researcher and the data form a self-referential observing system, which draws new distinctions, that is, creates new meanings. After careful scrutinising of the protocols, the researcher constructed 18 coding categories. These categories will consequently be discussed.

5.2.1 CC 1: ABSENCE FROM HOME ON SPECIAL DAYS [f = 10]

Criterion: Remarks regarding the fact that due to flight schedules, cabin crew cannot spend important days like birthdays, religious holidays, weddings, funerals or anniversaries together with the important people in their lives.

Respondent # 1: "I never seem to be at the right place at the right time. I am always going to work when others are coming home or enjoying weekends. It never seems to work out that you're home when something happens. There is no glamour to that"

Respondent # 4: (F) "What stresses me most of flying, is not being there when you are needed".

Respondent # 6: (M) "You are never home for special occasions, that is weddings, funerals or whatever the case may be. So people seems to eventually distant themselves from you because you are never around".

Respondent # 2: (M) "It is very uncertain. You go away and you feel you are missing out on a lot of things. So many things happened within the space of time in which you were away. You feel you are losing out on a lot".

Respondent # 5: (M) "Sitting in the hotel room, I mostly think what is going on back home. If it is someone's birthday, I wonder if they all get together. That frustrates me".

Respondent # 7: (F) "You have irregular working hours. For me it's time to decide if I'm going to fly when my child is born, am I going to be there when my child gives his first steps, am I going to fight to have the day off to be at my child's birthday?".

Despres (1991) cited in Bielfeld (1997, p.98)) was of the opinion that "a home is experienced as the locus of intense emotional experience, and as providing an atmosphere of social understanding where one's actions, opinions and moods are accepted". The social networks built in and around a home give a sense of acceptance and belonging. The inability to plan family activities such as birthdays, religious and special holidays is described by cabin crew as extremely disruptive. The unfulfilled social need of crewmembers to share special occasions with loved ones is evident. Some respondents seriously questioned whether life has any meaning if one is never able to share in the celebrations and rituals of milestones reached by meaningful others. Cabin attendants are preoccupied with thoughts about friends and family back home. It seems that this separation, this constant being away, gives rise to feelings of intense isolation. Sudden flight delays and changes in flight schedules contribute to these negative emotions. The frustration of being powerless to change the immediate circumstances due to flight schedules seems to be unbearable in some instances. Guilt feelings also appear to become a burden, where a crew member cannot give much needed support during a funeral; wedding or birthday of a loved one. Cabin attendants also fear that people outside the airline may think of them as undependable and untrustworthy.

5.2.2 CC 2: LONELINESS [f = 8]

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Criterion: Statements that reflect respondent's feelings of isolation from meaningful relationships. Also included are statements indicating the anxiety and frustration that respondents experience when they are alone in the hotel room away from home.

Respondent # 12: (F) "Loneliness feels dark. As if your umbilical cord with life and everyone you love has been cut off. I get terribly lonely in the hotel room on long overseas flights. The room becomes very small and impersonal. There is nothing in it that is mine. I miss my books, my music, you know".

Respondent # 12: (F) "London during winter makes me feel lonely. The rain never stops pouring, and the skies are always grey".

Respondent # 3: (M) "Perth is bad. It's like Bloemfontein by the sea. There is nothing to do after five in the afternoon. Only empty street from my window. That is why I always have the TV on. It's voices from a box, but at least they are there".

Respondent # 7: (F) "I feel very much lonely, very depressed from loneliness, and homesick. Last Sunday I wasn't aware that the shops were open – I was so homesick. O, on hearing the church bells ringing, I just wanted to cry my eyes out. Some of my money I actually used for telephone calls to phone home. I just had to speak to somebody that I know".

Respondent # 2: (M) "I t is your duty to make yourself fit. If you don't fit, you're an outcast. So I made myself fit. I am an easy-going person and it is easy for me to adapt to the environment".

The duties of cabin attendants do not allow them to spend quality time with important people. The majority of respondents were concerned about their feelings of detachment and isolation from meaningful relationships. One respondent used descriptions of subdued colours to express her experience of loneliness. Some cabin attendants seem to take responsibility for their own happiness, by reaching out to other members or getting involved in community activities, thereby encouraging social contact. Certain international cities seem to awaken the experience of loneliness more often than others. Perth in Australia is an infamous destination because of the scarcity of activities it offers to cabin attendants. The absence of external stimulation seems to make some members aware of a void within themselves and a lack of content in their lives. I could almost feel the forlornness and intense distress in the voices of the cabin attendants quoted above.

Porter (1988) stated that the majority of female cabin attendants in her study reported that their work schedules placed additional demands on them. This seems to be especially true in terms of the effort required to maintain meaningful relationships with partners, friends and family outside the airline. These female cabin attendants reported declining social activity, loss of contact with friends outside the airline, perceptions of lack of understanding by partners, friends and family, as well as consequent feelings of isolation, loneliness and sometimes withdrawal (Porter, 1988).

5.2.3 CC 3: IMPERSONAL WORKING ENVIRONMENT [f = 7]

Criterion: Statements regarding the lack of empathy amongst crew, as well as the superficial involvement in each other's lives. This category also includes remarks concerning unappreciative passengers.

Respondent # 11: (F) "If you go to somebody and say that you need help, he will not look at you as a human being. Everything works on a pension number".

Respondent # 6: (M) "A few years ago, there was a hostess that walked around in the old Inflight Services Building with her eyes open wide. She became funny. everybody laughed at her. Not in her face, but behind her, because she became funny".

Respondent # 2: (M) "Everybody is in their own little world, pursuing their own interests".

Respondent # 1: (F) "Because we work in such a confined environment, we want our own breathing space once the work is done".

Respondent # 12: (F) ".....they all seem to be so close to each other – accepting each other and joking with one another, a very happy community. But that is just a smoke screen. In reality, crew never become involved in each other's lives, apart from gossiping. You are just a pension number".

Respondents # 10: (F) "The passengers makes me want to cry. I am trying so hard to please them. I go out of my way and still they don't appreciate what I do. This I can't handle any more".

Respondents seem to be alienated from their colleagues, and there is a need for personal recognition. Despite complaints of loneliness, some cabin attendants still prefer not to socialise after a flight. It is also clear that there is no genuine empathy between colleagues. Contact with passengers is also as temporary as the duration of the flight. Several respondents mentioned that passengers view cabin attendants only as faceless "glorified waitresses" with inferior mental abilities. This creates an "us and them" attitude with the cabin crew, an "in group vs out group" situation, where the passengers belong to the "out group" and are also given nicknames.

5.2.4 CC 4: SEPARATION ANXIETY BEFORE FLIGHT DEPARTURE [f = 6]

Criterion: Statements concerning the anticipation of loneliness and loss before leaving on an overseas flight were sorted under this theme. Statements expressing the fear of leaving loved ones behind, as well as remarks describing anxiety attacks before a flight, were also included.

Respondent # 12: (F) "Before an overseas flight I feel anxious, lost, as if I'm not going to see my husband again. As if I'm saying goodbye for the last time ...it's terrible. Lately I cry until we get to the airport where my husband drops me off".

Respondent # 6: (M) "I become silent and I must tell you that I usually start sweating under my right arm. The sweat literally run down my right arm."

Respondent # 11: (F) "If I don't know anybody on the crew, then I almost always become anxious. You know that feeling that you get when you write exams, but you haven't studied? I am like that".

Respondent # 7: (F) "I feel anxious and incompetent. I feel insecure in that I am scared. I think the biggest thing is the fear of the unknown. That gets to me".

It is significant to note that the majority of the respondents who suffer from separation anxiety are females. Only one male respondent said that he becomes anxious before an overseas flight. This might be because he felt more comfortable talking about his feelings than most male respondents, or it might be because females are more dependent and prone to emotionality. Apart from one or two colleagues that permanently fly together, if they are lucky, crewmembers often do not know with whom they will be working on a flight. This uncertainty of not knowing what to expect, seems to increase anxiety. Some respondents also described physical symptoms resembling the typical physiological responses to danger described in Chapter 3. To constantly brave these anxieties can be detrimental to a person's health and detracts from job satisfaction.

5.2.5 CC 5: THE HOTEL ROOM [f = 6]

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Criterion: Statements concerning any experiences of the hotel room - in other words, thoughts, behaviour and feelings that crew members associate with a hotel room - were categorised under this theme.

Respondent # 12: (F) "The room becomes very small and impersonalthere is nothing in it that is mine. I miss my books, my music, you know....".

Respondent # 6: (M) "I sat in the window of my room on the 28^{th} floor and considered suicide. Then I climbed back into the room."

Respondent # 9: (M) "I draw the curtains so that it is dark all around me and silent. Then I sleep. And they say we have an exciting and glamorous job! (laughs)."

Respondent # 2: (M) "I don't like sitting in a hotel room. I guess I feel claustrophobic. I need to get out and get some fresh air".

Respondent # 8: (M) ".....there were no water, no air conditioning, no lights and all those kind of things. It is the same thing in the hotel in New York. The rooms were not ready. We had to wait 3 hours for our rooms, then they still didn't come and fix the TV's".

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The physical environment has a role to play in structuring what people do, what they feel and the sorts of meanings that are associated with a specific physical environment (Sixsmith, 1986). In general, cabin attendants seem to associate a hotel room with seclusion and solitary activities. The room is never personalised territory, that is, an extension of the self, as it is normally the case in one's own room. There are no personal possessions with which one can identify. It might be that some crew experience a frustrated need for self-expression in their hotel rooms, especially on longer flights. Not one respondent referred to "my" room when talking about their hotel rooms. It was always referred to as "the" room, detached from anything personal. The television is an important means of killing time, and it causes great frustration if a set malfunctions.

In short, the hotel room is often experienced as a forlorn place of impermanence, a place of limited personal freedom and privacy.

5.2.6 CC 6: DEPRESSION [f = 6]

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Criterion: Statements of despondency, tearfulness and sorrow were categorised under this theme. Respondents often exhibited symptoms of distress, such as spontaneous crying, while discussing matters related to this theme with the interviewer.

Respondent # 10: (F) " I don't know why I feel so depressed. I think my brain is chemically unbalanced. When I'm on a flight I just take it slow. Whenever I come to this place, I am totally depressed".

Respondent # 6: (M) "My psychiatrist confirmed that I'm suffering from depression. He also explained that my depression is a result of my drinking problem. I also started smoking 4 years ago. (Silence). I'm not really coping anymore with the stress in the airline. But I'm trying ...(crying). Respondent # 12: (F) "Lately I cry until we get to the airport where my husband drops me off for the flight".

Respondent # 6: (M) "According to the new licensing regulations, we as crew are not allowed to use anti-depressants, which of course only makes the problem worse".

There are so many factors interacting and mutually influencing one another in the cabin crew's working environment, that it is impossible to identify a single factor that induces depression in cabin attendants. Each individual has a different situation, with unique responses to that situation. One male respondent acknowledged the existence of a recursive relationship between his depressed moods and drinking patterns. Of great concern is management's prohibition of the use of anti-depressants by cabin attendants and the effect thereof. This regulation seems to decrease cabin attendant's trust and loyalty towards the management of SAA, as they do not provide the much needed the support. It also seems that some attendants apparently have coping skills to deal with the stressors, and do not suffer from any mood disturbances.

5.2.7 CC 7: THE INFLUENCE OF FLYING ON MEANINGFUL RELATIONSHIPS [f = 6]

Criterion: Remarks describing the influence of flying on a cabin attendant's spouse, partner, children or friends were categorised under this theme.

Respondent # 9: (M) "Yes, sometimes my wife cries when I'm leaving, but it is very seldom. Most of the time she gets depressed. But the stress I take is okay. I'm not happy at all about it. (Sigh). But what can you do, it is a way of life you have to live. She accepted it."

Respondent # 2: (M) "The pressure from my girlfriend is stressful. Not pressure, but she constantly reminds me that she misses me when I'm gone. We bought a house, but we don't spent time in it together to do certain things".

Respondent # 2: (M) "I would also like that my friends remember me, remember my birthday. I always have to say 'Hi, I'm going to be here, don't forget me. I am still around'

Cabin attendants have to put in more effort to maintain any relationship of value, as people with more normal routine work tend to forget about their flying friends and their flight schedules. These flight schedules are subjected to sudden changes, which means that a flight only returns a day or two later. Cabin attendants are consequently accused of being unreliable and disloyal partners or friends. In general it seems that cabin attendants who are secure in their relationships with family and friends have less concerns and anxieties about them. Although they do miss them for the duration of the flight, they are still able to enjoy their time away on their own.

5.2.8 CC 8: POOR PHYSICAL HEALTH [f=5]

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Criterion: All statements concerning physical ailments like migraines, chronic fatigue, the propensity to fall ill and burn out symptoms is included under this category.

Respondent # 12: (F) "Yes, without a doubt has flying affect my health. My immune system took the hammering. I constantly have a sore throat, or a sinus problem. If there is a virus going around, I am sure to fall ill".

Respondent # 11: (F) "Yes, definitely. My feet and back suffer mostly. I also suffer from migraine when I'm under stress".

Respondent # 10: (M) "No, I've been flying for twenty years now, and I cannot say that my health has been affected. I am fortunate to be very healthy".

Respondent # 4: (F) "No, I don't see any changes in my health".

Five of the twelve respondents complained of physical ailments, while the rest are enjoying good health. It seems that some respondents have naturally strong constitutions, while others have a predisposition for certain illnesses. Most of the complaints appear to be the cumulative effect of inadequate sleep. As described in Chapter 4, prolonged exposure to mental stress eventually decreases the immune system's ability to fight diseases.

Porter (1988) remarked that several female cabin attendants experienced problems with the inferior condition of their hair, skin and nails. In Porter's study, menstrual problems were frequently reported and related to disconcerted hormonal functions. With regards to these facts, the researcher refers the reader to Chapter 4, where the function of the adrenal gland and how it affects natural bodily cycles such as sleep and wakeful patterns, as well as certain hormonal fluctuations were discussed in brief.

5.2.9 CC 9: SHOPPING EXPERIENCES [f =5]

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Criterion: Remarks regarding shopping experiences in various domestic or international cities were sorted under this category.

Respondent # 12: (F) "This is a lifestyle, not a job. You get hooked on shopping. It's an addictive lifestyle".

Respondent # 1: (F) "And coming to think of it, it is not bad if the shops are close to the hotel, because then you always walk around and shop till you drop".

Respondent # 10: (F) "I spoil my child every time I go away on an overseas flight. I bring her something. When I look at it now, I'm making up for not being there by bringing gifts. It doesn't really work with presents".

Respondent # 4: (F) "I just love my shopping".

Shopping is a favourite (therapeutic?) activity with which cabin attendants kill time in foreign cities. Buying presents for friends and family, gadgets and goodies for the household thousands of kilometres away, seems to bring loved ones and home closer. Thereby, a symbolic continuity between the familiar/ beloved and the exotic/unknown is created. Some

of the cabin attendants with the responsibilities of children, tend to "wrap up" their guilt feelings about not being home in a staggering amount of gifts. In some cases, the "shopaholic syndrome" is evident. The shopping experience seems to be a way to relieve tension.

The need to buy that some respondents reported seems to be so overpowering that it become addictive. Not surprisingly, an interest in shopping is a female affair. Not one of the male respondents referred to shopping as an exciting experience.

5.2.10 CC 10: FEELINGS OF HOSTILITY TOWARDS THE PASSENGERS [f=5]

Criterion: Statements concerning feelings of aggression towards the passengers were sorted under this theme. This includes remarks with regards to verbal abuse as well as physical abuse.

Respondent # 9: (M) "So yes, I once did hit two or three passengers. They want to assault me and I'm not waiting for someone to hit me, I moer them first. Everybody saw what happened and passengers wrote reports. I was right and they were wrong."

Respondent # 7: (F) "I think it is a whole build up, you know. Especially when you are caught out on Standby and you didn't plan to go away from home. That is where the anger comes from most of the time. Anger directed towards the passengers, which is of course, unfair".

Respondent # 12: (F) "Some are horrible, expecting wonders from you, others can be quite nice. You just have to kill them with kindness!".

Respondent # 9: (M) "I asked the passenger why he is insisting on having a first class service, as he is a business class passenger. He said to me 'fuck off'. I said to him, 'no, you don't talk to me like that. He said 'buggeroff', leave me alone, I know what I'm entitled to and you can do buggerall about it. I'll write a letter.' I said 'fine, do It'".

Arguments between cabin attendants and passengers mainly arise because of special meals that have not been loaded for the flight, seating arrangements or poor client service in general.

Anger towards management or the roster office, is often projected on the passengers. Some passengers, commonly those that have had too much to drink, seem to deliberately provoke confrontation with certain cabin attendants. For irritated, fatigued cabin attendants, already on the brink of a nervous breakdown, such provocation is hard to counteract. It seems that some cabin attendants experience a great amount of frustration and anger, which is taken out on the passengers. Aggression, in the appropriate context, has "survival value" for humans, but definitely not in an environment where customers need to be taken care of and service is imperative for the survival of the company.

Porter (1988) remarked that pessimistic attitudes and perceptions of "everything going wrong", accompanied by aggressive thought patterns were evident in those cabin attendants that experienced high levels of work schedule stress. In this regard, Porter (1988) commented that emotional strain was frequently reported in the form of irritability, quick temperedness and general feeling of being "uptight".

5.2.11 CC 11: CREW ECCENTRICITIES [f = 4]

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Criterion: Remarks concerning the idiosyncratic language that cabin attendants use to communicate with one another were sorted under this category. This language is unique to cabin attendants at SAA and includes nicknames for passengers and cockpit crew. Also included in this category are eccentric personal mannerisms that some cabin attendants display.

Respondent # 12: (F) "You hear the typical language that crew mostly use, you know. It is the airline lingo. There are nicknames for some of the interesting characters, as well as for the passengers who behave in a certain way. For instance, I have just spoken to Edwin, but the crew call him Edwina Charlotte. Then there is still Molly, Wolkop and Dolla".

Respondent # 12: (F) "Passengers are categorised into 3 groups: Nora, Hilda and Chriselda. That is, you're a Hilda if you are a demanding and irritating passenger. Nora is even worse, asking for rooibos tea with lemon all the time, and Chriselda is an absolute nightmare to serve".

Respondent # 8: (M) "We are an abnormal bunch of people, otherwise we would not be able to survive".

Respondent # 6: (M) "There are so many eccentric people in the airline. Many that are just otherwise. Not all of us, but many of us".

Respondent # 9: (M) "Oh, very funny people here. Years ago, one guy was grounded because he became koekoes. He stayed in his Combi in the parking area at the old Inflight Services building. That is where he slept, ate and lived when he was not flying. He used to talk to himself. On the aircraft, after he did the safety announcements, he talked to the passengers over the PA, chatting away and saying up rhymes for them. He was actually very entertaining, always wanting to please the passengers".

Cabin attendants perceive their community as different and enigmatic with a certain amount of exclusivity. They spent a great deal of time in each other's company, have to work together as a team on board and share the same frustrations. There seems to be several cabin attendants that are conspicuous for their individuality, sense of humour and flamboyancy. These are cabin attendants that have been in the airline for a long time. They probably needed to develop certain behaviour patterns to cope with their unique trials and tribulations at work, as well as in their personal lives. In general, the respondents portrayed a cohesive group identity. The migratory lifestyle possibly encourages the free spirited attitude of most cabin attendants.

As the preceding quotations illustrate, cabin attendants tend to categorise or stereotype passengers. It seems that this differentiation serves the purpose of gaining control over large numbers of passengers on board. That is, the categorisation of passengers prevents an information overload on the part of cabin attendants.

5.2.12 CC 12: ACCUSATIONS OF INCOMPETENT COLLEAGUES [f = 3]

Criterion: Remarks expressing the frustration of working on board a flight together with lazy and/or incompetent colleagues were sorted under this theme.

The term "flying friendships" expresses the superficial nature of relations between cabin attendants. They spend many days together away from home, and start sharing their personal lives with one another. It seems to be easier to have friendships with colleagues than trying to work on meaningful relationships outside the airline. If a cabin attendant is not flying on a permanent roster with another cabin attendant, he or she never spent enough time with a colleague to build a meaningful relationship. These are professional relationships, and have little personal depth.

5.2.14 CC 14: COMING HOME AFTER AN OVERSEAS FLIGHT [f = 3]

Criterion: Statements concerning the positive experience of the return flight, after being away from home for several days.

Respondent # 4: (F) "The passengers can give me whatever trouble they want. They can stand on their heads, I don't care. I am going home! I find that when I'm going home, I go that extra mile for the passengers, because I think I am never going to see you again. Stuff you".

Respondent # 7: (F) "You should see me so early for pick-up. I don't want any mistakes to happen. I just want to get home".

Respondent # 8: (M) "It is always nice to come home. It's a challenge to see what my wife has changed while I was away. You have to take the leadership as father and husband back from the women. I always look forward to what she will be telling me. What went wrong and how she coped with it".

It is clear, that during the return flight, cabin attendants feel excited and anticipate a happy reunion with loved ones. Most cabin attendants seem to experience home as some form of stability in an ever-changing social and physical environment. In this regard, Sixsmith (in Bielfeld 1997, p.90) stated that "home appears as a profound centre of meaning and a central emotional and sometimes physical reference point in a person's life which is encapsulated in feelings of security, happiness and belonging".

It seems that most married male cabin attendants do not experience any trouble when resuming their responsibilities back at home. They actually look forward to re-assuming the reins. In general, cabin attendants behave more friendly and service-oriented towards the passengers during the return flight. With the exception of a few cabin attendants, this friendly attitude is however, still toned with some underlying aggression. It is not a sincere or genuine friendliness, but rather a false smokescreen to finish the job as soon as possible and get home.

5.1.15 CC 15: SUICIDAL TENDENCIES [f = 2]

Criterion: Remarks concerning a respondent's wish to die were included in this category. Expressions of the attractiveness that death holds, because it is perceived as a way out of misery, were included under this theme.

Respondent # 6: (M) "It happened a few years ago. I took a bottle of Whiskey and sat in the window of the hotel room on the 28^{th} floor. I wanted to end it all. Then I climbed back into my room. I then decided to see a psychologist".

Respondent # 3: (M) Three years ago I swallowed about 140 pills. Sleeping pills and dehydration pills. Fortunately my landlord found me on my bed in time and contacted an ambulance. If he didn't find me, I wouldn't have been here today".

Of the twelve respondents who were interviewed, two admitted to intense feelings of despondency and despair. These two respondents reported destructive or self-mutilating behaviour. They find themselves in a painful situation, as they believe they cannot change their own destiny, and have constant thoughts about death and ways to kill themselves. The prohibition on the use of any anti-depressants makes the situation even more serious, as these cabin attendants are of the opinion that nobody cares to support them.

5.2.16 CC 16: SUBSTANCE ABUSE [f = 8]

Criterion: All remarks that describe the abuse of alcohol or excessive pill consumption in order for cabin attendants to deal with stress were included under this theme.

Respondent # 2: (F) "So, I know from myself, that I drink quite frequently when I'm away. I feel that it makes me relax. Especially when we get together to have lunch or dinner. It is always a ritual to meet and have dinner. So obviously you start to drink".

Respondent # 5: (M) "Generally, most cabin crew are heavy consumers of alcohol. It might be because they have time on hand to socialise".

Respondent # 10: (F) "I think that there is a lot more drug abuse than we really know about. And alcohol, I suppose....(silence). Because it is so available".

Respondent # 6: (M) "Because I have drinking problem, I try not to go out with the crew for meals. I know that if I do, I will just drink again to forget about my worries".

Respondent # 12: (F) "I always go to the nearest gym, or take some time to go shopping, or read".

Cabin attendants exhibit a variety of strategies to deal with their stress. Some opt for the intoxicating effect of alcohol and drug abuse in order to unwind. Boredom and the availability of both alcohol and drugs encourage such behaviour. According to Bateson (1979), Bernard Smith - the non-alcoholic representative of Alcoholics Anonymous - came close to the truth when he said, "the AA member was never enslaved by alcohol. Alcohol simply served as an escape from personal enslavement to the false ideals of a materialistic society".

More effective ways of dealing with stress that cabin attendants reported are exercising, selftalk and religious activities. The avoidance of social activities out of fear of an uncontrollable drinking binge seems to intensify feelings of loneliness in those respondents who confessed having a drinking problem.

5.2.17 CC17: RELIGION [f = 2]

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Criterion: Remarks describing spiritual practices, or the need for such practices, were sorted under this category.

Respondent # 12: (F) "There is a small church in High Street Kensington, close to the hotel where we stay in London. I walk there whenever I feel down or miss home. There is something about the place that is comforting. It is always warm inside the wooden doors, and it reminds of home".

It seems that some respondents associate a cathedral with the intimacy and warmth they experience with family and close friends in a homely environment. A church building and the activities taking place there are experienced as a trusted, predictable and familiar environment, where visitors seem to experience a sense of belonging and relatedness. Silence and peacefulness enable some respondents to do self-reflection and counter feelings of self-alienation. The predictability and patterning of religious rituals seems to counterbalance the unpredictability of the SAA lifestyle. This notion is an example of a negative feedback loop as discussed in Chapter 2. The effect of external fluctuations (rapid changing physical environment or sudden changes in flight schedules) is minimised through the predictability of planned or expected activities

5.2.18 CC18: PHYSICAL EXERCISE [f=2]

Criterion: All statements referring to sporting activities that cabin attendants are involved in, were sorted under this theme.

Respondent # 6: (M) "I used to play tennisjust loved it... But it is impossible to take part in tournaments on week-ends, because I'm always away and cannot commit myself".

Respondent # 12: (F) "I try to find the nearest park, the "lung of the city", and go for long walks. In London, I like jogging in Hyde Park under those lovely old trees, watching couples strolling along the pathways with their dogs.....I always go to the nearest gym ..." The non-routine work schedules does not allow cabin attendants to take part in competitive team sports. Non-competitive exercises include individual-orientated sports like jogging and going to a gym. Exercising in a natural environment seems to enhance relaxation and psychological well being.

5.3 CONCLUSION

The handful of sand that Pirsig (1999) described in his book "Zen and the Art of Motorcycle Maintenance" is an appropriate metaphor for the way in which the researcher categorised the data obtained from the interviews. Pirsig (1999) described the formation of separate piles of sand on the basis of their similarity and dissimilarity in colour and form. Various themes or "piles of sand" were identified by the researcher from the cabin attendants' vast landscape of experiences, and categorised into eighteen different experiential themes. Quotes that best ascertain and describe the identity of a theme were included in a coding category. This first order "piling process" is unique to the researcher, since of her construction of reality is based on her unique personality traits and previous experiences.

In Chapter 6, this process of categorisation and sub-division will be continued towards the second-level analysis, that is, the formation of eight pattern categories. The third-level analysis, that is, the conceptual discussion will also be covered in Chapter 6.

SECOND-LEVEL ANALYSIS: PRESENTATION OF PATTERN CATEGORIES AND THIRD-LEVEL ANALYSIS: CONCEPTUAL DISCUSSION

6.1 INTRODUCTION

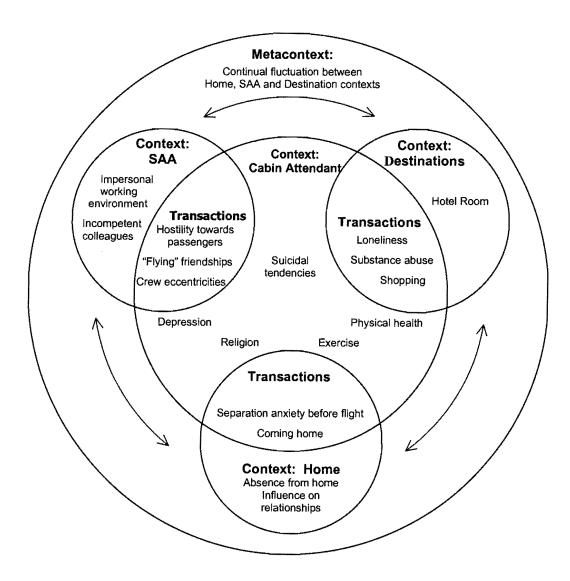
As discussed in Chapter 5, the descriptions of respondents' experiential world differ because each person constructs his/her own reality differently. It is however possible to identify some regularity in the respondents' descriptions of their experiences. Second-order analysis describes the relations between individual experiences. The closest we can get to the truth (in this study it is the essence of the experience of stressors in the working environment of cabin attendants) is by studying the patterns that bind ideas together (Bateson, 1979). The study of the relations between coding categories comprises the second-level analysis. The identified pattern categories are the product of this analysis. These pattern categories are based on the main themes underlying the coding categories, which were described during the first-level analysis.

Since various relationships may exist between the coding categories, a single coding category may be placed in more than one pattern category. The overlapping of the various coding categories constituting the pattern categories is the result of the coherence and interconnectedness of the pattern categories

Finally, the third-level analysis will be discussed. The pattern categories, which have been discussed during the second-level analysis, share underlying meanings, again giving rise to patterning on a higher level. The conceptual discussion will indicate how the various coding and pattern categories are integrated and how they relate to the more general concepts of a systemic epistemology.

Figure 3. A schematic representation of the different transacting contexts in the lives of cabin crew

The different elements in the diagram refer to the coding categories that were identified during the first-level analysis. The eight different contexts refer to the pattern categories that were identified during the second-level analysis. These different contexts are in continual fluctuation and are schematically presented as follows:



6.2 PRESENTATION OF PATTERN CATEGORIES

6.2.1 PC1: CABIN ATTENDANT

Constituting coding categories:

CC6: DepressionCC8: Poor physical healthCC15: Suicidal tendenciesCC17: ReligionCC18: Exercise

This pattern category comprises the experiential or the lived world of the cabin attendant. As indicated in the diagram, the cabin attendant is in constant transaction with three main contexts, namely Home, Destinations and SAA working environment. The coding categories Religion (CC17) and Exercise (CC18) can be described as activities that cabin attendants pursue to relieve stress. It seems that the time spent alone in silence, whether jogging in a park or meditating in a church, provides the freedom for cabin attendants to do self-reflection and gain a fresh perspective on their personal lives. For some cabin attendants, sanctuaries seem to provide special spiritual experiences. Surrounded by the uncertainty of the swiftly changing physical and social environment, a stony or granite cathedral symbolises constancy and timelessness, providing a psychological anchor to some cabin attendants. During such times of tranquillity, it seems that a cabin attendant experiences a heightened sense of self. In addition to this, some cabin crew reported an awareness of being connected to a higher reality, thereby lifting feelings of depression (CC6). With regards to this, Capra (1987, p.329-330) remarked: "At these rare moments in our lives we may feel that we are in synchrony with the whole universe. These moments of perfect rhythm, when everything else feels exactly right and things are done with great ease, are high spiritual experiences in which every form of separateness or fragmentation is transcended".

The interview data suggests that Depression (CC6) and Poor physical health (CC8) mutually reinforce one another. The more depressed a respondent feel, the poorer his or her physical health seems to be and the poorer a person's health, the more likely he or she is to be depressed. This "snowball effect" may escalate up to where a cabin attendant has thoughts of suicide or actual attempts to commit suicide as described by Respondent #6, in Chapter 5,

section 5.1.15. Porter (1988, p.120) remarked that "with regards to the specific facets of wellness, as measured, work schedule stress demonstrated a significant relationship with high levels of exhaustion, depression, psychosomatic complaints and low levels of general health". In Chapter 3, section 3.2.2 the physiological processes involved in a person's adaptation to a stressful environment were described in detail. It was also mentioned that continuous exposure to a stressful environment might have detrimental effects on a person's physical and psychological health.

6.2.2 PC2: CONTEXT: HOME

Constituting coding categories:

- CC1: Absence from home on special days
- CC7: Influence of flying on meaningful relationships

The central theme in these coding categories is the relationship patterns cabin crew experiences at home. Bielfeld (1997, p.75) defined home as "a place of refuge, providing a person with roots and a sense of stability and permanence". Home is a place where meaningful relationships with significant others are experienced in a relative predictable environment. For cabin crew, such predictable social circumstances are not always possible, due to their work schedules. Sixsmith (1986, p.291 in Bielfeld 1997) was of the opinion that "it is familiarity with other people, their habits, emotions, actions etceteras, indeed the very knowledge that they are there, which creates an atmosphere of social understanding".

Continual absence from home on days of significance like birthdays or anniversaries seems to create a disturbance in meaningful relationships at home. Respondents often described a feeling of being "disconnected" with their family and friends. Husbands, wives, partners, children and friends of cabin attendants may interpret their absence from home on special days as a sign of dwindling love or disinterest in the relationship, which seems to become a basis for distrust and suspicion. The contrary may also be true. When there is already so much unhappiness in a relationship, a cabin attendant may utilise flight schedules to escape from an unpleasant home environment.

6.2.3 PC3: TRANSACTIONS WITH CONTEXT: HOME

Constituting coding categories:

CC4: Separation anxiety before flight departure

CC14: Coming home after an overseas flight

The coding categories constituting this pattern category refer to the ceaseless cycle of departing from and reuniting with family and friends. It appears that the intensity of anxiety experienced by cabin attendants upon departure from home equals the intensity of the excitement and joy they feel upon their return. The symptoms of anxiety that some cabin attendants seem to experience before international flight departures varies from tearfulness and general restlessness to severe perspiration and intense misery (CC4). Respondent #6 described this experience as follows: *"Ek raak baie stil. Dan begin ek sweet onder my regterarm. Die druppeltjies hardloop letterlik onder my arms af. Dan begin ek maar net weer drink en vergeet van die sorge wat voorlê".* These symptoms are induced or intensified by anticipated thoughts and feelings of "being disconnected" from meaningful relationships, from emotional and physical closeness to another person. Bielfeld (1997) remarked that home is not just a physical structure that provides shelter, but is a place where one's emotional needs can be met.

During my own employment as a cabin attendant as SAA, I noticed that I experienced significantly less separation anxiety before flight departures when circumstances at home were pleasant and stable. I also noticed that cabin crew who enjoyed secure relationships, characterised by mutual trust and confidence that the family are able to cope in their absence, experienced less anxiety and uptightness before and during a flight. As humans, we seem to have an innate need for relative permanence and continuation in our social environment.

6.2.4 PC4: CONTEXT: DESTINATIONS

Constituting categories:

CC5: Hotel room

As mentioned in Chapter 5, section 5.2.5, the physical environment has a role to play in structuring what people do, how people feel and the symbolic meanings they attach to it. The interview data suggests that the majority of cabin attendants spend the greater part of their stay in international cities alone in their hotel rooms. The respondents associate a hotel room with a shelter where there is limited personal freedom and privacy. Cabin attendants experience the hotel room as a place of transition, deprived from any personal possessions that give a sense of warmth and belonging. Mostly, the hotel room is associated with solitary activities such as reading, watching television, attempts to sleep and often tormenting thoughts of what is going on back home. In this sense, it seems that cabin attendants do not experience a hotel room as "home away from home".

6.2.5 PC5: TRANSACTIONS WITH CONTEXT: DESTINATIONS

Constituting coding categories:

CC2: Loneliness CC9: Shopping experiences CC16: Substance abuse

The relations between these coding categories have a negative undertone, and if I were to colour this slice in the circle named "Context: Destinations" in Diagram 1, I probably would have chosen black. Despite the excitement that foreign destinations could offer a person, some cabin attendants' accounts tell a very different story. The saying "if you're tired of London, you're tired of life", seems to apply to the lives of some cabin attendants. Intense feelings of loneliness (CC2) and "not belonging" were reported by the majority of the respondents, and such feelings may increase the incidence of substance abuse (CC16). On the long run, a cabin attendant's habit of substance abuse seems to have self-alienating effect. The cabin attendant feels "cut off" from him or herself as well as from other people. Feelings of loneliness are thereby intensified. There seems to be a recursive relationship between

Substance abuse (CC16) and Loneliness (CC2). In some cases, Shopping experiences (CC9) appears to be an attempt to alleviate feelings of loneliness and alienation.

This pattern category reminds me of the words of a familiar country song:

"I've been to Nice, and the Isle of Greece where I've sipped champagne on a yacht,

Moved like Harlo in Monte Carlo and showed them what I've got...

I've been to paradise,

But I've never been to me"

6.2.6 PC6: CONTEXT: SAA WORKING ENVIRONMENT

Constituting coding categories:

CC3: Impersonal working environment

CC12: Accusations of incompetent colleagues

The central theme in this pattern category is the lack of empathy cabin attendants demonstrate towards each other and experience from the side of management and the roster office. Respondent #12 described this context as follows: ".... They all seem to be so close to each other - accepting each other and joking with one another, a very happy community. But that is just a smoke screen. In reality, cabin attendants never become involved in each other's lives, apart from gossiping. The data suggests that the impersonal working environment (CC3) elicit frustrations between colleagues, which eventually manifests itself in accusations of incompetence between cabin attendants (CC12).

6.2.7 PC7: TRANSACTIONS WITH CONTEXT: SAA WORKING ENVIRONMENT

Constituting coding categories:

CC10: Hostility towards the passengers

- CC11: Crew eccentricities
- CC13: "Flying" friendships with colleagues

In their working environment, cabin attendants interact with colleagues and passengers in the confined space of an aircraft for periods of time that can last for up to seventeen hours.

Despite the fact that cabin attendants spend a lot of time together, they do not seem to share deep friendships and emotional closeness with one another. Aggression towards passengers (CC10) could possibly originate from frustrated needs for intimacy and meaningful relationships. Temporary friendships with colleagues (CC13) - or "flying friendships" as one respondent called them - could possibly contribute to Loneliness (CC2), Depression (CC6) and Substance abuse (CC19). Cabin attendants that abuse alcohol or drugs may damage relationships with family and friends. It appears that cabin attendants experience disturbed social meaningful relationships at work and often at home.

Some respondents reported that in their working environment, individuality gets lost. Respondent #6 remarked "*I am only a number, a pension number*". It could be for this reason that some cabin attendants attempt to define or restore their identity by conspicuous mannerisms, language and behaviour (CC11).

6.2.8 PC8: METACONTEXT

The seven above-mentioned contexts are all embedded in a larger metacontext. A *metacontext* is a context of contexts. The metacontext identified in this analysis is characterised by a continual alternation between contexts. The various person-context transactions described above are to a large degree influenced by the fact that cabin attendants are continually alternating between contexts. One's experience of coming home to loved ones, for instance, is surely affected by the knowledge that this reunion is only a prelude to the next farewell.

Life experiences of cabin crew are more complex than Figure 6.1 suggests. It is not only the adjacent circles or contexts that connect with one another, but also the non-contiguous contexts that interconnect with on another. For example, the context "Destination" can transact directly with the context "SAA working environment", such as when cabin attendants behave in a hostile manner towards passengers (CC10) and colleagues, because of their own frustrations after spending many days in another city away from home (CC5). Another example might be that a cabin attendant's continual absence from home on special days (CC1) may give rise to depression (CC6), which may motivate the crewmember to abuse alcohol (CC16), causing poor physical health (CC8) over a period of time. Poor physical health (CC8) may aggravate Depression (CC6), thereby creating a self-reinforcing cycle. A

systems theoretical approach allows the researcher to telescope in and out the bigger picture to describe the transactions within the smaller contexts, as well as the transactions of these contexts with the metacontext.

6.3 THIRD ORDER ANALYSIS: CONCEPTUAL DISCUSSION

The aim of the third order analysis is to obtain an integrated understanding of the underlying patterns in experiences of cabin crew in their working environment, and will be presented in the form of a conceptual discussion. The researcher will attempt to indicate how the various coding and pattern categories are integrated and related to the more general concepts of a systemic epistemology.

6.3.1 Positive and negative feedback loops

The results from the first-, and second-level of analysis suggest that recursive relationships exist between certain coding categories and/or pattern categories. This means that various categories may reinforce each other mutually, creating negative or positive feedback loops as discussed in Chapter 2. The following *positive feedback loops* have been identified:

- The categories Depression (CC6) and Poor physical health (CC8) seems to reinforce each other. The more depressed a cabin attendant feel, the poorer his/her physical health seems to be. Poor physical health in turn seems to give rise to depression. When a cabin attendant experiences ill health, it is not possible to do physical exercises in an attempt to alleviate depression in a natural manner. He or she is often too tired or weak to engage in activities that may uplift feelings of despondency. Such physical immobility seems to exacerbate the depressed mood of a cabin attendant. As discussed in Chapter 4, prolonged mental stress or depressed moods eventually decreases the immune system's ability to fight diseases, causing more serious illnesses and more misery.
- Unhappy circumstances at home can motivate cabin attendants to request more flights in order to escape an unfortunate environment where they experience conflict with and alienation from family members and friends. Being away from home more frequently and for longer periods at a time only reinforces feelings of estrangement and intensifies existing conflict between a cabin attendant and family members. This situation further

provokes the cabin attendant to request flights in an attempt to "flee" circumstances at home.

- A self-amplifying loop exists between the coding categories Substance abuse (CC16) and Depression (CC6). Alcohol and drug abuse seems to intensify feelings of depression. The more depressed cabin attendants feel, the more they tend to escape this reality by abusing alcohol or drugs. In turn, depressed moods escalate - reinforcing the positive feedback loop.
- The same snowball effect exists between the coding categories Depression (CC6) and Loneliness (CC2). The more depressed a cabin attendant feel, the more he/she withdraws from colleagues, friends and family. Withdrawing behaviour prevents a cabin attendant to develop intimate relationships and enjoy the companionship of colleagues, friends and family.
- Productive, efficient and caring cabin attendants receive letters of appreciation from passengers. This acknowledgement and expression of appreciation motivates cabin attendants to render even higher standards of customer service, causing more letters of appreciation to reach management. This specific positive feedback loop is constructive, while all the aforementioned positive feedback loops are destructive.

As discussed in Chapter 2, negative feedback loops or homeostatic feedback loops instigate some contrary or compensatory action, thereby "balancing" the system. From the results of the first- and second-level analysis, the following negative feedback loops were identified:

- For some cabin attendants the practice of Religion (CC17) counteracts Loneliness (CC2). Cabin attendants experience a sense of belonging and relatedness through religious practices. Feelings of detachment are minimised and cabin attendants can engage in solitary activities with renewed inspiration.
- Cabin attendants sometimes seems to withdraw from other people after a strenuous flight. Seeking social isolation assist cabin attendants to regain their "balance" to prepare for the next flight.

6.3.2 Matching of flexibility of interacting systems

Bateson (1972) went on to say that in a healthy human ecology, there is a match between the flexibility of the people and the flexibility of the civilisation. Matching flexibility between interacting subsystems create a complex higher order system that is open-ended for slow change. In this study, the interacting systems are the cabin attendant and his/her working environment. In the following paragraph I will attempt to describe the contrast between the flexibility of humans and the flexibility of high technology in the airline industry.

Humans were clever enough to invent technology to help them overcome their lack of wings. These high technology aircraft had been designed with a great amount of flexibility. The steel-winged giants in the sky can adapt to a variety of environmental factors, for example fluctuations in weather conditions, loss of engine power or sudden loss of altitude. In contrast, we have not been clever enough to prevent the disruptive effects of disturbed circadian rhythms or to correct dysfunctional communication patterns in interpersonal The healing of emotional wounds cannot be accelerated by technology. relationships. Advances or "growth" in technology cannot be compared to growth in human affairs, which has a time of its own. In this sense, there is a limited amount of matched flexibility between the high-tech working environment as a system and the cabin attendant as a system. From the respondents' descriptions of their experiences in their working environment, this manenvironment system does not portray a picture of health. In this regard, Bateson (1972, p.503) remarked: " It appears that the man-environment system has certainly been progressively unstable since the introduction of metals, the wheel, and script". In the light of the results of this study, it seems appropriate to comment that the invention of "the wing" added to the instability of the man-environment system.

6.3.3 Quidquid recipitur, ad modum recipientis recipitur ("Whatever is received, is received according to the manner of the receiver"):

The cabin attendant in transaction with the various contexts can never be a detached observer of reality. The type of experience that a crewmember spontaneously shared with the researcher is not determined by the working environment only, but also personal characteristics. Each respondent's description of the stressors in his/her working environment is a unique construction of reality. In this regard, Dell (1985, p.7) remarked: "Forces and impacts cannot and do not determine, specify or instruct the behaviour of an object. They are merely the historical occasion for the system to continue its structure-determined behaviour". In short, it is not solely the stressors in the working environment of cabin crew that "cause" thoughts and behaviour. From a systems theory perspective, it is more correct to state that the stressors induce and facilitate certain responses that are already inherent in a respondent's personality structure. Capra (1987, p.290) confirmed this statement: " A living organism is a self-organising system, which means that its order in structure and function is not imposed by the environment but by the system itself". It is possible however, that the stressors in the working environment of cabin crew can encourage certain experiences and inhibit others.

In sum, the working environment serves as a catalyst for the stressful experiences, while a cabin attendant's reactions are determined by his/her own emotional and physical composition.

6.3.4 Disrupted personal meaningful patterns

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Throughout the process of analysis, it seems that some cabin attendants experience a relative lack of personal meaningful patterns. Perold, (2000, p.16) stated: "It is true that human beings are born with a deep-rooted belief in the "lawfulness" of their world, or in the regularity of causes and effects. It is probably also true that this belief may be destroyed – at least as far as certain types of contexts are concerned. This might be achieved by repeatedly exposing a person to a context in which sequences of events are completely devoid of pattern or regularity. Eventually, the person may learn that it is futile to try to predict the outcome. The context will have become predictable in its unpredictability." In systems thinking, pattern, redundancy, meaning and information can be regarded as synonyms. Where there is pattern or redundancy, there is regularity, predictability, meaning or information: "From a tree visible above ground, it is possible to guess at the existence of roots below ground. The top provides information about the bottom. From what I say, it may be possible to make predictions about how you will answer. My words contain meaning or information about your reply" (Bateson, 1972, p.131).

Three different disruptions in personal meaningful patterns will be discussed in this section. Disrupted circadian rhythms, disrupted interpersonal relationships and disrupted cultural patterns are distinguished.

6.3.4.1 Disrupted circadian rhythms

Disrupted circadian rhythms seriously affect the physical and emotional health of some cabin attendants. Lynch (1972) pointed out that changes in circadian rhythms imposed from the outside - by rotating shifts or flights across time zones, for instance - often result in fatigue, bodily upset and mental stress. Research done by Singer (1985) cited in Porter (1988) concluded that proper adjustment of the body clock never occurs, and that there is only distortion of rhythms, never adaptation. The body is not allowed to function according to its own internal wisdom for growth and healing, because its cyclical "lawfulness" is continually disrespected.

6.3.4.2 Disrupted interpersonal relationships

The irregularity of cabin attendants' work schedules makes it difficult for cabin attendants to establish meaningful *interpersonal relationship patterns*. Some cabin attendants seem to experience relationships that are completely devoid of any pattern. The knowledge of the state of a certain relationship creates expectations about how future interaction and behaviour within that relationship will be like. However, these expectations are more than often not met in the lives of cabin crew. What is experience as true and real in a personal relationship is not valid anymore the following day. That is, relationship patterns cannot be predicted with certainty. Physical presence and closeness to meaningful people on a regular basis build familiarity, trust and loyalty. These relationship patternings seem to acquire a sense of learned helplessness in their personal relationships, and do not take the trouble anymore to nurture these relationships. The personal relationship context has therefore become predictable in its unpredictability.

6.3.4.3 Disrupted cultural patterns

Cultural norms and values form the context in which interaction between individuals takes place. Cabin attendants from traditional African ethnic backgrounds seem to experience a disruption of *cultural patterns* in their lives. In accordance to affirmative action policies, SAA needed to correct the grossly uneven demographic distribution with regards to race. Potential employees from cities as well as rural areas were targeted for recruitment. Cabin

attendants realise those familiar and known values and behaviour from an often native and rural lifestyle cannot be put into practice in a first-world environment. In a sense, a cultural evolution is taking place in the lives of cabin attendants from an unsophisticated, rural environment where they are being moulded and trained into a new culture. The new environment is experienced as unpredictable and without meaning. This inconsistency is evident from the following remark that a respondent jokingly made during the interviews:

Respondent # 5 (M) "Aish! Yesterday I bought these expensive Gucci shoes in London. Tonight, back home in Kwa-zulu Natal, I'll be slaughtering a beast with my family, dancing with my new Gucci shoes around the fire!".

The conflict between the western and ethnic cultures seems to deplete the budget of flexibility of some of the crewmembers. For them, the new culture has become predictable in its unpredictability, and adaptation to these changes will require a great amount of flexibility.

6.4 CONCLUSION

The results of the second-order analysis were presented in the form of eight pattern categories. During the conceptual discussion, the interrelatedness of the coding categories and pattern categories were integrated and related to more general concepts of systems thinking.

These results cannot be viewed as all encompassing, although certain aspects of the findings correspond with previous research by Porter (1988), as indicated in the pattern categories. It is impossible for any researcher to give a complete description of reality. However, with this study, I intended to gain a more comprehensive understanding of the experiences that cabin crew have in their working environment:

"We social scientists would do well to hold back our eagerness to control the world which we so imperfectly understand ... Rather, our studies could be inspired by a more ancient, but today less honoured motive: a curiosity about the world of which we are part. The rewards of such work are not power but beauty" (Bateson, 1972, p.269).

CHAPTER 7

CONCLUSIONS AND RECOMMENDATIONS

"Our evolution continues to offer us freedom of choice. We can consciously alter our behaviour by changing our values and attitudes to regain the spirituality and ecological awareness we have lost."

Fritjof Capra

7.1 INTRODUCTION

In Chapter 2, the aim of this dissertation was defined as the development of a holistic description of the manner in which cabin attendants at SAA experience their working environment. It is not in the scope of this study to present the reader with an explanation for their behaviour or experiences. Three different levels of analysis, progressively more abstract, formed the framework of analysis. At each level of analysis, experiences or concepts were grouped together on the basis of certain criteria so as to form meaningful categories. The first-level analysis comprised cabin attendant's individual descriptions of their working environment. The individual's experience is based on his or her construction of reality, that is, individual meanings or patterns. The second-level analysis comprised shared meanings - that is, patterns of patterns of experiences. The third-level analysis relates the coding and pattern categories to some general concepts of systems theory.

7.2 SUMMARY OF RESULTS

The results from the first-level analysis indicated that cabin attendants experience "Absence from home on special days" (CC1) as a major stressor in their working environment. Ten out of the twelve respondents mentioned this theme during the interview. Loneliness (CC2) was mentioned by eight of the twelve respondents, indicating a high incidence of unfulfilled social needs amongst cabin attendants. Depression (CC6) and Suicidal tendencies (CC15) were also reported too frequently - that is, [f=6] and [f=2] respectively. Management should take these results seriously and implement support strategies with care and sensitivity. The results of the second-level analysis indicated the interdependence between the various contexts that constitute the lived world of a cabin attendant. The stressors that cabin attendants experience in their working environment may be exacerbated or alleviated by their circumstances at home or their physical and/or psychological well-being. The experiences described - that is the stories told by cabin attendants during the interviews, were presented as an ecology of relationships. In short, the working experiences of cabin attendants involve various contexts that continuously interact with one another, creating an ever-changing kaleidoscope of different colours, patterns and designs

The results of the third-level analysis reiterate the fundamental systemic principles according to which all living things function. Certain positive feedback loops in the working experiences of cabin attendants were identified. The dilemma of matching of flexibility of interacting systems (the cabin attendant interacting with the high-tech working environment) was discussed. The results suggested a disruption of personal meaningful patterns in the lives of cabin attendants.

7.3 RECOMMENDATIONS

According to Stokols (1991), research "findings" should be able to suggest intervention points not only at the individual level, but also at community level. In this study, it is the community level that is of interest, specifically the SAA cabin attendant community. As primary safety officers on board an aircraft, cabin attendants perform a vital function. Hancock (in Porter, 1986) stated that: "The failure of flight attendants to accomplish specific tasks can have catastrophic consequences, however, such individuals are subjected to many long term stresses and are still expected to perform at 100% efficiency". The following suggestions are proposed to enhance the quality of life of flight attendants:

7.3.1 Psycho-educational workshop

The problems of shift work are inherent in the nature of the airline industry. It is not feasible to remove all the difficulties associated with work schedules. However, it is possible to reduce some of the negative effects of work schedules through education or awareness programmes to cabin attendants. The results of this study can be integrated into a psychoeducational workshop for cabin attendants. New recruits, as well as some of the "old bags", might not always be educated as how to cope with the effects of their work schedules. The primary aim of such a workshop should be to equip cabin attendants with the skills to enhance the psychosocial quality of their lives. Cabin attendants, especially new recruits, need to be provided with information on topics such as eating, sleeping and recreational patterns. The secondary aim should be to make cabin attendants aware of their capacity for change or adaptation by thinking in terms of a budget of flexibility, as discussed in Chapter 6. Such information may empower individuals to take up the responsibility for managing their lifestyles.

7.3.2 Limited years of flying

The emotional and physical problems reported by cabin attendants, for example severe depression, loneliness and chronic fatigue, usually develop over a period of time. It is suggested that a legal limit be placed on the number of years that cabin attendants are allowed to fly. This strategy might reduce the long-term effects of flying on physical and psychological health. For example, employees can be contracted to work as cabin attendants for two years, where after they are given the choice to leave the airline or to apply for a position in another department. The consequent high turnover of cabin attendants will put more pressure on the human resource staff. However, I propose that with a shorter flying career, cabin attendants are less likely to develop serious health related difficulties. It is hypothesised that the Inflight Services of South African Airways will experience less absenteeism and crew shortages on flights. There will be more commitment to the company, improved levels of customer services and a consequent increase in revenue. This strategy has successfully been implemented at an airline company in Dubai.

7.3.3 Recommendations for future research

It was mentioned in Chapter 1 that insufficient research exists with regards to the well being of cabin attendants. From the results of this study, it can be concluded that further research in this field is necessary and the opportunities vast. Investigations could focus on psychological and/or physiological differences between cabin attendants who are able to cope and those who struggle to do so. A comparative study between the "survivors" and the "non-survivors" could render useful information for selection and training purposes.

7.4 "THAT REMINDS ME OF A STORY"

"The fountain of content must spring up in the mind, and he who hath so little knowledge of human nature as to seek happiness by changing anything but his own disposition, will waste his life in fruitless efforts and multiply the grief he proposes to remove".

Samuel Johnson

Bateson considered stories, parables and metaphors to be essential expressions of human thinking. He would never deal with any idea in a purely abstract way, but would always present it concretely by telling a story. Since relationships are the essence of the living world, one would do best, Bateson maintained (in Capra, 1989) if one spoke a language of relationships to describe it. This is what stories do. A story connects people from different contexts or backgrounds to one another. The following story is an ancient one, full of images and symbols, told by Bushmen from generation to generation. However, its meaning is as relevant to humankind today as it was to the Bushmen who created it centuries ago. The story is simple and describes a primitive man's experience of loosing "meaning" or "soul" in life:

There was once a man who lived happily by keeping cattle. One morning he found that his cows had no milk to give. (In other words, the story is telling us that he had arrived at a moment in his own life when his old ways no longer provided him with sustenance). He took them to better grazing grounds, but they still had no milk to give. He decided to keep watch on the cattle in their kraal. During midnight he saw a cord coming down from the stars, with beautiful young women with containers, who started milking his cows. When they saw him, they scattered immediately and ran up the cord as fast as they could. He managed to catch hold of one the girls, who still had her container with her. She said that she was happy to become his wife but on the following condition: she will fill the container full of starlight, and he must promise that he will never look in this container without her permission. He promised her that and they lived happily for months. One day, the man got irritated with the container and decided to look into it, while his wife was in the fields. He could not see anything in the container and perceived it as empty. That evening when she came home, she knew immediately that he had looked into her container and was very upset. He told her: 'You silly creature! Why have you made such a fuss about an empty container?' 'Empty?' she uttered, distressed. 'Yes, empty!' And at once she became very sad, turned her back on him, walked straight into the sunset and was never seen again on earth.

The problem here was not the fact that the man had broken his promise to his wife. Rather, the man could not see anything in the container, although it was full of starlight that the beautiful girl brought down for both of them. To him it was empty, without any meaning. This is an image of the moment in our lives when we can no longer see what we have naturally in our containers, the moment we experience a loss of meaning in our lives. It is not that we have empty containers, but rather that we have lost the capacity to see its content, to enjoy meaning and fulfilment in life and to live passionately. This loss was a loss of soul for the cattleman and implied a living death for him thereafter.

What cabin attendants at SAA "see" (experience) in their "containers" (working environment), should not be understood in terms of their visual sense of sight, but in terms of the understanding and the interpreting of their experiences. With regards to this, Capra (1987, p.320) remarked: "The patterns we perceive around us are based in a very fundamental way on the patterns within. Patterns of matter mirror patterns of mind, coloured by subjective feelings and values". The respondents imposed their own patterns or meaning, unconsciously, on their experiential world.

It is therefore not only the working environment that needs change, but also the cabin attendants' ability to make sense out of their working environment. This change incorporates a belief in the possibility of determining one's own fate and an attempt to make the most out of a situation. For all living things *growth* is a necessity of survival. Man survives not by adjusting himself to his physical environment in the manner of an animal, but by transforming his environment through intellectual and emotional growth. In this regard, Ayn Rand (1964, p.121) remarked:

"An animal's capacity for development ends at physical maturity and thereafter its growth consists of the action necessary to maintain itself at a fixed level. After reaching maturity it does not, to any significant level continue to grow in efficacy - that is, it does not significantly increase its ability to cope with the environment. But man's capacity for development does not end at physical maturity; his capacity is virtually limitless. His power to reason is man's distinguishing characteristic, his mind is man's basic means of survival - and his ability to think, to learn, to discover new and better ways of dealing with reality, to expand the range of his efficacy, to grow intellectually, is an open door to a road that has no end.

7.5 CONCLUSION

As mentioned in Chapter 2, it is not possible for a researcher to describe or understand the complexity of the interconnecting parts of any system or phenomena completely. Korzybski (1979-1950) emphasised that descriptions are simplified versions and not accurate presentations of real-life situations. With regards to this, Bateson (1979, p.100) stated: "I surrender to the belief that my knowing is a small part of a wider integrated knowing that knits the entire biosphere or creation". In agreement, Keeney (1979, p.47) remarked: "As one of Birdwhistell's (1970) students put it, it's (doing research on human behaviour) like trying to understand a drainage system from a 6-inch slice of river". However, this study has achieved it's objective if the reader was encouraged to think about the behaviour of cabin attendants in terms of various transacting contexts, circular causality or patterns that connect.

APPENDIX A: SEMI-STRUCTURED INTERVIEW GUIDE

QUESTION 1:

Describe in as much detail possible how you experience your working environment.

QUESTION 2:

Are there anything about your work that you find hard to cope with, that you find stressful? Tell me about it.

QUESTION 3:

How do you get along with your colleagues at work?

QUESTION 4:

How do you spend your time when you're away from home?

QUESTION 5:

Tell me about an incident at work when you experienced stress.

QUESTION 6:

How has your work schedule affected your social life?

OUESTION 7:

How has your work schedule affected your physical health?

QUESTION 8: How do you experience your work schedule?

QUESTION 9: Describe a typical day/night at work?

APPENDIX B: BIOGRAPHICAL DATA OF RESPONDENTS

RESPONDENT NUMBER	AGE	GENDER	YEARS OF SERVICE	RACE
RESP. #1	28	FEMALE	6 YEARS	BLACK
RESP. #2	25	MALE	3 YEARS	INDIAN
RESP. #3	49	MALE	20 YEARS	WHITE
RESP. #4	31	FEMALE	10 YEARS	COLOURED
RESP. #5	24	MALE	3 YEARS	BLACK
RESP. #6	34	MALE	10 YEARS	WHITE
RESP. #7	31	FEMALE	10 YEARS	BLACK
RESP. #8	49	MALE	26 YEARS	WHITE
RESP. #9	44	MALE	20 YEARS	WHITE
RESP. #10	28	FEMALE	4 YEARS	BLACK
RESP.#11	33	FEMALE	5 YEARS	BLACK
RESP. #12	31	FEMALE	8 YEARS	WHITE

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