

INVESTIGATING STRESS IN SECURITY GUARDS ON THE UNIVERSITY OF WITWATERSRAND CAMPUS.

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Degree of Master of Clinical Psychology by coursework and research:

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DECLARATION

I declare that this research report is my own, unaided work. It is being submitted for the Degree of Master of Clinical Psychology in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in any other University.

Siobhán Anne Carter-Brown

_____ day of _____ 20 _____

Abstract

This report describes an investigation into the levels and symptoms of stress in a sample of security guards on the University of the Witwatersrand Campus. Stress is an integral facet of life that has deep reaching implications for an individual's functioning in the world. Although the presence of stress can assist an individual in performing, stress can unbalance a person's equilibrium and lead to physical, psychological and behavioural symptoms that burden them. Data from 11 security guards on the University of Witwatersrand campus was collected by means of a semi-structured interview and an orally administered, structured checklist (the SSCL). Results from both data sets are provided and discussed. The data collected from each method was compared to determine which is more appropriate for tapping into the construct of stress in this population.

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Introduction

Stress is an integral facet of life that has deep reaching implications for an individual's functioning in the world. Although the presence of stress can assist an individual in performing, stress can unbalance a person's equilibrium and lead to physical, psychological and behavioural symptoms that burden them. Industrial psychology has paved the way to promoting well-being in the workplace. Although research into stress in top management positions and corporate environments is extensive, an investigation of stress in less affluent working sectors is limited and in the area of security guards it is non-existent.

Being employed as a security guard exposes the subject to potentially dangerous situations. The continuous exposure to potential threat is stressful. In addition, the nature of their work puts physical strain on their bodies that contributes to the manifestation of stress. Security guards are frequently faced with having to "police" people, which can lead to conflictual encounters that promote stress. A recent example of this occurred on the The University of the Witwatersrand campus (5 August and 26 August 2005) where members of staff were assaulted in academic buildings (Wits News, 2005a; Wits News, 2005b). This has increased the focus on the level of security provided on campus to the extent that a private company was recruited to boost the existing security measures on campus (Wits News, 2005c). This directly impacts the existing security guards and it is proposed that events such as these may elevate the stress levels for the security guards on the University's campus.

Literature and Theoretical Orientation

Stress is an easily branded term in our society and hence the clarity of its meaning becomes diffuse (Warshaw, 1979; Schlebush, 2000). This research adopts the transactional model of stress as described by Lazarus and Folkman (1984). Stress is a specific relationship between a person and their environment, which is viewed by the person as difficult and beyond the scope of their resources, thus threatening their wellbeing. It is a multifaceted construct that encompasses the physiological,

psychological and behavioural response to a person's perception of demands placed on them.

Stress is a non-pathological phenomenon and although impacting on a person's life, it is in line with the everyday, 'normal', experience of a person in the world and is not seen as a diagnosable disorder. Stress and anxiety are related (Schlebusch, 2004). Stress is the presence of these symptoms within the normal range of human experience, whereas anxiety is at the upper end of the continuum, describing pathological responses to a given experience. The level of functionality is pivotal in distinguishing between the two poles. Stress does not render a person incapable of functioning in the world whereas anxiety will be severely debilitating for the person. This research recognizes the functional attributes of stress and the fact that stress can impact both positively and negatively on someone's experience of the world (Wade and Tavis, 1990).

In 1956, Selye popularized the concept and study of stress. He proposed that environmental factors (stressors) such as heat, cold, pain and viruses impact on the body's equilibrium and force it to respond. He viewed a stressor to be anything that causes the body to mobilize its resources. The body responds to stress with physical and chemical changes. These alert the body to respond to the stressor. Selye called the stress reactions the General Adaptation Syndrome (GAS), with three phases: the alarm phase, the phase of resistance and the phase of exhaustion (Selye, 1956). Wade and Tavis (1990) point out that later studies recognize that stress is more than a biological condition and involves a psychological component that "between the stressor and the stress is the individual's evaluation of the event" (p541).

In line with this more holistic framework, this research adopts the position that stress is a biopsychosocial phenomenon and thus symptoms and stressors encompass the physiological, psychological and social contexts. Health is not seen as a reductionist concept where mind and body are split and treated separately. "Rooted in systems theory, the bio-psychosocial approach emphasises the view that each person is comprised of systems, which in turn are part of larger external systems" (Schlebusch, 2004. p7). This theoretical model purports that that many etiological factors (and systems) are necessary for the development of stress and that single etiological factors would not be sufficient for the manifestation of stress (Paris, 1993). The physiological,

psychological and social factors all contribute and interact with each other to produce the experience of stress.

In researching stress it is important to understand the mechanisms operating within the body under stress. Schlebusch (2000) outlines in detail how the body processes stress. An overview of these physical processes follows: The two simultaneous processes within the body that react to stress, are the 'physiological pathway' and the 'psychological pathway'. Although described separately, these two pathways operate in tandem and directly impact the functioning of the other.

The physiological pathway relates to the "fight and flight" response in the nervous system. When faced with a stressful, hence potentially threatening situation, the body activates the hormonal responses that put the body on alert and ready to react. This pathway involves the activation of the amygdala in the mid brain. At the same time, the endocrine system and autonomic nervous systems are activated. Because the body is set to "alert", physical symptoms of stress are experienced such as shortness of breath, increased heartbeat/ palpitations, perspiration, trembling/shaking, dizziness/faintness, nausea, butterflies in the stomach, numbness, stomach ache, lump in throat, hot flushes, chills, chest pain, headaches, muscle tension, frequent urination, clammy hands and a dry mouth (Schlebusch, 2000). When the threat dissipates, the nervous system brings the body back into a normal state of operation. It is important to note that the hormonal arousal evoked by stress lingers longer than the response of the nervous system. Hence the physical effects of stress may be prolonged in the body after the nervous system's state of alert has been deactivated.

The second pathway described by Schlebusch (2000) is the psychological pathway. This involves an individual's perception of stress and the appraisal of the level of threat that the stressor presents. The mind judges whether the coping mechanisms available are sufficient to handle the stressor that one is faced with. The appraisal of situations is carried out in the frontal lobes of the brain which are responsible for executive functioning. How one perceives one's ability to cope under stress can lead to people fearing that they are losing their mind, feeling that they will make a fool of themselves, wishing to withdraw from people, depersonalisation/ derealization, feeling on edge and irritable, feeling that problems are overwhelming and oversensitive (Schlebusch, 2000).

Stress not only affects the body and mind but translates into how people act in the world. Common behavioural symptoms include irritability, restricted involvement, rushing around, tiredness, hypervigilance, excessive worry, over reacting, exaggerated startle response, restlessness, poor concentration, feeling of impending doom, abusing substances, fidgeting, disrupted eating or sleeping (Schlebusch, 2000). An individual's perception of the world operates within the context of their social realm. This context needs to be considered in order to understand how it has contributed to a person's understanding of themselves and their world. For example, within the framework of the biopsychosocial model, one may attribute elevated stress to an overactive hypothalamic-pituitary-adrenal axis (physiological factor) with the effects being further exacerbated by low self esteem and negative self talk (psychological factor), and maintained by a poor social structure and low economic stature (social factors) that are preventing the person from reframing their perceptions of themselves and the world.

The relationship between stress and psychological problems is a well documented phenomenon (Shore, Tatum and Vollmer, 1996 as quoted in Barlow and Durand 1999). Research delineates how stress impacts on the occupational, social, psychological and physical functioning of a person (McLean, 1979; Warshaw, 1979). In his rationale for the development of the SSCL, Schlebusch (1994) quotes numerous research statistics on the cost of stress:

- At least 50% of work absenteeism is work related (Warren and Toll, 1993).
- 30%-90% of patients presenting to general practitioners have a psychological stress component to their medical problems (Schlebusch, 1989, 1990, 2000).
- Chronic stress can alter the body's immune system (Fawzy, 1995)
- Chronic stress affects the efficacy of influenza virus vaccines (Kiecolt-Glaser, Glaser, Gravenstein, Malarkey, and Sheridan, 1996)
- It plays a role in HIV/AIDS (Schlebusch & Cassidy, 1995; Schlebusch, & Schweitzer & Bosch, 1989).

The cost of stress and the escalating magnitude of the problem in South Africa highlight the necessity for research and developing interventions to ameliorate the phenomena. South Africa in particular reports significantly high stress levels (Schlebusch, 2004; Pharma Natura, 1999; Schlebusch & Bosch, 2003; Schlebusch, Bosch, Polglase, Kleinschmidt, Pillay, and Cassimjee, 2000). "This includes stress responses following

exposure to indirect trauma that result in trauma producing behaviours” (Schlebusch, 2004, p4). Security guards are engaged in a profession that confronts violators of the law as well as violence and are thus more likely to be exposed to traumatic experiences. A dominant feature of South Africa is crime and violence (Louw, 1997). Swanepoel and Pienaar (2004) state that research on the SAPS “consistently highlights increased rates of illness, post-traumatic stress, medical boarding, burnout, alcohol abuse and suicides, as well as decreased levels of job satisfaction and job performance, as compared to norms for the general population” (p17). Due to the similarity in the nature of the stressors experienced by those employed within the SAPS and security guards, it would be expected that research would produce similar results.

Stressors encompass a wide range of experiences and what is perceived as stressful for one person may not be perceived the same by another person (Wade and Travis, 1990). Holmes and Rahe (1967) focussed on life changing events in describing stressors. They refer to ‘life changing units’ (LCU), that are rated based on their disruptive impact. For example, the death of a spouse was considered the most stressful LCU. Their scale also encompassed traditionally pleasant events such as marriage and buying a house as being stressful. Subsequent research criticized the concept that all life events are stressful. It can be argued that many items on the Holmes-Rahe scale are in fact the result of psychological illness and not the cause, i.e. problems at work (Hudgens, 1974). The life events experienced will seem more stressful if a person is ill or depressed (Dohrenwend, 1979) and not all life events are experienced as stressful for all people (Taylor, 1986). The Holmes-Rahe scale has been criticized for not considering the psychological component that regardless of the number of stressful events, a person needs to feel overwhelmed by them (Cohen, Kamarck & Memelstein, 1983; Sarason, Johnson & Seigel, 1978). DeLongis, Coyne, Dakoi, Folkman & Lazarus (1982) argue that seemingly inconsequential daily hassles contribute more to stress symptoms than life changes. In Grier’s study (1982) of police officers in California, they reported daily paperwork and the slow judicial system to be the most stressful aspects of their job. Swanepoel and Pienaar (2004) report similar findings, suggesting that police officers find routine administrative and organizational aspects of police work as stressful as the dangers inherent in their work.

As outlined by Warshaw (1979), stress in the work environment can be delineated into the following broad categories; job content and environment, the way work is structured, the subject's role in the organization, interpersonal relations at work and change. Kurke (1995) suggests that studies have identified three broad categories of stress in police officers namely, organisational (i.e. work conditions), operational (i.e. life threatening nature of work) and situational stress (specific to the person). Swanepoel and Pienaar (2004) found that inadequate or poor quality equipment, the lack of officers to handle specific tasks, other officers not doing their job, other officers being poorly motivated, inadequate salary, staff shortages, and seeing criminals go free as the biggest organisational stressors impacting police officials.

Stress is not a new phenomena, it has always been a facet of human experience; "the difficulties of yesteryear have given way to those of a different sort today, punctuated on the one hand by a sense of change and urgency with so much to do and cope with in so little time, and on the other hand by perceptions of emptiness, uncertainty and meaningless" (Schlebusch, 2000, p3). Although relevant in many cultures, South Africa's society has undergone and continues to undergo change. Change is in itself exhausting and stressful. The lack of constancy and a perceived stable future fuels a person's stress level (Schlebusch, 2000).

In South Africa, stress is magnified by the presence of first world demands on a third world infrastructure. The population in review has the demands of a first world organization in the workplace (namely a university) with the coping capacity of a stretched third world society. This research does not wish to dictate the nature or impact of stressors on specific subjects but it is hypothesized that known stressors such as living in a township with crowded living circumstances, in a violent society may be stressful. Performing work that has a higher probability of being engaged in traumatic situations may increase stress. The presence of chronic illness in our society, especially people suffering from HIV/AIDS is another major contributor towards stress. The ability to cope is further hampered by the lack of access to resources that many South African's face, especially in the lower income bracket. The basic necessities of food, shelter, healthcare and education are not rights afforded to every member of society and the lack of these basic needs may lead to stress and the experience that one cannot cope. Schlebusch (2004) also suggests that commuting difficulties, coping with change,

population growth, technology and environmental issues may be stressors for the South African population.

Methods of measuring stress

When information on a subject cannot be gathered from observation, Bless and Abola (1990) suggest that interviews and questionnaires are appropriate methods to employ. Researchers have made use of various inventories for measuring stress levels in subjects such as the Police Stress Inventory, (Swanepoel & Pienaar, 2004), the Hamilton's Anxiety Rating Scale (Schlebusch et al., 2000) and the Stress Symptom Checklist (Schlebusch, 2004). Such inventories provide indicators of the level of stress and the nature of the symptoms. These have also been administered alongside interviews with subjects which provide a richer account of the person's experience (Schlebusch, 2004).

The Interview

An interview is a face to face discussion between a researcher and a subject where the researcher seeks to understand a specific phenomenon from the perspective of the subject via discussion with them. Bless and Achola (1990) regard this method as being particularly useful in exploratory research. Interviews vary from structured to unstructured interviews with most interviews lying on a continuum between the two approaches (Bless & Achola, 1990; Breakwell, 1995). A non-structured or semi-structured interview allows for the personal interpretation and understanding of the subject to be accessed (Bless & Achola, 1990).

Stress Symptom Checklist

Various inventories are available for determining anxiety levels in subjects. The Stress Symptom Checklist (SSCL) was developed specifically to tap into non-pathological stress in the South African context. It was developed specifically to provide an inventory within the unique South African context (Schlebusch, 2004). Schlebusch (2004) points out the following attributes of the SSCL;

- It is an inventory designed to measure non-pathological stress

- It is based on extensive research and clinical understanding of stress and has only incorporated definite symptoms of stress
- It has been developed in and for the South African context.
- Although administered in English it was developed on a diverse range of South African subjects and claims have cross cultural applicability.
- It is appropriate for subjects who have limited formal education and the SSCL makes use of uncomplicated language and concepts
- It is designed to be easy to administer
- It focuses on the respondents stress levels as opposed to the factors leading to stress
- It seeks to measure physical, psychological and behavioural reactions

The SSCL is an 87 item checklist that asks the subject to indicate which of the specific symptoms of stress listed they experience. The items are divided into 18 physical reactions, 27 psychological reactions and 42 behavioural reactions of stress. The subject indicates whether they experience the symptoms often (at least once a week), sometimes (less than weekly but at least monthly) or never. One point is given to symptoms experienced at least once a week and half a point to symptoms experienced once a month. Scores are tallied for the individual dimensions and as a whole. The severity of stress is calculated on the following scale, based on the total score, for each of the three areas:

- Low stress - 0-8
- Mild stress - 9-15
- Moderate stress - 16-30
- Severe stress - 30-45
- Profound stress - 46-87

The SSCL is in the process of being published, however it has undergone reliability and validity tests that are very positive (Schelbusch, 2004).

Psychometric Properties of the SSCL

Schlebusch, 2004, reports the psychometric properties ascertained on the SSCL to date are:

- Reliability using the Kuder-Richardson Formula 20 (KR20) ranged on average from 0.8 to 0.9, showing good reliability co-efficients.
- Content validity has been scrutinized and endorsed by professionals considered experts in the field of stress.
- Construct validity has been reviewed in that subjects with high stress levels were expected to obtain higher scores on the SSCL and this was experienced in the vitamin-mineral clinical trial.
- Convergent and discriminant validity was ascertained by comparing the results of the SSCL to similar existing measures; the BSI, HARS, VAS and the GWBS. Correlations ranged from 0.4 to 0.6 which is acceptable.

Rationale

Stress is a broad term that has specific meaning for each individual and subgroup within our society. Although there is a greater understanding of the impact of stress and its ramifications on a person's functioning, it is essential that we understand each population and their difficulties before interventions can be put in place to alleviate stress. Limited research has been conducted on stress in South African populations that work in the area of security and crime management. Security guards form a large portion of the workforce of South Africa that seeks to manage a violent and threatening society. This research aims to further our understanding of the levels and symptoms of stress in a sample of security guards. Such an understanding will assist in establishing relevant and effective intervention programs to reduce stress and enhance the well-being of security guards.

An investigation of stress in this sample deviates from existing research. If one looks at the various measures that are used to ascertain stress levels in subjects it would seem that the subject is expected to be a well educated, corporate executive that is well versed with the concept of stress. Although the SSCL is designed to be culturally applicable in the South African context, it has not been administered to a sample such as security guards. The subjects in this research have varying educational levels, and the majority have not achieved tertiary level education. As such they may have difficulty engaging with traditional measures that investigate stress. Existing measures of stress

may not be culturally applicable to this group who are black South African's who mostly reside in Soweto. As such, they may have very different symptoms of stress to those that existing stress measures encapsulate. In addition the subjects are not first language English speakers and thus it is not only the cultural concept of stress that may be unfamiliar to them but also the language in which to express and identify the symptoms. The issue of language may bias any attempt to collect data in a cross-linguistic situation. This research will review the appropriateness of a clinical interview and an orally administered checklist for tapping into the construct in this sample.

Research Questions

1. What are the physical, psychological and behavioural symptoms of stress exhibited by security guards on the campus of the University of the Witwatersrand?
2. How suitable are the methods of an orally administered checklist and a clinical interview to investigate symptoms of stress in the sample of security workers?

Methodology

Research Design

This is an exploratory study that investigated the symptoms of stress in a sample of security guards. Two sources were used to elicit information as to how the subjects experience stress. The two methods were in the form of a semi-structured interview and the completion of the Stress Symptom Checklist (SCCL). The use of two different modes of collecting information was designed to give a richer picture of stress symptoms in security guards than a single method of data collection would provide, hence increasing the construct validity. This research reviews the nature of the data that each mode provides and how they complement, overlap or contradict one another.

The study was conducted during the pilot phase of a larger research project that seeks to review changes in stress levels of security guards before and after an exercise intervention. An appropriate method of investigating and measuring stress in this sample is not available and needed to be devised and investigated before the main research is

conducted to ensure that valid and reliable data can be collected efficiently. Results from this research have assisted in this endeavour.

Ethical clearance was applied for in relation to the Kangoo Research Project by Dr Claire Nicholson in the School of Human Movement Studies. This research submitted an ethics proposal within the application for the Kangoo Research Project. The data used in this study was collected as part of the pilot study for this research project. Considerations specific to this research project are outlined in Appendix D.

Subjects

The research was conducted on the population of security guards on the University of Witwatersrand campus. A convenience sample of security guards from the university was used. This sample was formed for the pilot study of the Kangoo Research Project. Initially 20 subjects had been recruited to form the sample. 9 subjects dropped out before testing and this research was left with 11 subjects to capture the experience of security guard's stress. As the subjects in the sample were needed for weekly interventions at specific times, it was necessary to have all the subjects working the same shift at work. For this reason a convenience sample of a specific work group was recruited rather than a random sample from the population. The subjects were not paid for their participation but they did receive the exercise intervention, which included a new tracksuit and running shoes on completion of the Kangoo Research Project. The subjects were all black South Africans with one female and ten male subjects. The average age of the subjects was 42.8 years old and they ranged from the youngest subject of 32 years to the oldest subject of 58 years. As for as the distribution of age, four subjects were in their 30's, five in their 40's and two in their 50's. They were all married with children. All the subjects were 2nd language English speakers who spoke a variety of African languages as their first language, specifically two Sotho/Pedi, two Zulu, three Venda, two Tsonga, one Shangaan, and one Xhosa speaker. Eight of the eleven subjects resided in Soweto, with three others residing in Eldorado Park, La Rochelle and the main university campus respectively. Eight of the eleven subjects maintained homes in the rural areas, predominately in the Limpopo Province. The average years of service in the security industry was 15.27 years and at The University of Witwatersrand an average of 11.77 years. The least years of service in the industry was 4 years and the most years of service was 24. The shortest service period of a subject at the University

of Witwatersrand was 5 months and the greatest length of service at the university was 20 years. All the subjects were employed on a full time basis. Two subjects had formerly served in the police force. With regard to education level, one subject had obtained a Std 6 and another a Std 8. The remainder had obtained a Matric certificate with two having obtained post school qualifications. They all had undergone varying courses in security such as first aid, CPR and fire fighting courses.

Materials and Instruments

This research made use of a semi-structured interview and an orally administered check-list to capture the experience of stress within the sample of security guards.

A semi-structured individual interview was undertaken with each subject in the sample (The protocol for this interview is shown in the appendix A). The interview was recorded and transcribed for analysis. The interview was designed to elicit the subject's experience of stress on all three spheres namely the physical, psychological and behavioural spheres. The majority of the subjects did not have secondary education. The interview was conducted in English with none of the subjects having English as a mother tongue. Poor literacy levels and the inability to converse in English were expected to complicate the collection of data. The time allocated for the interview was limited to 15 minutes. The interviewer had to remain focussed on meeting the time limit, whilst at the same time concentrating on not leading the subjects' answers as to the specific symptoms they experience. For this reason a semi-structured interview was chosen so that the researcher could guide the interviewee to discuss specific material.

The interview commenced with an introduction on the purpose for the interview. Semi-structured questions that were open-ended were included in the interview, so that they subject was able to express their experiences in their own words. The interviewer began with the first broad question "Do you find you worry a lot about things?" The subjects were encouraged to respond as they wished to the initial question, with more directive questions being offered if need be. The interviewer tried to elaborate on any details that the subject shared and also attempted to assist the subject to talk about their stressful experiences and how it affects them. Specific symptoms such as tiredness, appetite and memory were directly enquired about during the clinical interview if they were not

spontaneously mentioned by the subject. This was to allow direct comparison to questions asked in the SSCL.

As this project was executed by a faculty of the university that employs the subjects, the subjects' concerns about any potential retribution resulting from their responses was addressed. Confidentiality was reiterated if the subject seemed guarded to disclose work related difficulties. A subject's experience of stress is individual and hence an interview was considered a rich and appropriate method to capture the various details of the subject's stress experience. As the interview was conducted by one researcher, interviewer bias may have resulted in relevant areas of stress being overlooked. Skill is also needed in conducting interviews, the interviewer was an Intern Clinical Psychologist trained to conduct interviews of this nature.

The second source of data was generated from the results of the Stress Symptom Checklist (a copy of the checklist is provided in Appendix B). The rationale for using this checklist is provided in the literature review as well as the properties of the checklist. Although designed for self administration, the SSCL still makes use of terms such as 'procrastination', 'apathy' and 'unpredictability' which may be misunderstood by the non first-language English speakers. The Stress Symptom Checklist was therefore administered orally to the subjects. The oral administration of the checklist was audio-taped and the researcher took note of what items needed to be rephrased for the subject or explained further.

The SSCL is designed to be a brief, easy to administer test and therefore appeared to be ideally suited to the umbrella research project that this research was working alongside. The language that it makes use of is still fairly complex and oral administration was deemed necessary for the given sample. The research considered how this change from the intended administration procedure impacted on results. In addition, this research shed light on whether the SSCL can be considered accurate and sensitive enough to identify stress levels and symptoms in security guards pre and post intervention.

A demographic questionnaire (appendix E) for use in the pilot study of the Kangaroo research project was completed orally with the subjects. Although not designed by the

researchers of this study, it was used to capture the biographical information of the subjects. Some interesting questions such as rating how stressful they found their job provided additional data to consider in the given research.

Procedure

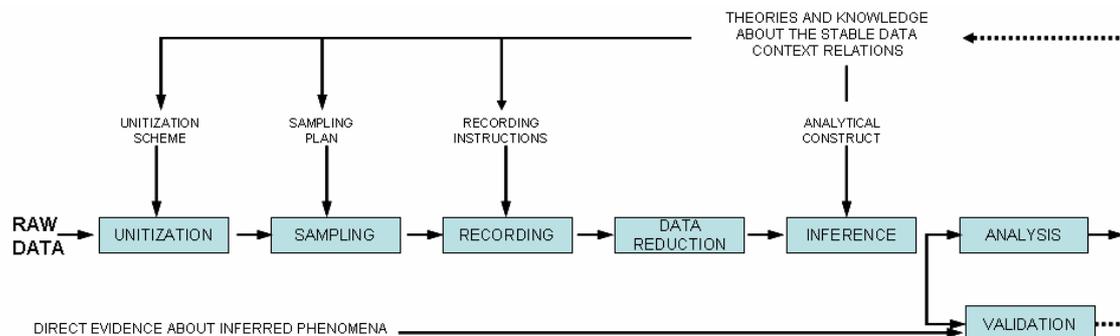
The data was collected during the pilot phase of the Kangoo Research Project. The research was conducted according to the timetable devised by the Principle Investigator and the staff of the Human Movement Studies / Science Department. Two mornings were set aside for conducting the clinical interview and completing the SSCL. The research data collection team consisted of three members. One researcher conducted the interviews and two researchers administered the checklist with the subjects. For the checklist, one researcher did the oral administration whilst the other researcher noted changes in items that were made. The use of different researchers for the different data collection methods was utilized in order to eliminate potential contamination between the results. The two sets of data were collected on the same day for each subject to ensure that time did not influence the subject's experience of their stress symptoms. The intention was for half the subjects to complete the checklist before undergoing the clinical interview and the other half to complete the checklist after the interview. This was to enable the researchers to examine suggestibility between the results on each data collection.

The subjects were interviewed between the physical tests administered for the Kangoo Research Project. These included tests such as bone density and blood tests. Complications in assigning subjects to each intervention resulted in only 3 of the 11 subjects being administered the SSCL first. The interviews were conducted in tutorial/conference rooms at the Department of Human Movement with the door remaining closed throughout the interviews. Subjects waited outside the venues between investigations. Consent forms (see appendix C) for recording and transcribing the interviews were given to the subjects before the interview. The issue of confidentiality was explained to all subjects prior to administration of the checklist and interview. The demographic information was collected prior to the stress interview and checklist being completed. This was conducted by researchers in the Kangoo Research Project pilot study team.

Data Analysis

The data was analysed both quantitatively and qualitatively. The recorded dialogue from the clinical interview was transcribed in order to enable a more thorough analysis of the content. In reviewing the process of each method of data collection, the non-verbal cues, such as pauses and tone of voice were analysed by listening to the audio tapes directly. Unfortunately, a technical error resulted in data from three of the interview sessions being destroyed. Only the interviewer's notes were available for comparison between the interview and checklist which compromised the results of the research. The completed checklists were scored according to the procedure outlined by Schlebush (2000). A total stress score and a severity score for each subject in the different spheres (physical, psychological, behavioural) was calculated. The stress scores obtained on the SSCL were compared to the stress levels described in the clinical interview. Possible inconsistencies between the subject's report in the clinical interview and the SCCL were examined and reported on.

Qualitatively, thematic content analysis was employed as the methodological tool to identify themes and the physical, psychological and behavioural symptoms of stress. As such the written transcripts were reviewed for themes that emerged in the data. The data pertaining to each theme was grouped for discussion to revolve around the findings. [Can you clarify this sentence?] Krippendorff's (1980) guidelines of unitization (breaking up the data into discrete, self contained, information giving units) and recording/ data languages (creating exhaustive, mutually exclusive coding categories that units can be assigned to) was used. His strategies for organising the data meaningfully (enabling logical, sound links) were employed. The following diagram depicts the procedures he advocates for content analysis:



(Krippendorff, 1980, p54)

Before being exposed to the completed checklists, the researcher reviewed the audio material from the clinical interview and completed items on the SSCL profile that could be answered from the interview material; this was later correlated with the results from the SSCL that the subject completed. [Need to rewrite this- not sure what the actual stages were]. Before viewing the SSCL data, the researcher assigned a percentage score of estimated stress to each subject based on their interview data. The number of stressors, the manner in which they spoke about the stressors and the number and severity of symptoms that were reported informed the clinical impression of stress levels. The rated scores were also ranked and cross-checked ensuring that subject exhibiting the most stress subject ranked highest in the stress level score. The same classification of severity of stress as indicated for the SSCL was utilized. This enabled the researcher to rank the subjects and to compile a quantitative score from the interview which could be compared the SCCL scores. Although the stress level categories are listed in the literature review they have been restated here for ease of reference.

	TOTAL SCCL SCORE	PERCENTAGE
Low stress -	0-8	0-9
Mild stress -	9-15	10-17
Moderate stress -	16-30	18-34
Severe stress -	30-45	35-51
Profound stress -	46-87	52-100

The qualitative analysis focussed on how appropriately the SSCL classified and depicted the symptoms of stress and how accurately it conveyed the severity of the symptoms.

Results

As outlined above, the data was analysed to extract the physical, behavioural and psychological manifestations of stress, for the sample of security guards. Accessing sufficient information to understand the symptoms of stress proved to be a more difficult endeavour than expected. The majority of the subjects were reluctant to acknowledge the presence of symptoms at the time of the interview and were more able to discuss how they may have been affected by stress in the past. When considering the suitability of the orally administered checklist and the interview to investigate stress, the summary of the individual cases best portrays each subject's response to the interviews. The case studies also highlight the differences in data collected by the two methods. In addition, the case summaries provide a grounding for the general results which follow the presentation of the case summaries.

Due to the barrier experienced in accessing information on the symptoms of stress directly from the subjects, the interview relied heavily on discussing what worries the subjects experienced and how this translated into symptoms. Although it is recognized that the purpose of the study was not to investigate the stressors experienced by the subjects, rich and useful data was collected with regard to the types of worries experienced by the security guards at the time of interview. As such data is deemed beneficial in the study of stress for this sample, it has been included in the results of this research.

In order to maintain confidentiality, all statements made by the subjects have been reported in the masculine gender to protect the anonymity of the single female subject. Any possible identifying statements made by subjects have been reworded to prevent correlation to the original subject.

Case Summaries

Case Study: Case #1

General Biographical Information

Case #1 fell within the 30-40 year old age range of the subjects in the sample. He was a full time employee with almost a decade of experience in the security field. Case #1 was living alone in Johannesburg with his family living in a rural context in another province. He was married with four children. In comparison to the other subjects in the sample, case #1 had attained a higher level of education than the average subject in the sample. He held a valid drivers licence and had completed courses in first aid, combat training, CPR and management skills. In the demographic questionnaire the terms he selected to describe his job satisfaction included the following: was boring, rewarding, easy, stimulating and repetitive. He felt his job was “stressful” and “fairly difficult”. He indicated that he was sleeping on average less than 6 hours. In addition to his salary he had savings and investments. He denied a history of smoking and drank six to eight glasses of spirits or wine once a week. He described his current and previous health as “good” and was not participating in any regular exercise. He had suffered no recent illnesses or hospitalizations. His physical activities on the job were limited to walking, standing and sitting. He described getting “fairly tired” on the job, “a bit” hungry and his energy levels dropping “a bit”.

Summary of Interview material

Case #1's results rated him as one of the most stressed subjects in the sample. The clinical impression estimated his stress level to be 75%, which lies within the profound stress category of the SSCL rating scale. He was particularly concerned about recent deaths in his family stating that he “thinks it destroyed” him. His father had died of old age in the past year and three of his brothers had been murdered. The subject believed that his brothers had been murdered by extended family members that were jealous of his family's success. He was greatly distressed by the inability of the authorities and legal representatives to solve the case and bring justice upon the perpetrators. In addition, case #1 felt that his life was under threat by the same family members who had killed his brothers. He felt that they were also jealous of his achievements and were “not stopping now because they don't see us going down”. His perception of the constant

threat to him (and his family) cause him to experience unresolved feelings of anger. He was significantly affected by the death of his family members, and disclosed crying at times when he thinks of them.

He was experiencing additional stress caused by a failing memory, which was very distressing to him and resulted in his withdrawal from writing his exams in security management. It had also prevented him from reregistering for the course as he felt that he could no longer concentrate or retain information in long term memory. He expressed a great need to further his education and felt pressure from “working in environment where people are educated” to “be taken to a second step”. Case #1 felt that when under stress he was unable to keep the bereavement memories from invading his thoughts. He was battling to cope without his family members and felt alone and deserted in his struggles.

From a work perspective, case #1 felt that there was not enough skills development and promotional opportunities at work. He wanted to be trained in and implement the use of technology in the security systems on campus. He felt that there were no motivational strategies such as training opportunities for security guards. He described the lack of differentiation in the work as boring. He felt that management were not sufficiently competent and also felt undermined by security management. A recent committee position that he had been appointed for was perceived as stressful to the subject at the time of interview. Case #1 reported experiencing headaches when stressed. He said that there were times when he is unable to sleep, although his sleep had not been bad in the past week. He doesn't feel like eating when stressed. He does not experience sweaty palms when stressed.

Case #1 made requests to the interviewer to assist with his memory difficulties. He expressed relief at sharing his concerns and felt that “its better when I share to someone else”. He appeared to be feeling very stuck and limited in his own capacity to deal with his problems stating that “I need someone to advise me”.

Summary of SSCL material

Case #1 was the only subject to obtain a significant score of 16 on the SSCL which indicated that he experienced moderate stress levels. He scored 3 points for physical

symptoms of stress indicating that at least once a month he experienced “unusual tiredness”, “frequent indigestion”, “feeling like his appearance had altered for the worst”, “muscle tension”, “dizzy spells for no reason” and “disturbing dreams/ nightmares”. He scored 6 points on the psychological reaction scale. He identified “feeling helpless”, “feeling depressed” and “feeling neglected or let down” at least once a week. He reported feeling that at least once a month he “can’t cope”, “feeling no-one understands him”, “being over critical of himself”, “feeling lonely with no one to talk to” and “lacking self confidence”. On the behavioural scale he described symptoms such as “memory loss/ forgetfulness”, “needing to regularly work late”, “feeling disgruntled/ moody/ irritable” and having a “low interest in work” on a weekly basis. On a monthly basis he experienced “worrying”, “poor concentration”, “suppressed anger/unexpressed anger”, “fearfulness”, “lack of interest in life”, “little sense of humour”, “sleep disturbances” and “social withdrawal”.

Discussion of Case, case #1

Case #1’s results provided the most congruent case between the checklist and the interview. The memory loss and forgetfulness that most significantly distressed this subject was picked up on both methods of data collection. In addition, sleep disturbances were noted on both sets of data. Although the subject reported no sleep disturbances in the week prior to the interview, the frequency of the symptom appeared to be more than at least once a month. The biographical data indicates that the subject sleeps on average less than 6 hours a night. In the interview he stated that there are evenings that he does not sleep at all. This poses the question of what the subject means when describing a “fine” night’s sleep. It would seem that if the subject got 6 hours of sleep a night he felt he was sleeping well. Such limited hours of sleep would be classified as a sleep disturbance. The subject described feeling disgruntled/ moody/ irritable in both the interview and the checklist. The checklist failed to provide evidence of the headaches and loss of appetite that the subject described in the interview. It did however provide more insight into the nature of the symptoms that case #1 was experiencing. Given the feelings of despair related by the subject in the interview, the moderate stress level indicated by the checklist appears to be on the lower side of the spectrum than expected. It is necessary to consider whether the clinical impression has over-estimated the stress level of this subject. Given that this was the only subject to score outside the low category, yet stress was present in all subjects, a profound

classification is feasible. This category begins at 52% and even if the clinical impression of the subject's stress is too high, it is likely to still fall within the classification of severe stress. Case #1's SSCL score and symptom profile may have been more accurate than other subjects as he was actively seeking assistance for his difficulties and perhaps had less avoidant defences in place at the time of data collection.

Case Study: Case #2

General Biographical Information

Case #2 was one of the older subjects in the sample, who had almost two decades of service in the security industry. He had obtained secondary education and had undergone police training. He worked full time for the University of the Witwatersrand. He was married with two children and maintained a home in both a rural and urban environment. In the job satisfaction section of the questionnaire, he indicated that he found work exciting, rewarding, challenging and stimulating. He felt that his job was "fairly stressful" and "fairly difficult". He had undergone courses in first aid, combat training, CPR and firearm training. He disclosed that he smoked an average of five cigarettes a day. His current sleeping pattern was described as sufficient when he worked a day shift, but that he only slept for four and a half hours when on night shift. Case #2 drank approximately four quarts of beer once a month when off duty. He described his health in the last twelve month period as "good" with a current perceived health status of "very good". He had not been hospitalized in the past year and had been ill once with "flu". This subject exercised for three hours per week. On the job his physical activities included walking, standing and sitting. He described getting "fairly tired" on the job, "a bit hungry" and energy levels dropping "fairly".

Summary of Interview material

Although stating emphatically that "life is not much difficult", case #2 reported that his greatest difficulty was money.. He felt irritated that the more he earned the more he ended up paying in tax. He related concern about providing food for the home and found it difficult making ends meet. He described a constant juggling scenario of borrowing and sharing. In particular case #2 was stressed by conflict with his wife over an investment policy for his retirement. He felt that he could not be "free" unless she understood him. He also indicated that her being uneducated prevented her from seeing the need to put money away each month. This also left him feeling unsupported by his wife. He seemed

distressed by his upcoming retirement and worried about how he would provide for his family. This placed emphasis on his son to perform at school so that he would be able to provide for his parents as well as himself.

The subject felt that his work was not stressful. He expressed that it was a helpful agent assisting him with his greatest difficulty, money. Despite feeling that work in itself was not stressful, he did disclose some stressors experienced at work. Case #2 felt intimidated by the academic staff at the University. He did not feel that as security guards they were acknowledged for their part in protecting the staff and their possessions from crime. The subject described instances where teaching staff of the university became offended if he did not acknowledge knowing them. The subject explained that he invariably does know them but given their status did not want to seem over-familiar. In addition, the subject felt uncomfortable sitting at work. He could not describe any pain that he incurred by sitting. The interview explored his concern with sitting and it appeared that he avoided sitting as he likes to keep himself busy as then he can ignore worries "and be free". He was grateful that his job did not necessitate much sitting.

Case #2 did not identify many symptoms of stress. He felt that sometimes he became frustrated but that it wasn't a severe problem. He also indicated that sometimes he gets headaches. Although not recognising it as a symptom he worried about how he was going to support himself and his family in retirement. He reported no presence of muscle pain or unexplained tiredness. Although case #2 claimed not to be affected by stress, he spoke in depth, in an intense manner, about the stressors that he related. His symptom of not wanting to sit that he identified as a coping mechanism is quite an intrusive coping mechanism that suggests the presence of severe stress. For this reason his stress level was estimated as 60% which is in the classification of profound stress.

Summary of SSCL material

Case #2 only checked two items on the SSCL. Both symptoms were indicated as experiencing at least once a month; "disturbing dreams/ nightmares" and "feeling that you are frequently criticized". These items gave subject a score of 1 or 1%.

Discussion of Case, case #2

The stress levels as indicated by the two methods of data collection are very disparate. The subject clearly stated that being at the interview took him away from his stress and worries. This indicates the presence of stress in this subject which is not tapped into at all by the checklist. The checklist does indicate the symptoms of nightmares and feeling that he is frequently criticized that were not picked up by the interview. The headaches and irritable mood that the subject spoke of in the interview were not checked on the checklist. The telling symptom of stress that the subject avoids sitting or being alone that is described in the interview has no equivalent item for checking in the SCCL. For this subject the SSCL provides little useful data.

Case Study: Case #3

General Biographical Information

Case #3 was one of the younger subjects. He had over a decade of security experience but had only recently been employed at the University of Witwatersrand as a full time employee. In addition to his salary he had supplementary income from renting rooms to lodgers. This subject maintained a rural and an urban household. He was married with one child. He was one of the more qualified subjects who had undergone courses in first aid, CPR, fire arm training, security and management training. This subject was in possession of a valid drivers licence. Under the job satisfaction questions, he indicated that he found work exciting, undermining, easy, stimulating and repetitive. He felt that his job was "fairly stressful" and "fairly difficult". His current sleep pattern was an adequate six hours. On the job he was engaged in walking, standing and sitting. He described getting "a bit tired" on the job, a "bit hungry" and his energy levels dropping "fairly". He had never smoked and approximately twice a month drank six or less ciders. He described his previous health in the last twelve months to have been "fair" with a current perceived health status of "good". He had not been hospitalized in the past year and had been ill once with bronchitis. This subject was not engaged regular exercise.

Summary of Interview material

Case #3 was defensive about being personally affected by stress. He said "I don't have much worries myself". When asked to elaborate on his worries he did so and then stated

that that “it is not actually a worry it’s a wish”. He reiterated that his position is normal and that there are others worse off than him. Subject was able to give the symptoms of stress that he had experienced in the previous year.

Case #3 spoke of extreme stress in the year prior to being interviewed as he had been unemployed. He had lost his house in the process and described not being able to get away from debt, battling to pay for services such as electricity and receiving court orders for late payments. This had caused tension in his marriage but he felt that this difficulty had been worked through at the time of interview. Symptoms that he recalled at this time were painful, heavy shoulders that felt weighed down. He felt that although he was eating, he had lost weight from being stressed. He was restless and couldn’t sleep properly. He also described having lost interest in life.

At the time of the interview he felt he still worried about achieving a better way of life but that he was grateful that he was at least able to eat and have a “roof over his head”. He spoke about transport stress and that his car had been stolen. He bought another car that had never worked despite having bought a new engine for the car. This left him reliant on public transport which he felt added to his stress as he was not in control of his time management.

Case #3 had a number of issues that concerned him about work. He experienced work as boring and not as professional as his past employment. He did not feel that the management were as competent or as educated as they should be. This subject experienced a lot of difficulty with his fellow employees. He described three separate instances that had recently been frustrating at work. In relation to these instances he described being furious, embarrassed, being less proactive at work and mistrusting his fellow employees. The subject felt prejudiced by colleagues and superiors for being a new employee. He felt that the staff compliment was too large and that the “kind of people that works here are difficult to understand”. In particular he felt that they were too old, uneducated and unable to take a joke. The situation described at work resulted in the subject feeling he “can’t go the extra mile” at work. The defensiveness around acknowledging difficulties and the intensity with which the subject recalled the issues at work informed the clinical impression of stress. In addition, the subject had strong reactions to the stressors at work such as no longer approaching colleagues at work,

being mistrustful, not going the extra mile and feeling isolated and different from his peers. The clinical impression of stress for this subject was estimated as 50%. This falls in the category of severe stress on the SCCL.

Summary of SSCL material

Case #3's total score for the checklist was 3½. This equates to a score of 4% and a classification of low stress. The subject scored most symptoms under the physical reactions scale. He checked experiencing "difficulty with relaxing" on a weekly basis and experiencing "unexplained headaches", "disturbing dreams/ nightmares" and "feeling physically unwell" on a monthly basis. One psychological reaction of "feeling he is being gossiped about" and one behavioural reaction of "sleep disturbances" were reported to occur at least once a month.

Discussion of Case, case #3

The subject contradicted himself in the biographical questionnaire and the interview. In the interview he described work as boring but ticked exciting in the demographic questionnaire. In addition to these sets of data being collected on different days, the job satisfaction section of the demographic questionnaire recorded many contradictions within subjects and may rather be a reflection of a poorly constructed or administered item rather than unreliable subjects. The stress levels are incongruent between the data sources, once again the interview has data to support the presence of stress in this subject. Even if the clinical impression of stress levels was too high, a classification of low stress does not fit the stressors and symptoms indicated by the interview. The checklist does provide insight into symptoms such as nightmares and feeling that one is being gossiped about. Although not elicited from the interview, these symptoms are congruent with the profile presented in the interview. The interview provided additional information as to how the subject responds under extreme stress. The behavioural response to work stressors such as withdrawing, not going the extra mile and being mistrustful of colleagues cannot be checked off on the SSCL, neither could the symptom of weight loss despite normal eating patterns. The interview would appear to have provided better insight into what this subject perceives as stressful and his response to such situations. The SCCL assisted in understanding additional symptoms of stress experienced, it would appear to have been inaccurate in assessing stress levels with the interview providing more insight in this regard.

Case Study: Case #4

General Biographical Information

Case #4 was a middle aged, security officer, with two decades of service in the security field. One and a half decades had been served at the University of the Witwatersrand as a full time employee. He maintained a rural and urban household and was married with three children. He had obtained secondary education and had undergone courses in first aid, combat training, CPR, fire arm training. This subject possessed a valid drivers licence. Under the job satisfaction questions, he indicated that he found work exciting, undermining, challenging, stimulating and repetitive. He felt that his job was “stressful” and “fairly difficult”. His current sleep pattern was an adequate six hours. He felt that he got “fairly tired” on night shifts. On the job he was engaged in walking, standing and sitting. He described feeling “very hungry” at work and that his energy level dropped “not at all”. He was a current smoker of five to six cigarettes a day. He consumed approximately 30ml of alcoholic spirits twice a week. He described his health in the last twelve months to have been “fair” with a current perceived health status of “good”. He had not been hospitalized in the past year and had been diagnosed with a dietary condition. This subject did not participate in regular exercise.

Summary of Interview material

Audio tape data destroyed. Only interviewers notes available for comparison.

This subject spoke about money as his greatest difficult. He also spoke about putting children though university and wanting more for them in life than he had had. He felt that he could see the importance of education from working at the university. Case #4 was also concerned about his level of fitness and the effect that this had on a dietary condition that he had been diagnosed with. He knew what the doctors expected him to eat but felt that he did not have the resources to eat in such a manner. He was hoping that increased fitness would help balance his condition.

Summary of SSCL material

Case #4 obtained a low score stress level of 4 on the SSCL. The 2½ points on the physical reaction scale came from the indication of “high blood pressure” weekly and

experiencing “frequent indigestion”, “unexplained headaches”, “disturbing dreams and nightmares” on an at least monthly basis. He obtained a score of 1 on the psychological reaction scale for experiencing “being afraid of disease” and “being upset by disease in others” on a monthly basis. On the behavioural scale a ½ point was allocated for the presence of “memory loss/ forgetfulness” on a monthly basis.

Discussion of Case, case #4

It is unfortunate that the detail from the interview was lost and does not allow in depth comparison of the results to be made. The low score for this subject would again seem an under estimation of stress levels for this subject. The fear of disease is congruent with his concern raised during the interview of the management of his dietary disorder. Given the intensity with which he seemed concerned about his health, rating his concerns as “at least once a month” is likely to have been understated. The SSCL provides some insight as to the likely symptoms that would be most prominent for this subject.

Case Study: Case #5

General Biographical Information

Case #5 was a relatively older subject. He had obtained almost two decades of service to the security field and was a full time employee. He lived alone in the urban township whilst his wife, three children and 3 adult family members resided in a rural household. In addition to his salary he had investments as a source of income. He had not obtained secondary education and had undergone courses in first aid, combat training, CPR, fire arm training and dog training. This subject was in possession of a drivers licence. Under the job satisfaction questions, he indicated that he found work exciting, rewarding, challenging, stimulating and informative. He felt that his job was “stressful” and “fairly difficult”. His current sleep pattern was a sufficient eight hours. He felt that he got “fairly tired” at work. On the job he was engaged in walking, standing and sitting. He described feeling “a bit hungry” at work and that and his energy level dropped “a bit”. He was a current smoker of ten to fifteen cigarettes a day. He consumed and approximately six to eight glasses of alcohol (spirits and wine) once a week. He described both his previous and current health perceived health status as “good”. He had not been hospitalized or incurred any illnesses in the past year. This subject was not engaged regular exercise.

Summary of Interview material

Audio tape data destroyed. Only interviewers notes available for comparison.

Case #5 identified money as his greatest stressor. He felt that he did not have too many problems at work however he was upset with his management for not assisting him with an issue as they had promised. He related that he had been diagnosed with a condition that entailed a specialist uniform item to be worn while on duty. Management had approved purchase of the item but had failed to reimburse him on submission of the claim. He felt let down and unheard by management.

Summary of SSCL material

Case #5 obtained a score of 2, indicating a low stress level for this subject. 1½ points were received for physical reactions indicated by “excessive perspiration for no reason”, at least weekly and “disturbing dreams/nightmares” at least monthly. Behaviourally, case #5 reported “sleep disturbances” on a monthly basis.

Discussion of Case, case #5

Case discussion is hindered by the loss of interview data. The checklist highlights symptoms that appear relevant for this subject. No psychological symptoms are recorded although he does have thoughts and feelings that surround his difficulty with management. “Excessive perspiration for no reason” would appear to be most significant for this subject as he has indicated it on a weekly basis.

Case Study: Case #6

General Biographical Information

Case #6 was in his 40s. He had obtained two decades of service to the security field with the past decade and a half being a full time employee of the University of Witwatersrand. He was married with two children and maintained an urban and rural household. In addition to his salary he had investments and savings as additional sources of income. He had obtained secondary education and had undergone courses in dog training. This subject was in possession of a drivers licence. Under the job satisfaction questions, he indicated that he found work exciting, rewarding, easy,

stimulating and repetitive. He felt that his job was “fairly stressful” and “not at all difficult”. His current sleep pattern was an adequate 6 hours. He felt that was never tired at work. On the job he was engaged in running/jogging, walking, standing and sitting. He described “never feeling hungry” at work and that and his energy levels “never dropped quickly”. He had no history of smoking and did not consume alcohol. He described both his previous and current health perceived health status as “good”. He had not been hospitalized in the past year and had been ill once with flu. This subject engaged in regular exercise three hours a week.

Summary of Interview material

Case #6 was highly defensive about discussing symptoms of stress or worries that he experiences. He was emphatic that “No! I don’t get stressed” and that “stress is not me”. This subject’s body language and non-verbal cues was the most significant indicator of underlying stress. He was unable to maintain a consistent gaze. It is recognized that non-direct eye contact can be culturally appropriate but his eyes shifted from one place to another in the room in an agitated manner. He sat in a very defensive style with his legs and arms crossed. He was restless in his seat and his legs vibrated in a nervous manner.

Case #6 reported feeling compelled to exercise and that was how he handles his problems. He stated that he did not look at his problems because “if I think about it I end up getting cross”. He spoke about keeping himself busy. In particular he used running as a release for his stress. He would “go for a run, after that I don’t feel anything”. The only stressor he recalled was his children asking for things like sweets and the fact that they will continue to keep asking. Despite the body language and coping style, the interview did not provide much information to gauge a stress level from. The clinical impression of his stress level was estimated to be 30%. This was felt to be a conservative figure but in line with the information that had been forthcoming.

Summary of SSCL material

Case #6, obtained a total score on the SSCL of 1½ (Low stress level). Half a point was allocated for disturbing dreams/ nightmares on a monthly basis scored on the physical scale. On the behavioural reactions half a point each for allocated for memory loss/ forgetfulness and nervous tics/habits.

Discussion of Case, case #6

This case is a good example of the trend in both methods of data collection. The checklist was able to extract specific symptoms of stress that pertain to the subjects. In comparison, the interview provided more information for determining the stress level of the subject. The checklist has no means to explore this subject's use of physical exercise to cope with stress and thus underestimates the stress level of the subject. The subject reported getting cross if he considered his worries. As the subject defends against looking at his difficulties this symptom is not indicated on the checklist. The nervous tics and habits were picked up by both methods of data collection.

Case Study: Case #7

General Biographical Information

Case #7 was one of the youngest subjects. He had almost five years of experience in the security field and was a full time employee. He lived in the township with his wife and two children and did not maintain a rural home. He had obtained secondary education and had undergone courses in dog training. This subject was in possession of a drivers licence. Under the job satisfaction questions, he indicated that he found work exciting, rewarding, easy, stimulating and informative. He felt that his job was "fairly stressful" and "not at all difficult". His current sleep pattern was an adequate six hours but that after night shift he only slept 2 hours in the day. He felt that he "never got tired" at work. On the job he was engaged in walking, standing and sitting. He described "never feeling hungry" at work and that and his energy levels "never dropped quickly". He had no history of smoking and did not consume alcohol. He described both his previous and current health perceived health status as "good". He had not been hospitalized or incurred any illnesses in the past year. This subject was engaged in regular exercise, walking two hours a day.

Summary of Interview material

Case #7 was assessed to be the most stressed subject in the sample. His stress level was estimated to be at approximately 80% and indicative of profound stress. This subject disclosed many worries that revolved around personal and social issues. He spoke of work as a support, not a burden. He claimed to enjoy work and get satisfaction

from combating crime. He also felt that his colleagues treated him well. Crime and human indifference towards each other was a great concern for this subject and the first concern that he raised. He worried about crime, war, people getting hurt, being murdered, robbing each other and hating each other. He saw this as a burden that prevents people from being free.

Case #7 elaborated that he received much joy and a will to live from his two young daughters and that they helped take his mind off his worries. He was however burdened by the responsibility of looking after them. He was concerned about the crèche that he was sending them to as he felt that the conditions were not adequate for his daughters. He felt trapped in that he could not seek alternative placement for them because he “can’t afford, (and is) forced to take them to that place”. Further into the interview he spoke about feeling isolated with only his mother as a support. His first wife and mother to his daughters had passed away and he was battling as a single parent to the children. He had remarried but was not experiencing his new wife as supportive. The subject also mourned the death of his grandmother. He was worried about his living circumstances of living in a back room of his uncle’s house. He found the sharing of a house stressful and the crime in the township as well as transport difficulties. He described the township as “really there it is terrible”. The subject was anxious about an uncertain future and trying to make a better life for himself and his children.

Case #7 identified feeling more tired when stressed and getting headaches that were mild and not severe in nature. He noted no sleep changes between being stressed and not stressed. He also felt that he always eats a lot has not noticed a change in eating habits when stressed. He felt that he became more irritable when stressed and had a tendency to want to fight with others when stressed, he noted that he is not an aggressive person by nature. He did not feel that he is ever forgetful at work. He noted that he preferred “to be alone, watching TV and listening to music then the stress is coming out”. The subject was appreciative of the interview and requested if he would be able to see the interviewer again.

Summary of SSCL material

Case #7 obtained the lowest score for all the subjects on the SCCL with ½ a point indicating low stress. The only symptom that he identified was unexplained headaches at least once a month.

Discussion of Case, case #7

In this case, the two methods of data were the most discrepant of all the data, with the interview ranking the subject as the most stressed and the checklist ranking him as the least stressed. This contradiction is puzzling as this subject was one of the least defended subjects around recognising that he suffered from stress in the interview. He was also talking about predominately current rather than past stressors and symptoms and thus if he was truthful in the interview, the checklist should have been more inline with the interview's estimation of stress level. The number of concerns raised by this subject and his lack of defensiveness around recognizing stress indicates that he was definitely affected by stress. This adds weight to the assumption that the interview is a more accurate reflection of stress levels than the checklist. The checklist and interview both recorded the symptom of headaches however only the interview picked up on symptoms of withdrawal, irritability and tiredness experienced by this subject.

Case Study: Case #8

General Biographical Information

Case #8 was a little younger than the average age of the subjects. He had two decades of experience in the security field and was a full time employee. He maintained a rural and urban household and was married with two wives and five children. In addition to his salary he received income from investments and savings. He had obtained secondary education and had undergone courses in first aid, combat training, CPR and fire arm training. This subject was in possession of a drivers licence. Under the job satisfaction questions, he indicated that he found work exciting, rewarding (but not on a monetary basis), challenging, tiring and informative. He felt that his job was "fairly stressful" and "fairly difficult". His current sleep pattern was a sufficient eight hours. He felt that he got a "bit tired" at work. On the job he reported being engaged in standing. He described "never feeling hungry" at work and that and his energy levels "never dropped quickly". He had no history of smoking and did not consume alcohol. He described his previous

perceived health status as “very good” and his perceived current health status as “excellent”. He had not been hospitalized or incurred any illnesses other than flu in the past year. This subject was engaged in regular exercise, five hours or more a week.

Summary of Interview material

Case #8 identified money as a stressor but indicated that “it affects me but not a lot, not very strongly”. He specifically felt that he was only stressed at the end of the month when he was forced to juggle payments. He stated that sometimes such worries meant that he can’t sleep for thinking and then quickly added that “but you can stay thinking about any problem because it is part of life”. This subject was highly defensive about discussing stress and its affect on him. The researcher would reflect a statement that he made and the subject would down play the statement that was reflected. For example;

Case #8: difficulty is when it comes to like, when pay day comes sitting down calculate what accounts to pay, friends to owe, wow is something. Sometimes can’t sleep...

Interviewer: you say when it is hard and things are not fitting that you can’t sleep so well...

Case #8: but it doesn’t mean that it affects me too much....

In his discussion it became apparent that he finds it stressful not being able to give his children the things that they want. He felt that stress doesn’t affect his body and that he always has an appetite. He felt that if he did have problems he would discuss it with friends at work or home. This subject was again difficult to assess with regard to stress levels. The non-disclosure of stress symptoms and the insistence that his worries and symptoms were normal worries and behaviours seems to indicate an existence of stress rather than a care-free subject that did not experience stress. The symptoms that he allowed to slip through such as not sleeping at all are indicators of stress being present. An estimated stress level of 40% was allocated to this subject translating to a classification of severe stress.

Summary of SSCL material

A total score of 2½ (low stress level) on the SCCL was obtained by case #8. 1 point was allocated from the physical reaction scale where “frequent indigestion” and “disturbing dreams/ nightmares” were reported to be experienced at least monthly. On the

psychological scale, “feelings of confusion” was indicated as occurring “at least monthly”. On the behavioural scale “memory loss and forgetfulness” and “inability to meet deadlines” was checked off as occurring at least monthly.

Discussion of Case, case #8

The stress levels are again disparate in this case. The SSCL is able to extract more symptoms from the subject and once again the interview appears to give a clearer indication of the subject’s stress level.

Case Study: Case #9

General Biographical Information

Case #9 was roughly average age for the sample. He had just over ten years experience in the security field and was a full time employee. He lived with friends in the township and whilst maintaining his wife and four children in a rural setting. He had obtained junior secondary education and had undergone courses in first aid, combat training, fire fighting and fire arm training. This subject was in possession of a drivers licence. Under the job satisfaction questions, he indicated that he found work exciting, undermining, challenging, stimulating and informative. He felt that his job was “fairly stressful” and “fairly difficult”. His current sleep pattern was an adequate six hours sleep on day shift with less than 6 hours after night shift. He felt that he got “a bit tired” at work. On the job he reported engaging in running/jogging, walking and standing. He described feeling a “bit hungry” at work and that and his energy levels “never dropped quickly”. He had no history of smoking and consumed two quarts of alcohol every two weeks. He described both his previous and current perceived health status as “excellent”. He had not been hospitalized or incurred any illnesses in the past year. This subject was engaged in regular exercise, five hours or more a week.

Summary of Interview material

Living in a squatter camp was the first concern that case #9 raised. He then elaborated on the stress of money and paying bills at the end of the month. He said that there were “too many things that I want to pay that I don’t have money for”. He specified the difficulty of paying for furniture that he had bought on hire purchase. In relation to money difficulties this subject felt that his stress was worse “towards the end of the month”. He explained that he used to experience muscle pain but that since he had sought the help

of professionals (doctors and psychologists) that he only suffers from occasional headaches. During the interview he described at how he had been having difficulty with his son misbehaving. He spoke about the benefit of sharing his difficulties and actively sought the support of his friends to share problems with. He felt that his friends were supportive. When stressed he did feel that he can't stop thinking about his difficulties. He also felt that he became more tired but that this symptom had abated. He described needing a sleeping tablet to sleep at one stage. This subject reported not sleeping enough. He said that before he was stressed he would have slept a full 15 hours. At times he was now waking at 1am and not sleeping again until sunrise. He felt this had not happened in the past week and about twice in the past month. He denied any difficulties at work and felt that when he "comes to work I forget what was given to me". His stress level was estimated to be profound at 70%.

Summary of SSCL material

Case #9 obtained one of the highest scores of the total subjects on the SSCL of 5½. This score still only equated to a low stress level classification. Five physical symptoms were reported on a monthly basis, they were "frequent indigestion", "unexplained headaches", "feeling like your appearance has changed for the worst", "difficulty relaxing" and "disturbing dreams/ nightmares". Psychological symptoms included "feeling helpless" and "feeling panicky" both indicated on a monthly basis. On the behavioural scale the subject indicated "experiencing worrying", "sleep disturbances", "excessive appetite" and "frequently criticizing others" on a monthly basis.

Discussion of Case, case #9

Although very discrepant scores on stress levels are indicated between the two levels of data collected, the ranking of the stress levels is more congruent. On both sets of data this subject is one of the more stressed subjects. There are no contradictions in the data collected with both methods of data collection assisting in understanding stress in this subject.

Case Study: Case #10

General Biographical Information

Case #10 was one of the older subjects. He had just over two decades of experience in the security field with approximately 15 years of experience as a full time employee at

the University of the Witwatersrand. He lived with his wife, an adult family member and two children in an urban township. In addition to his salary he received income from investments. He had obtained secondary education and had undergone courses in combat training, CPR, fire arm training, management, dog training, customer service and computer skills. Under the job satisfaction questions, he indicated that he found work boring, rewarding, challenging, stimulating and informative. He felt that his job was “not at all stressful” or “difficult”. His current sleep pattern was less than six hours sleep. He felt that he “never became tired” at work. On the job he reported engaging in walking, standing and sitting. He described feeling “a bit hungry” at work and that and his energy levels “never dropped quickly”. He had no history of smoking. He described current perceived health status as “good” and his previous perceived health status as very “good”. He had been hospitalized for a broken arm and had experienced sinus problems in the past year. This subject was not engaged in regular exercise.

Summary of Interview material

Audio tape data destroyed. Only interviewers notes available for comparison.

Case #10 was the most disgruntled subject about work and in particular management. He felt that he had been side lined at work and despite having attained qualification in the field of security he had not been promoted. He also felt that other younger employees with less years of service at the University of Witwatersrand had been promoted above him. He felt that it favouritism and jealousy on the part of management was the reason for him being suppressed at work. This left him feeling bored and unmotivated at work.

Summary of SSCL material

Another low stress score of 1 was obtained by case #10. He only indicated that he may experience “being breathless for no reason” (physical) and “suppressed/ unexpressed anger” (behavioural) at least once a month.

Discussion of Case, case #10

As with case #1, the less than 6 hours sleep recorded in the biographical questionnaire is not depicted in the SSCL. There is also discrepant information between the interview and the demographic questionnaire where he reports no stress at work but elaborates in

depth about his frustrations at work in the interview. This may be an indication of him viewing stress as a sign of weakness in himself whereas the stress he discusses in the interview places blame on the workplace.

Case Study: Case #11

General Biographical Information

Case #11 was in his 40s. He had one and a half decades of experience in the security field with approximately 7 years of experience as a full time employee at the University of the Witwatersrand. He was married living with two adult family members and one child. He maintained a rural and urban household. In addition to his salary he received income from investments and savings. He had obtained secondary education and had undergone courses in combat training, CPR, management, and security skills. Under the job satisfaction questions, he indicated that he found work exciting, rewarding, easy, stimulating and informative. He felt that his job was “not at all stressful” or “difficult”. His current sleep pattern was less than six hours sleep. He felt that he became “a bit tired” at work. On the job he reported engaging in walking, standing and sitting. He described “never feeling hungry” at work and that and his energy levels “never dropped quickly”. He had no history of smoking or alcohol use. He described both his current and previous perceived health status as “excellent”. He had not been hospitalized in the past year but had suffered once from flu. This subject was engaged in five hours or more of regular exercise a week.

Summary of Interview material

Case #11 elaborated on being married under the traditional custom of having two wives. He felt that he had burdened himself by following a traditional custom and disclosed that the pressure of accommodating two wives was stressful. He did acknowledge that having two wives can be helpful in the fact that there is always someone to look after the children. He was maintaining seven children which he found demanding “because if one comes with things that they need you to do for them and then another comes”. This subject reported no worries about work or living in the township. He felt that sometimes he might get cross under stress but that his eating habits, sleep patters and energy levels were not affected by stress. Case #11’s body language and manner in the interview informed the estimated stress level of 50% (severe classification). He was exasperated (out of breath, deflated and saddened) in his discussion of his situation with

his wives and it felt like he was too overwhelmed by that situation to relate any other stressors or reactions to stress.

Summary of SSCL material

Case #11 obtained a score of 1, equating to a classification of a low stress level. The two symptoms indicated by this subject were both on a monthly basis in the physical realm. The subject identified “unexplained headaches” and “disturbing dreams/nightmares” as symptoms that he experiences of stress.

Discussion of Case, case #11

The stress levels once again differ between the data sets. The SSCL although providing additional information on symptoms does not add much to the understanding of stress in this subject.

Symptoms of Stress

Having outlined each specific case, a more general overview of the data from the sample is considered. Discussion is delineated into information provided by each method of data collection for comparison of the suitability of each method for the purpose of investigating stress levels and symptoms in the sample.

From the Interview

Although reluctant to express that they were affected by stress, during the interview, the subjects did identify symptoms of stress that they experience. 75% of the subjects spoke of physical symptoms, 38% spoke of psychological symptoms and 100% spoke of behavioural symptoms. The symptoms were extracted from statements made in the interview and categorized under physical, psychological and behavioural symptoms as indicated by the biopsychosocial approach and in line with the philosophy behind the symptom checklist. The symptoms were then grouped under the headings to general symptoms that classified the symptoms described. The grouping of symptoms under each category are depicted in the following diagram

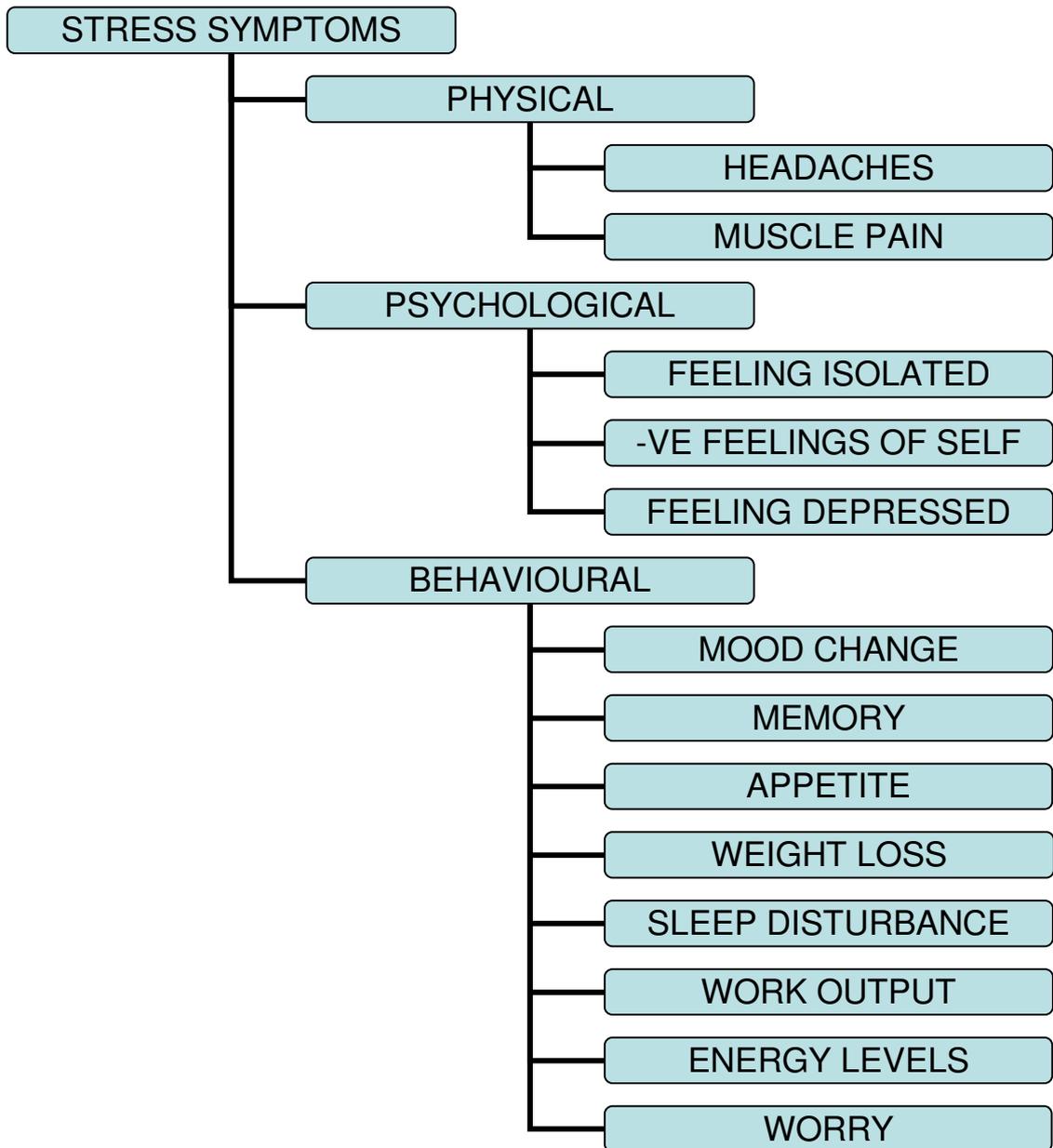


FIGURE 1: SYMPTOMS INDICATED BY INTERVIEW

This data thus suggests that behavioural symptoms are more acknowledged by the subjects than physical symptoms. Psychological symptoms of stress were the least identified symptom grouping within this sample. Headaches and muscle pain were the only physical symptoms elicited from the interview. The interview extracted a range of behavioural symptoms varying from mood changes, memory loss, appetite changes, weight loss, sleep disturbance, work output, energy levels and worrying. The three

symptoms on the psychological sphere were feeling isolated, negative feelings of the self and feeling depressed.

When considering the percentage of subjects who reported experiencing symptoms in each of the designated categories and the number of statements recorded in each sphere, the following chart depicts the results.

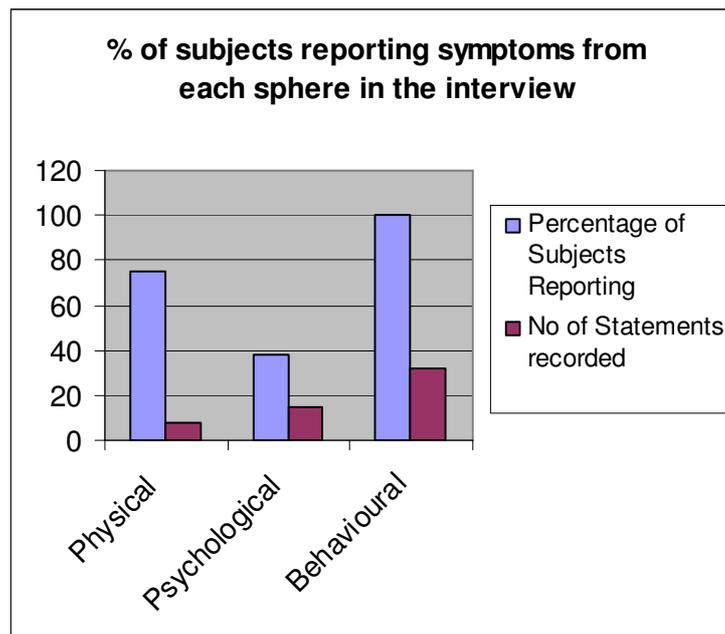


FIGURE 2: % OF SUBJECTS AND STATEMENTS REFERING TO SYMPTOMS IN INTERVIEW

100% of the subjects reported some form of behavioural stress symptoms, 75% reported physical symptoms whilst only 38% identified psychological symptoms during the interview.

The number of statements recorded in each grouping indicates to some extent the level of intensity of the symptoms but this is not a linear relationship and must be interpreted with caution. The greatest number of statements, (32 statements), equates with the largest percentage of subjects reporting symptoms in the behavioural sphere. Fewer statements were reported in the physical sphere, (8 statements) than in the psychological sphere, (15 statements), although there were more subjects who identified physical symptoms.

The percentage of subjects who highlighted a specific symptom, and the number of statements made on the symptom are listed in the following table

	% of subjects	No. of statements
Physical Symptoms	75	8
Headaches	38	4
Muscle pain	38	4
Psychological Symptoms	38	15
Feeling isolated	25	8
Negative feelings of self/can't cope	25	5
Feel depressed	25	2
Behavioural Symptoms	100	32
Mood change	75	10
Sleep disturbance	50	4
Work output	38	5
Energy levels	38	3
Appetite	25	2
Memory	13	6
Weight loss	13	1
Worry	13	1

TABLE 1: % OF SUBJECT AND NUMBER OF STATEMENTS REFERING TO SYMPTOM

The following section gives details of the symptoms recorded from the interview. The specific statements that were elicited from the data are indicated in Appendix E. The following section includes reference to statements where subjects indicated there was no presence of a symptom. These statements were not included in the tabulations above.

SYMPTOMS

A. PHYSICAL

1. Headaches

Four subjects reported experiencing headaches as a symptom of stress. Two of which indicated that it was an occasional occurrence and not a severe symptom.

One subject directly linked experiencing headaches when stressful thoughts came to mind.

example

- and headache, a bit of a headache some pain I have in head, not a severe pain (case #7)

2. Muscle Pain

a. Change

Three subjects reported the presence of muscle pain when stressed. One subject was specific in that his shoulders felt weighted and painful. Another subject battled to articulate that he felt muscle pain but rather that his body urged him to run and after running he felt a sense of physical relief in his body. The third subject felt that muscle pain had at one time been extreme but at the time of the interview was an intermittent occurrence.

example

- my shoulders were heavy, forceful (case #3)

b. No Change

- On direct enquiry, one of the subjects denied experiencing any muscle pain.

B. PSYCHOLOGICAL

1. Feeling isolated

Two subjects reported feeling alone with their problems and stressors. For one subject this was directly related to bereavement and feeling that he was now without the support and guidance of his deceased family members in handling his difficulties. The other subject spoke about feeling alone in his responsibilities and disliking the experience of being alone and rather seeking the support of others with his difficulties.

example

- I sometimes cry if I think more about what they might be doing with me if they were still alive (case #1)

2. Negative feelings of self/ can't cope

Two subjects reported negative perceptions of self. One subject felt that being stressed had "destroyed" him and that he is unable to work through problems on his own. Another subject reported that things were beyond his control.

3. Feel depressed

Two subjects reported times when they felt low and depressed. One subject articulated crying when he gets wrapped up in bereavement thoughts.

example

- I get very depressed and down (case #3)

C. BEHAVIOURAL

1. Mood Change

Seven subjects identified changes in their mood when under stress. For all of the subjects they described becoming angry when stressed. Descriptive words such as angry, frustrated, uncomfortable, furious and cross were used with the subjects describing that they feel like fighting, feel like hitting more when they are stressed.

example

- I feel like sometimes hitting that one who made me angry ... but I am not a person who likes fighting (case #7)

2. Memory

One subject was particularly concerned about a difficulty with memory due to being stressed. He described being unable to retain information that he read or being able to concentrate or remember.

example

- it effects my memory (case #1)

3. Appetite

a. Change

Two of the security guards reported a change in appetite when they are stressed. Particularly they both felt that they lost their appetite and did not eat sufficiently when stressed.

example

- if I am stressed I don't eat (case #9)

b. No Change

Four subjects denied any appetite changes under stress. This information was gleaned from direct enquiry.

example

- I like food, I like eating too much I can't tell you when I am stressed I eat a lot or what (case #7)

4. Weight loss

One subject reported losing weight when stressed. This subject indicated that although they were eating, they involuntarily lost a lot of weight.

example

- I lost a lot of weight (case #3)

5. Sleep Disturbance

a. Change

Four subjects described sleep disturbances when stressed. This translated into an inability to sleep, restless sleep and needing sleeping tablets to remain asleep.

example

- (before) I didn't sleep at night, I got a tablet to sleep (case #9)

b. No Change

Two subjects indicated that their sleep does not change when stressed

example

- yah for sure I do sleep well (case #7)

6. Work Output

Three subjects felt that their work output is affected by being stressed. These subjects they felt that they were not able to give of their full potential. One of the subjects elaborated on two incidences where work stress had culminated in the subject withdrawing and no longer being proactive in situations and having become mistrusting of fellow work colleagues.

example

- I always do my best but it is hard to push oneself (case #5)

7. Energy levels

a. Change

Three subjects reported feeling more tired under stress and thus having less energy.

example

- I get quite tired (case #7)

b. No Change

Two subjects denied feeling tired or having less energy when stressed.

example

- not feeling tired/ less energy (case #2)

8. Worry

All the subjects were able to discuss specific worries that caused them stress. One subject specifically described being caught up with worry when stressed.

example

- Just thinking, sometimes just trying to get a plan (case #8)

From the SSCL

The following symptoms were indicted by the responses on the checklist. Most subjects reported experiencing the symptom once a month. Where a subject indicated experiencing a symptom weekly, an (*) has been entered next to the symptom description.

	% of subjects
Physical	100
Disturbing dreams/nightmares	82
Unexplained headaches	45
Frequent indigestion	36
Feel like your appearance has altered for the worst	18
Difficulty relaxing*	18
Unusual tiredness	9
High blood pressure*	9
Breathless for no reason	9
Excessive perspiration for no reason*	9
Muscle tension	9
Dizzy spells for no reason	9
Feeling physically unwell	9
Psychological	55
Being afraid of disease	18
Feeling helpless*	9
Feel depressed*	9
Feel you can't cope	9
Feel anxious	9
Feelings of confusion	9
Feel you are being gossiped about	9
Being over critical of yourself	9
Feel that you are frequently criticized	9
Feel that you have been neglected or let down*	9
Feel panicky	9
Feel lonely with no one to talk to	9
Upset by disease in others	9
Lack of self confidence	9

Behavioural	73
Memory loss/forgetfulness*	36
Sleep disturbances	36
Little sense of humor	36
Worrying	18
Suppressed/unexpressed anger	18
Poor concentration	9
Tics/nervous habits	9
Lack of interest in life	9
Inability to meet deadlines	9
Need to regularly work late*	9
Feel disgruntled/moody/irritable*	9
Low interest in work*	9
Excessive appetite	9
Frequently criticizing others	9

* indicates that an “at least weekly” frequency was recorded

TABLE 2: % OF SUBJECTS INDICATING SYMPTOM IN SSCL

In the checklist, the subjects all reported some form of physical symptoms. The subjects predominately disclosed experiencing the symptoms on a monthly basis. In particular disturbing dreams or nightmares affected the majority of subjects and was the most frequently reported symptom on the checklist. Unexplained headaches and frequent indigestion were reported by five and four subjects respectively. The symptoms of feeling that their appearance had altered for the worst and having difficulty relaxing were each reported by two subjects. Having difficulty relaxing, high blood pressure and excessive perspiration for no reason were reported as experienced on an at least a weekly basis.

Behavioural symptoms were identified by 8 of the subjects. Memory loss/forgetfulness, sleep disturbances and little sense of humour were the most frequently recorded behavioural symptoms with four subjects reporting each symptom. Worrying and suppressed/unexpressed anger were each indicated by two subjects. Memory loss/forgetfulness, need to regularly work late, feeling disgruntled/moody/irritable and

low interest in work were the behavioural symptoms that subjects reported experiencing on a weekly basis.

Just over half the subjects reported psychological symptoms on the SSCL. The maximum number of subjects reporting a single psychological symptom was two subjects. They reported being afraid of disease. The other psychological symptoms reported were only reported by one subject each. Feeling helpless, feeling depressed and feeling that they had been neglected or let down were the psychological symptoms that subjects reported experiencing on a weekly basis.

The following figure shows the percentage of subjects who described symptoms in each sphere. As depicted, 100% reported physical symptoms, 73% behavioural symptoms and 55% psychological symptoms.

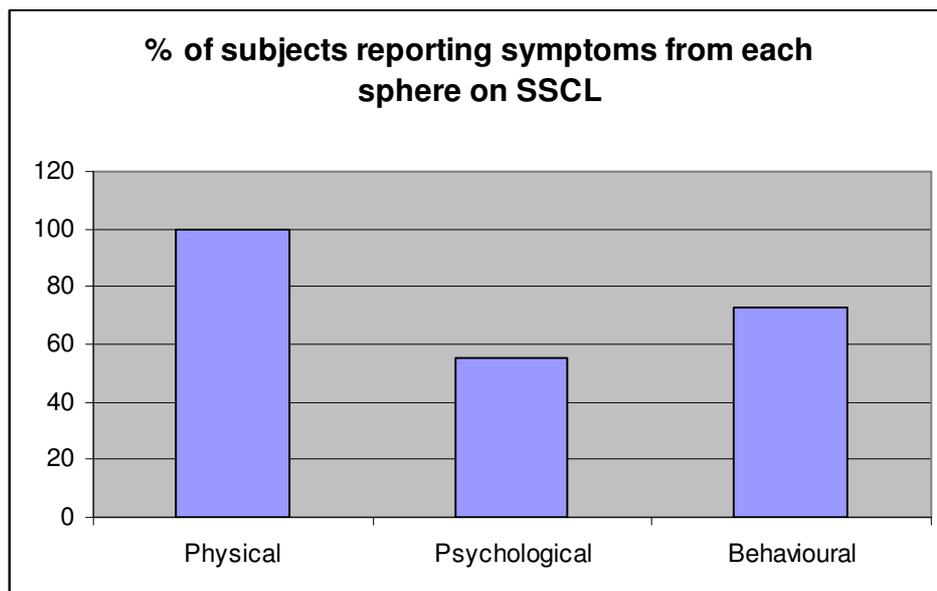


FIGURE 3: % OF SUBJECTS REPORTING SYMPTOMS PER SPHERE IN INTERVIEW

Stress Levels

From the Interview

Results on the stress levels of the sample interviewed were difficult to access. Most subjects reported not suffering from stress and although they were able to discuss issues that worried them, they made statements such as “I don’t have much worries

myself” (case #2) or “stress is not me” (case #6). This is elaborated more under the heading of ‘Stress as a concept for this sample’. Some subjects were able to talk about past stressors and how they affected them but all but two of the subjects indicated that stress was not present at the time of interview.

As mentioned previously, the researcher had to probe for the symptoms of stress by extracting the stressors that the subjects perceived at the time of interview. The number of stressors elaborated on and the intensity with which the subject spoke about such stressors provided material for a clinical impression of stress to be allocated to each subject. The researcher’s clinical impression of the stress levels of the subjects was as follows, using the same classification system for stress as is used by the SSCL, 50% were deemed to suffer from profound stress, 38% from severe stress and 13% from moderate stress levels.

From the SSCL

The subjects identified with very few of the checklist items on the SSCL. The total stress level results as picked up by the SSCL indicated that 91% had low stress levels and 9% had moderate stress levels.

The exact scores are as follows

Subject Code	25	26	27	28	29	30	31	32	33	34	35
Score on SSCL	16	1	3.5	4	2	1.5	0.5	2.5	5.5	1	1
Score as a %	18	1	4	5	2	2	1	3	6	1	1
Stress classification	Mod- erate	Low									

TABLE 3: RESULTS OF TOTAL SCORES ON SSCL

The scores for each sphere on SSCL are as follows.

Subject	Physical	Psychological	Behavioural
27	2.5	0.5	0.5
33	2.5	1.0	2.0
32	1.0	0.5	1.0
34	0.5	0.0	0.5
30	0.5	0.0	1.0
28	2.5	1.0	0.5
35	1.0	0.0	0.0
26	0.5	0.5	0.0
29	1.5	0.0	0.5
25	3.0	6.0	7.0
31	0.5	0.0	0.0
Total	16.0	9.5	13.0

TABLE 4: RESULTS FOR EACH SPHERE ON SSCL

It should be noted that case #1, is the only subject who recorded scores in the moderate stress level and his scores distort the trend between the spheres that is noted in the other subjects scores. The following graphs denote this visually

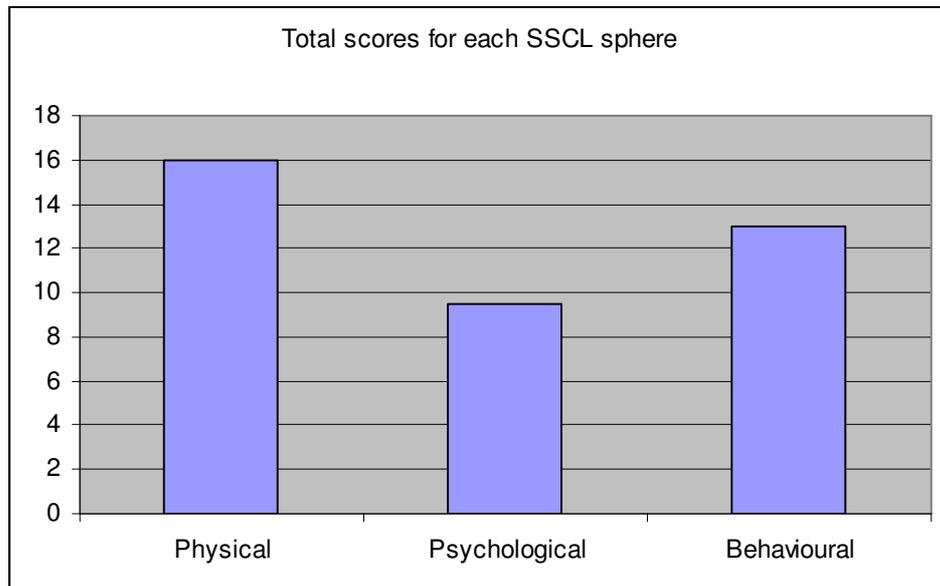


FIGURE 4: TOTAL SCORES FOR EACH SPHERE ON SSCL

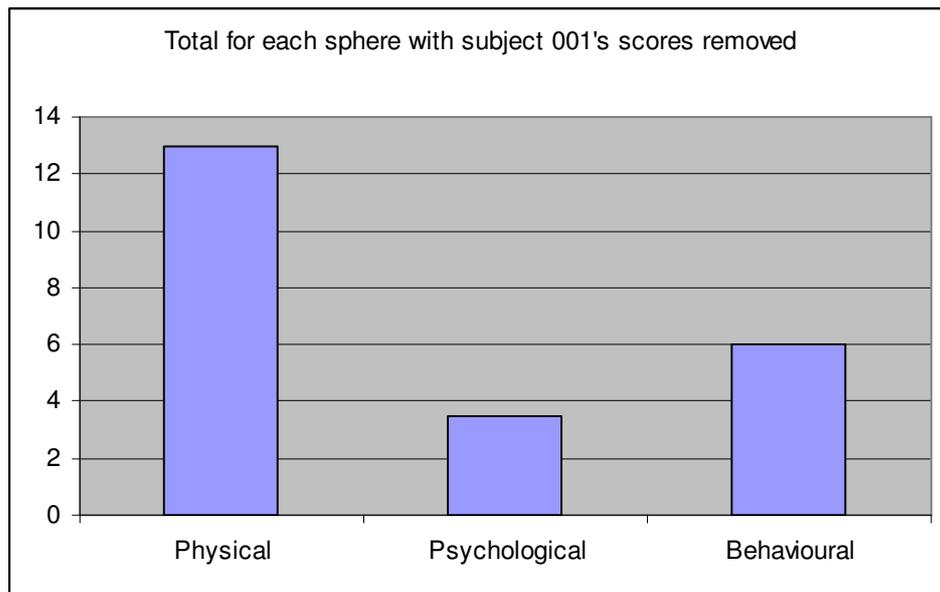


FIGURE 5: TOTAL SCORES FOR EACH SPHERE ON SSCL WITH CASE #1 SCORES REMOVED

The total for each sphere with case #1's scores removed, displays a greater trend towards physical symptoms on the SSCL for the majority of subjects.

Interview versus SSCL

Both methods found the subjects declare that stress was not a current issue for them. There is significant discrepancy between the stress levels indicated by the SSCL and the interview. The chart below depicts the results in tandem.

Subject Code	25	26	27	28	29	30	31	32	33	34	35
Score on SSCL	16	1	3.5	4	2	1.5	0.5	2.5	5.5	1	1
% score on SSCL	18%	1%	4%	5%	2%	2%	1%	3%	6%	1%	1%
Clinical impression of stress level	85%	70%	60%	-	-	30%	90%	50%	80%	-	75%

TABLE 5: COMPARISON OF SSCL AND INTERVIEW STRESS LEVEL SCORES

The discrepancy is not solely isolated to the magnitude of stress indicated by the two methods of data collection. There is little correlation between the rankings of subjects when their stress levels are compared. The following graph represents this visually

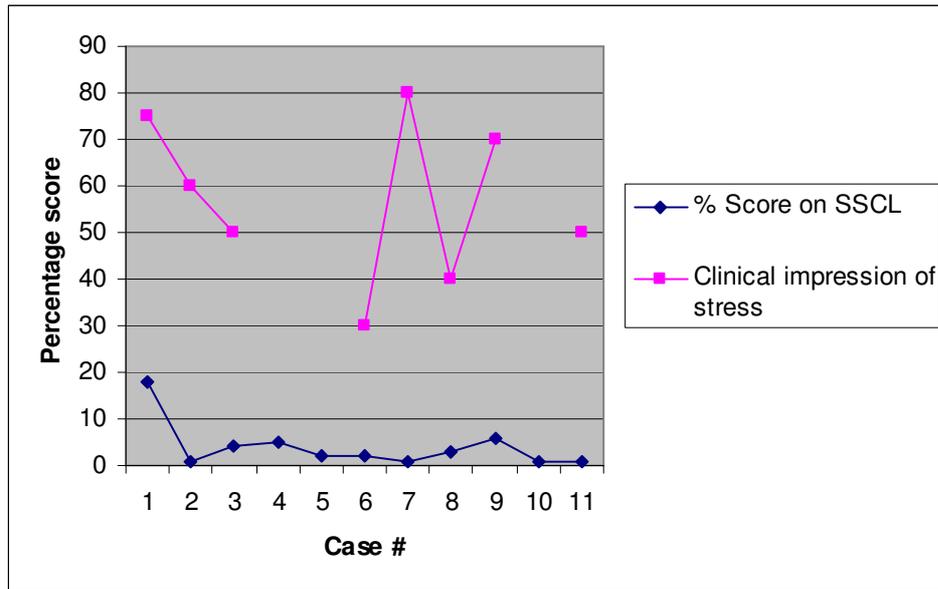


FIGURE 6: STRESS LEVELS

Case #1 obtained relatively elevated scores on the interview and the SSCL however there is little correlation between the other subjects' scores other than case #9

Although a similar distribution of the percentage of symptoms under each sphere was found in both the interview and the SCCL, there were discrepancies noted between the two methods. There was some conflicting data collected, such as subject (case #9) noting in the SSCL that he experiences excessive appetite on a monthly basis and stating that he doesn't eat when stressed in the interview. There were on average 2 symptoms of stress per subject noted from the interview that the SSCL does not indicate. Since the subjects were reporting low levels of stress at the time of data collection the discrepancies may be a result of the interview giving the subjects the opportunity to speak about how stress affects them at any point in time. In general, the interview gave more informative information on the stress levels of the subjects and the SSCL provided more clarity on the nature of the symptoms. There were two symptoms noted by case #3 (unable to go the extra mile at work, and burning off weight when stressed) which could not be checked off on the SSCL. The interview did not elicit information on disturbing dreams/ nightmares which was the most frequently recorded symptom on the SSCL. Similarly frequent indigestion, feeling like your appearance has

altered for the worst and little sense of humour were highlighted by the SSCL and not the interview.

Stressors

Identified from the interviews

Due to the line of questioning that the interview was required to take, interesting data was collected on what the subject saw as their worries and stressors. In reporting these stressors it is recognized that the method of data collection is not exhaustive but an insight as to the thinking of the subjects at the time of the interview. Due to the nature of the investigation one cannot delineate whether the worries described are causal or a product of stress. For example, is conflict with a spouse a stressor or a symptom of stress? This researcher is of the opinion that making such a distinction can be done on a theoretical basis but practically the factors are cyclical. For example if conflict with a spouse was sparked by one or both of the partners being stressed, the presence of conflict will place more demands on the resources of the subject and cause them to experience more stress. The subjects spoke about stressors from all facets of their life. For clearer analysis, the stressors were grouped according to personal, social and work stressors. It must be highlighted that in concordance with the biopsychosocial approach where biological, psychological and social factors all impact each other and cannot be viewed in isolation. Delineating stressors into the above mentioned categories is not absolute and stressors are related to each other even between categories. The following diagram outlines the stressors that were spoken about by the subjects during the interviews.

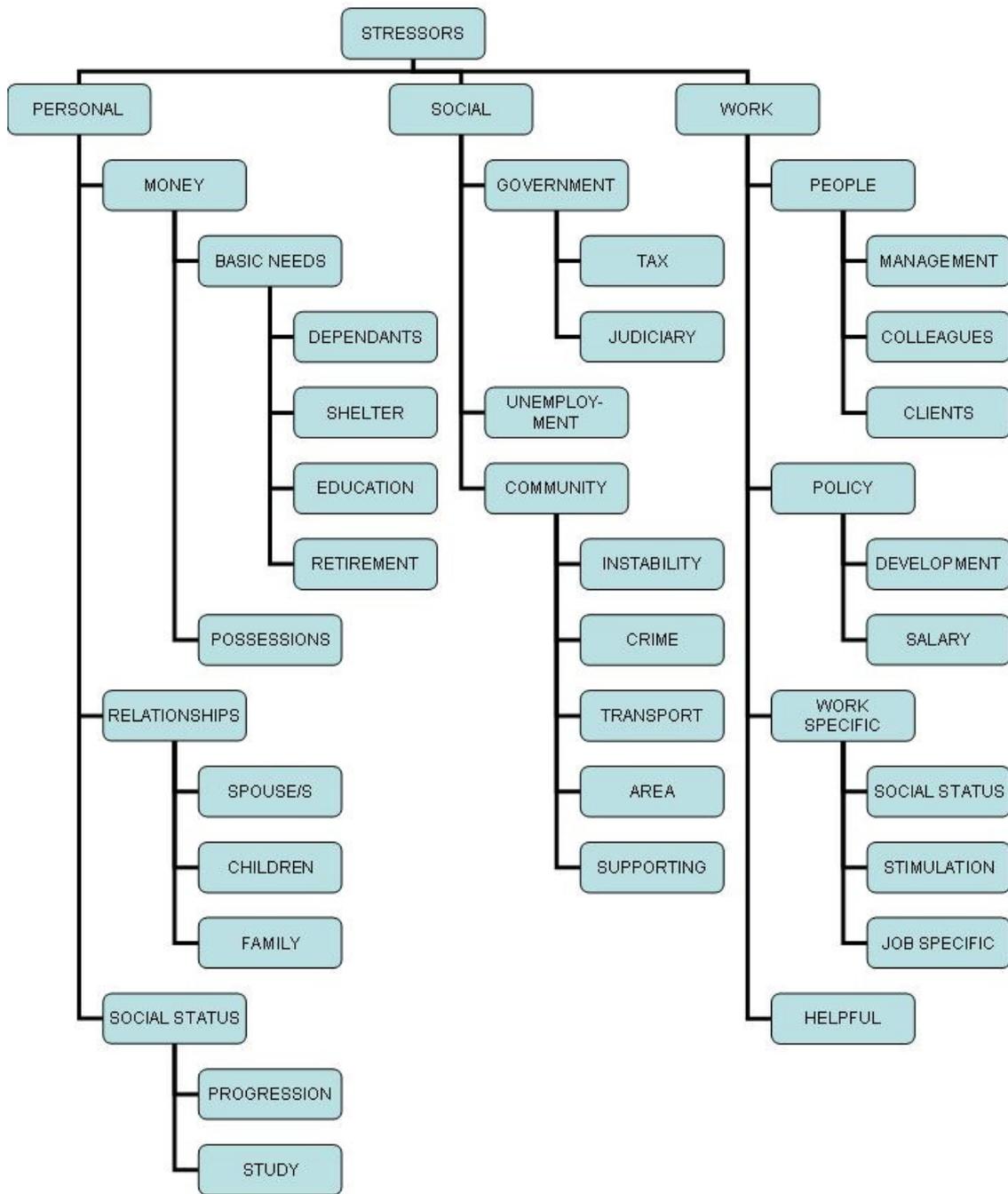


FIGURE 7: OUTLINE OF STRESSORS

The data collected with regard to stressors is summarized in the following section. Specific statements that resulted in these themes are listed in Appendix F. The same data may have been documented in the case studies, for the purpose of creating an understanding of what the stressors were for the sample as a whole, the data is repeated here rather than referring the reader back to the case study section.

Stressors

A. Personal

1. Money

All but one of the subjects articulated that money was a significant stressor in their lives. The majority of subjects classified money worries as their most prominent stress. Subjects spoke about having too little financial resources to meet their financial commitments. In this regard some subjects spoke about the end of the month as a particularly stressful time. Two subjects also found the social obligation of giving to others who are less fortunate burdensome.

examples

- money it is the most problem (case #4)
- money is what my worries are (case #5)

Under the category of money, specific stressors such as providing various basic needs and money related issues with regard to possessions.

a. Providing basic needs

i) For dependants

Five subjects described providing for their family members as being stressful. Specifically food and clothes were outlined as necessities that the subjects had to provide for dependants. Three subjects added that it was not only providing for basic needs but also the wants of children for items such as sweets and smart clothes that were draining.

example

- food, to provide at home, to give to family, its very hard (case #2)

- takes me responsibility to care for them, buy them food, clothes you know (case #7)

ii) Shelter

Four subjects spoke about stressors related to the accommodation needs. For one subject maintaining a house with facilities such as electricity was difficult and having to deal with relevant authorities when services are terminated. For three of the subjects, sharing a house, living in a squatter camp and having insufficient space were stressors.

examples

- so my worries are sharing a house (case #7)
- first living amongst squatter camp (case #9)

iii) Education

Two subjects specifically referred to the difficulty in paying for tuition either for themselves or their children. One subject was stressed by having to send his children to a crèche that he felt was not within their best interests but he could not afford alternative educational placement for them.

example

- it has been a struggle for education (case #4)

iv) Retirement

One subject elaborated on the stress that his up coming retirement was causing him. Specifically he was having difficulty saving for his retirement and in addition was having conflict with his wife over making such contributions towards his retirement. This subject felt very responsible as the sole provider in his family and was worried that there would be no money for his children in the face of his retirement.

example

- (it is hard to) provide for the future (case #2)
 - **Aging**

Two subjects indicated concern for their progressing years and one subject disclosed an awareness of death.

examples

- We will be old now and still need to support him (case #2)
- I have aged with no progress for my years (case #5)

b. Possessions

Two subjects reported stress with possessions. One subject was experiencing difficulty paying for furniture that he had bought on credit and the other subject was experiencing stress with regard to a motor car that had been bought and had never worked.

example

- like furniture - we have to pay over next 6mths (case #9)

2. Relationships

a. Spouse/s

Conflict with spouses was described as a stressor by four subjects. One of the subjects had a previous wife pass away and had remarried. He described experiencing conflict with the new relationship and missing the support and companionship of his first marriage. In addition he was left with the responsibility of being the sole parent to his two young daughters which he experienced as stressful. For another subject he felt that he was affected by his spouse, who he described as uneducated, and was in opposition to him saving monthly for their up coming retirement. Another subject referred to problems in his marriage the previous year but that at the time of the interview the conflict had been resolved. One of the subjects elaborated on being married under the traditional custom of having two wives. He felt that he had burdened himself by following a the traditional custom and disclosed that the pressure of accommodating two wives was stressful. He did acknowledge that having two wives can be helpful in the fact that there is always someone to look after the children.

example

- its difficult, just following our parents with two wives (case #11)

Children

Other relationships that appeared to concern the subjects were their children. Six subjects related issues with their children. For one subject, the pressure of trying to get his child to achieve an education was a difficulty. The difficulty of meeting the demands and wishes of their children was related by three subjects. The constant, non abating requests of their children was spoken of by two of these subjects. One subject touched on difficulties with his son being engaged in misconduct.

examples

- it is difficult 'cause if one comes with things that they need you to do for them and then another comes (case #11)
- As a father you want more for your children (case #4)

c. Family

Two subjects reported stress of having ill family members and family members who had passed away. This was a particular concern for one of the subjects. He felt that his father falling ill had had a significant impact on his ability to function and he had had to pull out of his studies. He was also stressed by the passing away of two of his brothers. He elaborated on the death of his brothers by explaining that he thought they had been murdered by jealous family members. This understanding further heightened his stress levels as he believed that he was also the envy of his extended family and believed that he may be a target of an attack in the future. The other subject expressed the loss of a support system since his grandmother had passed away.

- I got a call that my father is sick last year and break up my studies, I couldn't manage to write (case #1)

3. Social Status

a. Progression

Four subject related concerns around furthering themselves and their family's social status. They described feeling pressure to raise the standard of living for themselves and also for the future of their children. For the subject who

felt threatened by his family he felt vulnerable because of the success he had achieved that caused his family to be jealous of him.

examples

- worry about to better living (case #3)
- my children must have more chance in life than me (case #4)

b. Study

Two subjects specifically defined the desire to obtain further qualifications.

example

- I have furthered myself studying my discipline (case #5)

B. Societal

1. Government

a. Tax

A single subject complained about taxation. He was disgruntled by the fact that the more a person earns, the more tax they have to pay.

example

- the more you earn the more the government takes away (case #2)

b. Failure of judicial system

The subject that had experienced the murder of his brothers was upset with the relevant professionals and legal authorities that they had not been able to solve the cases of his brothers' murders.

example

- We even try to get a legal advisor ...but he didn't succeed, and I think that is why it is worse (case #1)

2. Unemployment

Although currently employed, two subjects that had recently commenced employment at the University, related how stressed they had found being unemployed. The subjects described being, down, depressed and stressed when unemployed. They both felt that a major contributor to not experiencing stress was now being employed.

example

- It was too stressful when I didn't have a job, now is easier (case #10)

3. Community

a. Instability

One subject experienced stress in that he felt his future was uncertain

b. Crime

The same subject reported concern for general community issues such as crime and war. In particular the following specific crimes were mentioned during the interviews.

i) Robbery

A subject reported the difficulty of having had her car stolen, The subject who expressed concern for general crime issues was upset by people robbing each other.

example

- my car was stolen (case #3)

ii) Violence

Case #7 who was concerned about crime in general felt that there were too many people falling victim to physical violence. He expressed a wish that people should be free and not under the threat of being hurt or victimized. The subject who endured the murder of his brothers elaborated on his first brother having been shot. As has been described in previous headings he was concerned that he would be the direct recipient of violence to.

examples

- many people getting hurt (case #7)
- (The killing) is not stopping now because they don't see us going down (case #1)

c. Transport

Two subjects described transport difficulties. The subject who had lost his car he felt restricted by public transport and felt that he had little control over being at work on time or being able to work after hours. Another subject felt that transport from the township to work was stressful without elaborating on what in particular was stressful.

example

- public transport, I can't be on time (case #3)

d. Neighbourhood

Living in the township and squatter camps was indicated by two subjects as being stressful. Such neighbourhoods were described as terrible and that there were criminals there.

example

- (Soweto) really there it is terrible, but I have no choice I haven't got a place to stay (case #7)

e. Civil Obligation

Two subjects related the inclination to assist others in the community. They spoke about trying to share food and mothers with others in the community but that it was a difficult endeavour to follow through on.

example

- the money, if you can share with others but it is hard (case #8)

C. Work

1. People

The subjects discussed different groupings of people that worry them. These were grouped as complaints of management, colleagues and clients.

a. Management

Case #10 had a specific complaint regarding his management. He was diagnosed with a physical disorder which required that an item of his uniform be replaced with a more supportive item. The management had agreed to

pay for the replacement part of his uniform but on submission of the claim he had received no reimbursement.

example

- I feel like they don't hear me, that I am not important (case #10)

i) Incompetent

Two subjects reported that they felt the management of security guards at the university was not as competent as they felt they should be. One subject (whose subject number will not be disclosed) specifically felt that the problem with management was that there were too many black managers in management positions. He felt that when too many black staff made up the management the organization, they did not work as efficiently or with the required consideration for their employees.

example

- (management) are not in a position or level where I think they must be (case #1)

o Prejudice

One subject was disgruntled about never having received a promotion at work. He felt that employees with fewer qualifications than he held and who had served at the University for shorter periods had been promoted over him. He laid the onus of responsibility for his lack of promotion on the security guard management feeling that it was due to jealousy and favouritism on their part that he had never been promoted.

example

- because of jealousy and favoritism from those in management I have not received a promotion (case #5)

o Other work environments

Two subjects they felt that the work environment for security guards on the campus of University of Witwatersrand was not as professional as other institutions that they were aware of. One subject compared the institution that he worked for with

UNISA and felt that the technology that was available and used at UNISA was not instituted at the University of the Witwatersrand. He understood that UNISA trains their security guards in security technology. He wished for the training and opportunity to develop more technologically advanced security systems on the campus of the University of Witwatersrand. The other subject felt that a past employer had been more professional and better educated. The examples that were given in regard to professionalism indicate he found the policies laborious and rigid, not enabling the security guard to bend rules and be understanding toward client's requests.

examples

- To get all the information from other institutions as to how do they operate in security...I think in that sense we will manage to minimize the crime (case #1)
- past employer was very professional (case #3)

b. Colleagues

The subject that felt that he had been overlooked in being promoted, described being older and more experienced than his colleagues which frustrated him. Another subject related three frustrating incidents at work. He had a superior over ride him and be rude to a student whom the security guard had assisted earlier. There had been another time when a fellow security guard refused to let him bring a borrowed car onto campus because it didn't have the appropriate sticker. The subject became angry that the colleague would not be sympathetic to his cause and that they were fellow colleagues did not temper the verbal abuse he received. He made reference to the large security staff compliment, feeling that this contributed to lack of support and understanding between colleagues. As a relatively new employee, this subject felt prejudiced against by work colleagues and had more withdrawn and less proactive in the setting. In relation to himself, this subject felt that his colleagues were older, not as well educated and lacked a sense of humor.

examples

- kind of people that works here are difficult to understand (case #3)
- I am new so they say no just do it this way (case #3)
- I am older with more experience than the ones I work along side (case #5)

c. Clients

Difficulties with the people they serve on the university campus were outlined by two subjects. A number of subjects spoke of incidences where students, staff or visitors on the campus could be rude and obnoxious but only one subject felt that this was taxing. The others felt that conflict with clients was the client having a bad day and that later they usually apologize. The other subject felt that being less educated than their clients caused the clients to undermine their service as security guards.

2. Policy

a. Development

i) Promotion

Two subjects expressed irritation with their working environment in that there were not enough avenues and opportunities provided for promotion. The subject that felt management had purposely overlooked him was disgruntled by not having received a promotion into management. For the other subject, he was seeking promotion to a position that held more possibilities such as working with more technologically advanced systems for security.

examples

- possibilities for one to be an operator (case #1)
- you are always at the lower level (case #1)
- I have been longer than others now in management (case #5)

ii) Training

The same subjects who mentioned feeling frustrated with regard to lack of promotion in the work place also criticized their employers for not training and developing the skills of their employees. One subject

pointed out that to provide skills is a motivational incentive. The other subject was disgruntled by having undertaken skills acquisition on his own accord.

example

- the university does not further their people's skills, I have furthered myself studying my discipline (case #5)

b) Salary

No one spoke directly about concerns with the salary that they received. One subject included the potential to receive more money in a statement about things that he would like improved at the work place.

example

- not only promotion and money but to get skills (case #1)

3. Work related issues

a. Social status

i) Education

Four subjects reported the need to achieve further education. They were specific in relating how the environment in which they work has cultivated their desire to study further. The subjects were conscious of the academic level of the people they serve and perceived disparity at not possessing equivalent levels of education. For one subject he was reluctant to communicate and befriend highly educated staff such as professors. Others used labels such as feeling undermined and downgraded by their educational status.

examples

- compete with the environment which we are living with (case #1)
- we work for doctors, lecturers, professors and stuff ... I know them but I want to make sure I stay away (case #2)
- I see the importance of university education being where I work (case #4)

b. Stimulation

Three subjects experienced the monotony of their work as boring. One subject felt that there was no motivation within their work structure. For another not being promoted or having a change of work was boring.

example

- doing one thing from January to December is boring (case #1)

c. Job specific

Three subjects identified four job-specific elements of their work as being stressful. Only one subject related working with crime as a stressor. Another subject had felt stressed by the demands of a committee position that he had recently commenced. Sitting whilst on duty was seen by a stressor for one subject, he was unable to describe what he found stressful about sitting. With further clarification it became apparent that he was liked to keep himself busy so as to avoid contemplating stressful issues. Another subject was having difficulty with the amount of walking that was entailed in the job description. He had recently been diagnosed with a condition that was aggravated by the hours he was required to spend on his feet.

examples

- Selected as one of the committee, that is the stress (case #1)
- Sitting may effect me (stress wise) sometimes (case #2)
- there is much walking on my feet for my condition (case #10)

4. Helpful

Six subjects referred to work as a helpful agent that either did not contribute to stress or assisted them in preventing stress. One of the subjects found receiving a salary from work as assisting him in coping. Two subjects remarked on how less stressed they felt by no longer being unemployed. Case #7 felt that his colleagues were supportive and was happy to be working against crime which was one of his particular concerns. Another subject felt that work removed him from his difficulties outside of the work situation and thus helped reduce the stress he experienced.

examples

- work itself gives me money it is OK (case #2)
- it is better because if we work hard for the (stopping crime) (case #7)

- if I come to work I forget what was given to me (case #9)
- It was too stressful when I didn't have a job, now is easier (case #10)

Some indication of the significance of stressors can be gleaned from the percentage of subjects that commented on a specific stressor. Although not a direct correlation, the number of statements made in the interviews about the stressor suggests some indication of the intensity of the stressor for the subject.

The following chart depicts the significance of stressors in the personal, social and work related spheres.

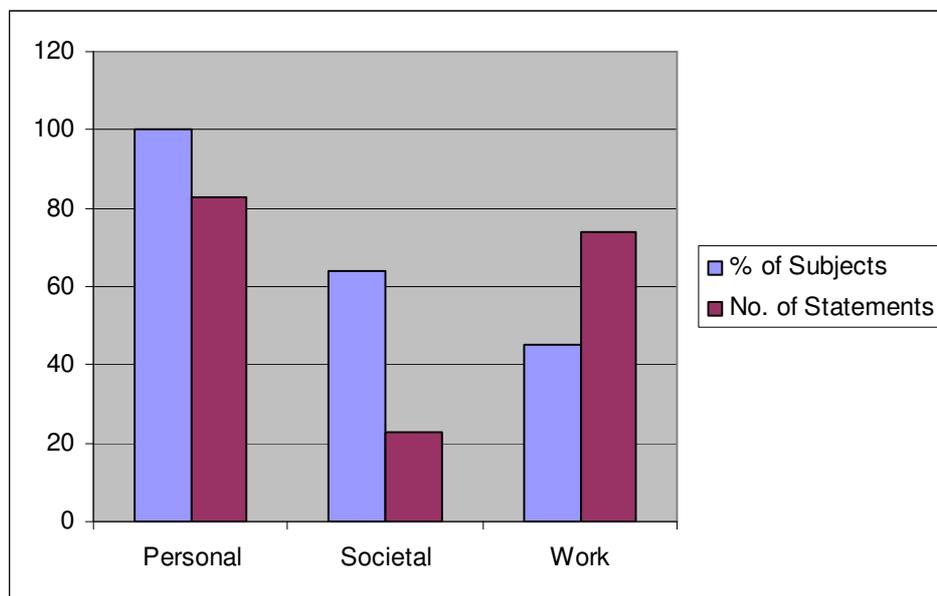


FIGURE 8: % OF SUBJECTS AND STATEMENTS REFERRING TO STRESSORS

As depicted visually, personal stressors were identified by all 100% of the subjects, with a total of 83 statements being elicited from the data. 64% of subjects related societal stressors that were spoken about in 23 statements. Although fairly significant in the number of statements in the interviews, only 45% of the 11 subjects spoke about work related stressors.

More specifically, the following table outlines the hierarchy of stressors as identified by the number of subjects reporting a specific stressor. The number of statements is also

recorded but once again this is not a direct indication of intensity as personal variations in verbalizing the stressors will have differed from subject to subject.

Stressor	% of subjects	No. of Statements
Money	91	44
Providing for dependants	73	24
Relationships	64	28
Community	64	18
Work related issues	55	30
Children	55	12
Work as helpful	55	9
Food	45	9
Social status	45	11
Shelter	36	6
Spouse/s	36	11
Progression	36	7
Work relations	36	26
Management	36	11
Crime	27	9
Social status through education	27	18
Stimulation	27	4
Job specific	27	8
Education	18	3
Aging	18	3
Possessions	18	2
Family	18	6
Study	18	4
Government	18	3
Unemployment	18	2
Transport	18	6
Neighbourhood	18	3
Civil obligation	18	2
Colleagues	18	13
Clients	18	2
Policy	18	18
Development	18	17
Promotion	18	10
Training	18	7
Retirement	9	5
Instability	9	1
Salary	9	1

TABLE 6: % OF SUBJECTS AND STATEMENTS REFERRING TO STRESSORS

Although not indicated as a stressor, it is interesting to note how many subjects framed their work in a positive light. 55% of subjects (and 9 statements) spoke about their work

as being a “depressor” or helpful agent. For example case #9 said “if I come to work I forget what was given to me”.

Stress as a concept for this sample

75% of the subjects used the term stress during their interview, without the interviewer using the term first.

There were a number of defensive statements made during the interviews that stress was not something that the subjects suffered from. Despite the clarifications that stress is a normal phenomenon, the following statements reveal how the subjects related to the concept.

- No life is not much difficult (case #2)
- Is money. No I like that is no other problems (case #2)
- Ah! Physically I'm alright (case #2)
- I don't know how others feel but not me (case #2)
- So all that is normal, i take it as normal (case #3)
- Like everyone else (case #3)
- I don't have much worries myself (case #3)
- Its not actually a worry it's a wish (case #3)
- Stress is not me (case #6)
- No! I don't get stressed (case #6)
- Ah its fine I don't have any problems about it (case #6)
- But it doesn't mean that it effect me too much (case #8)
- Because it is not the difficulty that I would reach to the doctor about (case #8)
- About thinking it does not affect my body (case #8)
- It used to be like that but each and everyone is having problem to pay (case #9)
- No I don't have worries (case #11)
- No, no worries (case #11)

In the demographic questionnaire the subjects were asked to rate how stressful they felt their work was. Most subjects reported at least a classification of “fairly stressful”. As

such some level of stress would thus be present at work. In the interview the subjects conveyed that work was not stressful. This lends weight to the argument that the subjects were perceiving stress in the interview and checklist as an abnormal, excessive phenomena that did not apply to them.

Coping mechanisms

The following coping strategies were elicited from the interviews. Examples of statements made and the percentage of subjects using such coping mechanisms are provided.

Sharing with others/ taking strength from others – 63% of subjects

- its better when I share talk to someone else (case #1)
- being alone is not helpful (case #2)
- being here takes all my stress and worries (case #2)
- when I see my kids I see things can be better then (case #7)
- I'm only depending on her (mom), when I'm hurt I go to her (case #7)
- If I have got something that I don't understand or something which is a problem, I just ask somebody next to me at work or home (case #8)
- I try to convey the problem to my friends again, we share the problem (case #9)
- shared problem with doctor and psychologist (case #9)

Avoidance -25% of subjects

- I just keep quiet and let him talk (case #2)
- just ignore it and be free (case #2)
- say there is something or what, try and avoid anything (case #6)
- I don't think about it I have to manage with what I have got (case #6)

Keeping oneself occupied – 25% of subjects

- keeping myself busy - (linked to preference to stand) (case #2)
- You just can't sit I rather take (things to do) (case #2)
- I try to keep myself busy (case #6)

Isolating oneself – 25% of subjects

- just close the window and switch on the (TV) (case #2)
- I prefer to be alone watching TV, listening to music and that stress is coming out (case #7)

Comparing to less fortunate – 13% of subjects

- there are some people who don't even have a roof over their heads so I am thankful that I have a house (case #3)

Denial – 13% of subjects

- it has its difficulties but I don't care about them (case #3)

Physical exercise – 13% of subjects

- go for a run, after that I don't feel anything (case #6)

Discussion

Stress levels

The clinical interview and SSCL produced very discrepant results with regard to stress levels. The SSCL results suggest that only one subject experienced moderate levels of stress. It needs to be considered that the culture of this sample may have more effective coping strategies for handling stressors than the dominant western culture that stress measures have been developed against and in fact that the SSCL scores are accurate. Although most subjects declared in the interviews that they were currently not affected by stress, the intensity that they spoke about stressors would add weight to the assumption that stress was present for the sample even though they refrained from stating it. For example case #7 discussed in a passionate and intense manner stressors that included among others violence, transport problems, living in a relatives home, death of a spouse, limited support structure and feeling that he was unable to care for his children adequately. This subject obtained a score of 0.5 points on the SSCL. The stress levels obtained from the SSCL would appear to be considerably underestimated. This research purports that the stress levels of the subjects are more in line with the stress level allocated by the clinician from the interviews. As such half the subjects were

classified to suffer from profound stress, 38% from severe stress and 13% from moderate stress levels. Given the discrepancy between the two methods of data collection, further research with such a sample to obtain reliable and valid stress levels is required.

Symptoms

With both methods of data collection, subjects reported less psychological problems. On the SSCL, subjects reported more physical symptoms. In the interview, subjects reported more behavioural symptoms. The SSCL identified a wider range of symptoms of stress that related to the subject than the interview whereas the interview outlined symptoms that were applicable to more subjects at a time. The SSCL highlighted particular symptoms such as “feel your appearance has altered for the worst” and “Tics/nervous habits” which are not encompassed by the general symptoms identified by the interview. When reviewing both methods of data, headaches and sleep disturbances are prominent symptoms. The interview suggests mood changes, muscle pain, work output and energy levels are prominent symptoms of stress. The SSCL identified disturbing dreams/nightmares, frequent indigestion, memory loss and little sense of humour as symptoms applicable to a number of subjects.

Stressors

The results from this data suggest that personal stressors are the biggest burden for this sample. Subjects were more able to discuss stressors in the area of personal stressors than societal or work-related stressors. Money was by far the biggest concern raise for the subjects with the majority of subjects speaking specifically of the burden of providing basic needs for their dependants. It is theorized that the dominance of this stressor may result in the subjects not identifying as strongly with other stressors in their lives. This argument is supported by the 82% of subjects indicating in the demographic questionnaire that they experienced work as at least fairly stressful (rated 2 or 3 out of a possible 5), whereas only 45% spoke of work stressors in the interviews.

In relation to personal stressors, 64% of subjects spoke of relationships as being stressful. In particular managing their children and living with conflict with their spouses. Some subjects related how their living conditions are stressful, particularly in the townships and squatter camps. The strain of HIV which has burdened South African

society was not referred to by the subjects. Given the reported infection rates of between 4.5 million and 6.3million South African's it would be highly improbable that HIV has not affected at least one of the subjects in this research either directly or indirectly (Kahn, 2005). The stark absence of reference to HIV as a stressor, may reflect the stigma and non-disclosure of the illness that is dominant in society.

Societal related issues were discussed by 64% of the subjects. Stressors included, public transport, violent neighbourhoods, instability and crime such as robbery and violence.

Work-related stressors were only identified by 55% of the subjects. The subjects that did disclose stressors within the work environment elaborated in more depth than the average discussion generated around stressors which may suggest that work related stressors play more of a role in the lives of these subjects than the results this data suggests. Although the researchers made a concerted effort to communicate to the subjects that they were not a representative of their work or management, this factor may have caused the subjects to refrain from disclosing work stressors or prompted them to speak of work in a positive light. Of interest is the 55% of subjects who reported work to be a helpful agency that reduced stress rather than contributed to it. This sentiment was not only referring to the fact that work provides the subjects with money (their biggest stressor) but also that it kept them keep busy and removes them from the difficulty of facing personal stressors at home. Those with tertiary education discussed more difficulties with work than other subjects. Only one statement indicated that a subject saw their job as potentially dangerous and stressful due to crime related potential. This finding is in line with the findings of Grier (1982) and Swanepoel and Pienaar (2004) who found that policemen found organizational aspects of police work as stressful as the inherent dangers in their work. In this study, the potential danger was not indicated by the subjects. The majority of work-related stressors were management related with the subjects feeling that development and promotional opportunities were not adequately provided.

Specific to this sample of security guards who are employed by a university, 27% felt pressure from the academic environment to achieve educational status. This resulted in

some feeling inferior to their clients, wishing to or engaging in study and encouraging their children to achieve higher levels of education.

Method of collection

The use of two data collection methods did provide a richer insight into the construct of stress in this sample. Although discrepancies in the data were experienced, it was primarily noted in the stress levels obtained for the subjects. In this regard, the subject's reluctance to view stress as impacting their lives was consistent between the two methods of data collection. The interview was more informative for understanding stress levels in the sample as it appeared to be easier for them to talk about their worries rather than the affect that it has on them. The interview enabled a clinical impression of stress levels to be formulated however this is not as empirically valid and reliable as a structured tool such as a checklist. Although assisting the research to gain insight into the types of symptoms of stress that the subjects are likely to experience, the SSCL was not able to accurately reflect the stress levels in this sample. It should be recognized that the SSCL is designed as a self administration tool and the oral administration may have contributed to the subject's reluctance to disclose their experience of stress. Self administration would however not have been appropriate as the majority of items in the SSCL had to be reworded for the subjects. Although the SSCL is designed to be appropriate for subjects with a limited formal education, this sample of second language English speakers needed assistance with the terminology. The SSCL was designed to be brief and easy to administer the time required for administration of the SSCL equalled or extended the time needed to conduct the interview. No trends were evident between the data of subjects that completed one method of data collection before another.

Accessing the concept of stress within this population

Three quarters of the subjects used the term "stress" in their discussion which suggests that stress is a known construct for the sample. The subjects as a whole were experienced as being highly defensive to revealing the personal impact on their lives. Examples of such defensive statements are outlined in under the heading "stress as a concept for this sample". This defensiveness was noted in both the interview and the checklist. A number of possibilities could account for this defensiveness. Firstly the subjects underwent medical tests on the same day as the interviews were conducted and this may have influenced the subjects to assume that the researchers were

enquiring about pathology rather than an everyday construct. Secondly, the subjects appeared to view experiencing symptoms of stress as weakness. The subjects being predominately black males may have been reluctant to disclose weakness to white female interviewers. The oral administration of the SCCL may have fostered a tendency towards non disclosure that may not have been evident with self administration. Equally feasible could be that the gender and race differences facilitate disclosure of the impact of stress as a white female researcher may be perceived as more removed from cultural implications. The female subject did not disclose the impact of stress in a different manner to the male subjects. Future research conducted by black researchers of different genders would shed light on this phenomena.

Linked to the above hypothesis, the defensiveness surrounding recognising stress in their lives may be culturally appropriate. The black urban culture may suppress the recognition of personal difficulties. There is no current research in this area, the negative connotation that stress appeared to evoke for the subjects highlights the need for further research into the cultural assumptions of stress in this population.

The defensiveness about recognising stress in their lives may be a result of the hardship this sample experiences in attending to their basic needs. This difficulty is evident in the major stressor of money being advocated by all subjects. If the subject's energy needs to be channelled into survival needs, stressors and their symptoms that have been well documented in the corporate arena may not be of concern for this sample. Either the subjects' energies are so channelled in one arena that other areas fade into insignificance or in the purpose of protecting the subjects in overwhelming situations, the mind defends against being aware or focussing on other stressors.

The coping mechanisms that were extracted from the interviews lends support to the assumption that the subjects experience stress and defended against reporting it. Although 63% spoke about sharing problems to relieve stress, the majority of these subjects relied on close family and friends and may have experienced difficulty in sharing with a stranger. The other coping mechanisms such as avoidance, keeping oneself occupied, isolating oneself and denial, may explain why it was hard for the subjects to speak about stress and its personal effect in the here and now.

Although 75% of subjects initiated the use of the term “stress” in discussion during the interview, language was a difficulty for accessing the required data. 52 of the 87 items on the SSCL needed to be rephrased during the checklist interview. There were times in the interview when subjects misunderstood questions asked. An example of this can be seen in the interview with case #2;

Interviewer: “worrying about the future do you think that it affects how you behave at all?”

Case #2: “Its changing, its changing. Cause since I sit down with my wife and explaining it has changed when she sees my way”.

In the demographic questionnaire, subjects were asked to tick coupled descriptions that best reflected how they experienced work. The descriptions were as follows

1. Exciting or boring
2. Rewarding or undermining
3. Challenging or easy
4. Stimulating or tiring
5. Informative or repetitive

The language difficulty for these 2nd language English speakers is evident in the incongruent descriptions that were given by subjects such as 5 subjects described work as easy and stimulating, 4 subjects described work as stimulating and repetitive. 3 subjects said it was exciting and undermining. The poor understanding of English and the impact on responding to written questionnaires as highlighted by these incongruencies suggests that it would be inappropriate to administer the SSCL this way.

Suggested changes to methods of data collection

The Interview

The interview would have benefited by psycho-educating the subjects on the research's understanding of stress. Without indicating the exact symptoms one experiences, stress as a normal phenomena needs to be emphasized to the subjects. An attempt to bring participants to the same understanding of stress as is purported by this research should be undertaken. In addition, the interview should ascertain a fuller understanding of the meanings behind language that the subjects make use of. For example when case #1 reported that he slept fine in the week prior to the interview, the interviewer should have enquired as to what he regarded a fine nights sleep to be. This would necessitate an increase in the length of time needed for the interview which was not available for this set of data collection.

The SSCL

The frequency indicators of at least once a month and at least once a week need to be revised, if a subject experiences sleep disturbances every night of one week and sleeps adequately for the next 3 weeks, he would indicate this as at least once a month whereas on average he has had disturbed sleep for 7 nights of the month and someone who had occasional disturbed sleep once a week would have scored higher for only 4 nights of disturbed sleep.

The language used in the SCCL was not accessible for the subjects. As stated above 52 of the 87 items from the checklist needed to be reworded for the subjects. Some of the questions such as "need to constantly take work home" were not applicable to this population. The following revised checklist is proposed for further research within this population. The items consist of those that were indicated by the subjects in this research. Behavioural change towards others and weight loss has also been added in attempt to elicit information such as was provided by case #3.

Physical	
Unusual tiredness	
Uncomfortable/ sore stomach	
Disturbing dreams/nightmares	
Unexplained headaches	
Feel like your appearance has altered for the worst	
Difficulty relaxing	
Feel sick sometimes	
Sweating a lot for no reason	
Sore muscles	
Dizzy spells	
Feeling physically unwell	
Psychological	
Being afraid of disease/ illness	
Feeling helpless	
Feel depressed/ sad/ unhappy	
Feel you can't cope	
Feel anxious/ worried	
Feel mixed up	
Feel you are being gossiped about	
Being over critical of yourself	
Feel that you are often seen as doing things wrong	
Feel that you have been let down	
Feel panicky	
Feel lonely with no one to talk to	
Upset by disease/ illness in others	
Lack of belief in yourself	
Behavioural	
Memory loss/forgetfulness	
Sleep disturbances	
Worrying about troubles	
Suppressed/unexpressed anger	
Poor concentration	
Tics/nervous habits	
Lack of interest in life	
Little sense of humor	
Inability to meet deadlines	
Need to regularly work late	
Feel angry/moody/irritable	
Low interest in work	
Changed behaviour towards others	
Excessive appetite	
Unexplained weight loss	
Often moaning about or criticizing others	

This should be supplemented by asking for any additional symptoms that the subject feels are particular to them. An alternative measure of intensity should be considered. A possible alternative to the weekly/ monthly classification could be a 5-point Likert scale that asked the subject to rate the impact of the symptom on their daily functioning. The SSCL original checklist and classification categories could be used as a starting point for interpreting scores but further research is needed with regard to this adaptation.

In Combination

Given the difficulty of tapping into the construct of stress within this sample, the two methods of interviewing could be used together to assess stress levels and the subsequent symptoms. The interview could explore worries that are specific to the subject while reemphasising the normality and universality of stress. The revised checklist could then be administered in exploration of the symptoms that pertain to the subject.

Conclusions and Indications for Future Research

In closing, this research has indicated the complex nature of accessing stress within such a sample of security guards. Although the subjects were guarded against reporting the intensity to which they experienced symptoms of stress, stress does seem to apply to this population and thus interventions would be prescribed for this population. Physical and behavioural symptoms would appear to be the most recognized expression of stress for this population.

This research would suggest that personal stressors are the greatest contributors towards stress in security guards on the University of Witwatersrand Campus. Money related stressors were presented as the most significant stressor. Work related stressors did not impact the subjects as strongly as personal stressors and over half of the subjects experienced work as a helping agent against stress. Subjects identified with behavioural and physical symptoms of stress over psychological symptoms.

The two methods of data collection provided contrasting information which helped to understand how this sample of subjects respond to stress. The interview provided more data for understanding the construct. It was also a more flexible tool that was better suited to the exploratory nature of this research. The SSCL has many attributes that promote it as a South African stress tool however it did not prove sensitive enough to pick up stress levels in this sample. Although the quantitative results of the SSCL provided little understanding into the levels of stress experienced by the sample, it did indicate symptoms that seem relevant for this population. Future research that made use of such information in a semi-structured interview would further our understanding in this regard. Psychoeducation that is general and non-leading about stress before further research is conducted with future samples of security guards on the University on the Witwatersrand campus, may reduce the guardedness that was experienced by the subjects in this research. Alternatively, clarification as to what the subject understands by stress at the onset of an interview may give the researcher an opportunity to correct assumptions that may hinder disclosure regarding stress in their lives.

There is no research into the manner in which stress manifests culturally for this population. This research indicates that there are cultural issues that surround the construct. Hypotheses as to the nature of such issues have been postulated however further research that targets this phenomena is required.

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Appendix A

Interview Protocol

The basic purpose of the interview is introduced by saying that the interviewer would like to try and understand how life is for the subject and what things make life more difficult.

“Do you find you worry a lot about things?”

To expand –

- **Can you tell me more?**
- **What worries you?**
- **How often?**

If the subject is confused direction may be given such as

“Everyone has things that they worry about, it is a normal part of life. I am wondering if there are things at home, or work or in the community that worry you?”

If the subject states that nothing worries them, conversation can be encouraged by asking about the person’s life, such as

“Tell me about your family, are you married?”

Or

“I know you are a security guard but can you help me understand what work you do?”

For specifics, the following will be asked if not covered in the spontaneous conversation

“How well do you feel?”

- **In what way do you feel sick?**
- **How often?**

“Do you get tired easily?”

- **Is this different from in the past?**

“Do you have things you enjoy doing?”

- Is this different from in the past?

“Are there times when you feel that you cannot cope?”

- How often?
- Is this different from in the past?

“Are there people who you feel support and help you?”

“Do you feel you are coping?”

“Do you find yourself forgetting things you feel you should remember?”

- Is this different from in the past?
- Does this affect your ability to work?

“Have you noticed any changes in how hungry you feel?”

“Do you get cross and lose your temper easily?”

- In what way?
- Is this different from in the past?

Appendix B

Stress Symptom Checklist (SCCL)

Appendix C

Consent Form

**RESEARCH ON STRESS WITHIN THE
KANGOO JUMPS RESEARCH STUDY**

MA CLINICAL PSYCHOLOGY
WITS PSYCHOLOGY DEPARTMENT

CONSENT FORM

AUDIO TAPING AND TRANSCRIPTION OF INTERVIEW

I hereby give my consent for my interview on stress, to be conducted during the Kangoo Jump Research Study, to be audio taped and transcribed. It is understood that this material will be treated as strictly confidential within the research team and that the tapes and transcriptions will be destroyed on completion of the research.

Name of Participant

Study Code #

Signature

Date

Appendix D

Ethical Considerations

To guard against ethical violations;

- The nature of the study and their participation in it was communicated in an in-depth manner and the subjects had the opportunity to ask questions about their participation in the study.
- The security guards were asked to sign consent forms before participating in the study.
- Signed consent was obtained for the interviews to be recorded.
- The subjects were voluntary participants and the aim of the research will be explained in a clear and honest manner.
- There was no employer prejudice if a subject decline to participate or dropped out of the research project.
- All identifying data was kept confidential, the subjects were given a number that followed all the data collected in the study and hence no identifying data could be elicited from the material.
- Given the one female participant in this study, statements that may result in identification due to gender classification have been removed. By default, the statements recorded in this research have all been reported from a male perspective.
- The data included in this research has been referenced by a different code than the number that was allocated to the subject during the data collection to avoid subjects who were part of the study recalling the number and hence statement of a fellow subject.
- Where the research process evoked psychological issues that required attention, the participants were directed for therapeutic intervention.

Appendix E

Statements from interview indicating symptoms of stress experienced by security guards

A. PHYSICAL

1. Headaches

- Headaches (case #1)
- maybe sometimes headaches (case #2)
- and headache, a bit of a headache some pain I have in head, not a severe pain (case #7)
- my headaches just come when the thought comes out (case #9)

2. Muscle Pain

a. Change

- my shoulders were heavy, forceful (case #3)
- I can feel my body telling me I need to go for a run (case #6)
- used to be like that (feel pain in body)...comes and goes (case #9)
- I feel, I think that I must do this and then I will be free (case #6)

b. No Change

- no muscle pain (case #2)

B. PSYCHOLOGICAL

1. Feeling isolated

- I feel like I am alone now (case #1)
- I need someone to advise me (case #1)
- its really hard not to have them around (case #1)
- I sometimes cry if I think more about what they might be doing with me if they were still alive (case #1)
- its better when I share talk to someone else (case #1)

- being alone is not helpful (case #2)
- cause when I die no money working (case #2)
- (if) he would be old now he could help (case #2)

2. Negative feelings of self/ can't cope

- I think it destroyed me (case #1)
- (stress) it brings back all the memory that is the worse part (case #1)
- its better when I share talk to someone else (case #1)
- I feel like maybe one can come with ones own ideas of how to settle something (case #1)
- Things that are beyond my control (case #3)

3. Feel depressed

- I get very depressed and down (case #3)
- Sometimes I cry if I think more about what they might have been doing with me if they were still alive (case #1)

C. BEHAVIOURAL

1. Mood Change

- I become angry (case #1)
- I get frustrated now and then but I've got no problem (case #2)
- (when you are made to sit down do you get irritated) yeas actually, I don't feel comfortable to sit (case #2)
- Furious...Jesus I was mad (case #3)
- if I about it I will end up getting cross (case #6)
- one that make me cross I feel like sometimes fighting (case #7)
- (do you get cross) yeah sometimes (case #11)
- I feel like sometimes hitting that one who made me angry (case #7)
- (worse when you are stressed) Yah (case #7)
- but I am not a person who likes fighting (case #7)

2. Memory

- it effects my memory (case #1)

- I'm just afraid of the memory I read something it quickly go out (case #1)
- especially when I am trying to concentrate for something that I have read to stay in my head, (case #1)
- to remember is difficult (case #1)
- memory (case #1)
- but if you can help me with my memory (case #1)

3. Appetite

a. Change

- when I am stressed I don't even feel like eating (case #1)
- if I am stressed I don't eat(case #9)

b. No Change

- I like food, I like eating too much I can't tell you when I am stressed I eat a lot or what (case #7)
- I have appetite always (case #8)
- eating fine (case #11)
- I was eating but I was stressed (case #3)

4. Weight loss

- I lost a lot of weight (case #3)
- I was eating but I was stressed (case #3)

5. Sleep Disturbance

a. Change

- sometimes I don't sleep (case #1)
- I was restless (case #3)
- sometimes can't sleep (case #8)
- (before) I didn't sleep at night, I got a tablet to sleep (case #9)

b. No Change

- yah for sure I do sleep well (case #7)

- no I sleep well (case #11)

6. Work Output

- not given the opportunity to give service accordingly (case #1)
- I can't go extra mile (case #3)
- I always do my best but it is hard to push oneself (case #5)
- (withdraws - did not speak to colleague looking for her) (case #3)
- (mistrusting) (case #3)

7. Energy levels

a. Change

- I just stay (case #3)
- I get quite tired (case #7)
- (are you more tired) yes but not like before (case #9)

b. No Change

- not feeling tired/ less energy (case #2)
- (do you feel tired) No (case #11)

8. Worry

- Just thinking, sometimes just trying to get a plan (case #8)

Appendix F.

Statements from interview indicating the stressors discussed by security guards in the interview

B. Personal

1. Money

- it helps if you have money, mostly (money) (case #2)
- That is my really big problem (case #2)
- That is a big problem (to make your money stretch) (case #2)
- because I cannot afford I am forced to take them to that place (case #7)
- money (case #8)
- no well if effects me but not a lot, not very strongly (case #8)
- difficulty is when it comes to like...pay day...sitting down calculate what accounts to pay, friends to owe, wow is something (case #8)
- I think (money) is the biggest one yah (case #8)
- the money, if you can share with others but it is hard (case #8)
- spending my money incase end of month is more stressful (case #9)
- too many things that I want to pay that I don't have money for (case #9)
- maybe two or three months we have had money to pay back (case #9)
- problem is money (case #11)
- if I had that money to give them (case #11)
- money it is the most problem (case #4)
- money is what my worries are (case #5)
- if only one could have more money (case #10)

a. Providing

i) For dependants

- food, to provide at home, to give to family, its very hard (case #2)
- if you don't have you have to borrow from friends (case #2)
- (if) he would be old now he could help (case #2)

- my child say "I want some sweets" (case #6)
- The child will keep on asking (case #6)
- if I think about it I end up getting cross (case #6)
- takes me responsibility to care for them, buy them food, clothes you know (case #7)
- (if you are not able to give them the things they want it is hard) (case #8)
- Having to give all the time is what is hard (case #9)

ii) Shelter

- small yard (case #2)
- court order - they want a deposit (for lights) (case #3)
- where we are staying is a back room (case #7)
- so my worries are sharing a house (case #7)
- first living amongst squatter camp (case #9)
- I actually lost my house (case #3)

iii) Education

- because I cannot afford I am forced to take them to that place (case #7)
- it has been a struggle for education (case #4)
- I have one daughter in University, and another doing courses in that place. It is hard to make payments for the tuition (case #4)

iv) Retirement

- have got an investment (difficulty putting money away) (case #2)
- provide for the future (case #2)
- cause when I die no money working (case #2)
- supposed to be retired at 65 (case #2)
- have to push him hard (so he can earn for them) (case #2)
 - **Aging**
 - We will be old now and still need to support him (case #2)
 - cause when I die (case #2)

- I have aged with no progress for my years (case #5)

b. Possessions

i) Furniture

- like furniture - we have to pay over next 6mths (case #9)

ii) Car

- I bought a car, the car broke down, it never, it doesn't work (case #3)

2. Relationships

a. Spouse/s

- but to talk to my wife...say no (case #2)
- (she doesn't understand she is uneducated) (case #2)
- my wife fighting may effect me (case #2)
- she started arguing with me (case #2)
- when she says "yes I understand" I feel free (case #2)
- my wife is sick (case #2)
- like problems with my marriage but we worked that out (case #3)
- I got married to other lady and she died (case #7)
- Two wives (case #11)
- its difficult, just following our parents with two wives (case #11)
- (worries a few months ago) yeah I was back home I was just fighting with her (case #11)

b. Children

- have to push him hard (case #2)
- he has got to study hard (case #2)
- I want him to do well (case #2)
- my child say "I want some sweets" (case #6)
- The child will keep on asking (case #6)

- takes me responsibility to care for them, buy them food, clothes you know (case #7)
- crèche- conditions are not good cause they are young (case #7)
- (you worry about them being at crèche) yah for sure (case #7)
- with one I have 5 and the other two, ...it is hard (case #11)
- it is difficult 'cause if one comes with things that they need you to do for them and then another comes (case #11)
- As a father you want more for your children (case #4)
- The problem is with my son (misconduct) (subject33)

c. Family

- I got a call that my father is sick last year and break up my studies, I couldn't manage to write
- memories of the passing away of my relatives (case #1)
- (unexpected death i.e. not age related) (case #1)
- Jealousy about succeeding (case #1)
- (The killing) is not stopping now because they don't see us going down (case #1)
- my Gran has already died (case #7)

3. Social Status

a. Progression

- Jealousy about succeeding (case #1)
- trying to move forward in our lives (case #1)
- I still want to get further with my studies (case #1)
- I want to achieve (case #3)
- worry about to better living (case #3)
- making a better life (case #7)
- my children must have more chance in life than me (case #4)

b. Study

- I try to study for degree in Damelin (case #1)

- Couldn't manage to write even this year couldn't manage to register (case #1)
- I still want to get further with my studies (case #1)
- I have furthered myself studying my discipline (case #5)

B. Societal

1. Government

a. Tax

- the more you earn the more the government takes away (case #2)

b. Failure of judicial system

- We even try to get a legal advisor ...but he didn't succeed, and I think that is why it is worse (case #1)
- If we knew who killed him and he was penalized, then maybe sometimes we would be relieved (case #1)

2. Unemployment

- when I was out of a job, I get very depressed and down (case #3)
- It was too stressful when I didn't have a job, now is easier (case #10)

3. Community

a. Instability

- feeling my futures' uncertain (case #7)

b. Crime

- crime (case #7)
- war (case #7)

i) Robbery

- my car was stolen (case #3)
- not robbing each other (case #7)

ii) Violence

- many people getting hurt (case #7)
- everyone should be free (case #7)
- not killing each other (case #7)
- not hating each other (case #7)
- the first brother that passed away, he was shot (case #1)
- (The killing) is not stopping now because they don't see us going down (case #1)

c. Transport

- public transport, I can't be on time (case #3)
- public transport, I can't finish what I want to do (case #3)
- yah transport (case #7)

d. Neighbourhood

- (Soweto) really there it is terrible, but I have no choice I haven't got a place to stay (case #7)
- there is criminals there...they know that I am a security so they can't be sure that I don't have a firearm (case #7)
- first living amongst squatter camp (case #9)

e. Civil Obligation

- We have to share (case #2)
- the money, if you can share with others but it is hard (case #8)

C. Work

1. People

a. Management

- I have not yet been paid for my uniform. They said to give my receipt and the doctors letter which I did but there is nothing that has come back for me (case #10)
- I feel like they don't hear me, that I am not important (case #10)

i) Incompetent

- (management) are not in a position or level where I think they must be (case #1)
- management becomes too many black people it is a problem
 - **Prejudice**
 - I feel I have been bypassed (case #5)
 - because of jealousy and favoritism from those in management I have not received a promotion (case #5)
 - **Other work environments**
 - Not similar to other institutions for example UNISA (case #1)
 - They give skills to them (case #1)
 - To get all the information from other institutions as to how do they operate in security...I think in that sense we will manage to minimize the crime (case #1)
 - past employer was very professional (case #3)
 - they were educated (case #3)

b. Colleagues

- kind of people that works here are difficult to understand (case #3)
- I always told myself it is because of old age (case #3)
- not educated (case #3)
- don't know how to differentiate things (case #3)
- they can't take jokes and I like joking you see (case #3)
- I am new so they say no just do it this way (case #3)
- (not liking the way procedures are handled) - it is not professional (case #3)
- (being unsupportive of each other) - traffic sticker (case #3)
- big compliment (case #3)
- (subject no longer proactive due to past experiences with colleagues) (case #3)

- (The colleague) thinks that you should be lower than him (case #3)
- Problem is some people don't want to listen (case #3)
- I am older with more experience than the ones I work along side (case #5)

c. Clients

- people can be difficult (case #2)
- the people that we serve will undermine our service (case #1)

2. Policy

a. Development

i) Promotion

- no promotion (case #1)
- it doesn't take you anywhere (case #1)
- got no movement (case #1)
- not only promotion and money but to get skills (case #1)
- possibilities for one to be an operator (case #1)
- you are always at the lower level (case #1)
- I have been longer than others now in management (case #5)
- I feel I have been bypassed (case #5)
- because of jealousy and favoritism from those in management I have not received a promotion (case #5)
- I am older with more experience than the ones I work along side (case #5)

ii) Training

- no input (case #1)
- no skills development (case #1)
- not only promotion and money but to get skills (case #1)
- I would like to know information technology (case #1)
- They give skills to them. It is part of motivation (case #1)

- To get all the information from other institutions as to how do they operate in security...I think in that sense we will manage to minimize the crime (case #1)
- the university does not further their people's skills, I have furthered myself studying my discipline (case #5)

b) Salary

- not only promotion and money but to get skills (case #1)

3. Work related issues

a. Social status

i) Education

- I try to study for degree in Damelin (case #1)
- I couldn't manage to write (exams) (case #1)
- I still want to get further with my studies (case #1)
- working in environment where people are educated (case #1)
- I also feel we as security guards should be taken to a second step (case #1)
- compete with the environment which we are living with (case #1)
- the people that we serve will undermine our service (case #1)
- not to be downgraded (case #1)
- I would like to know information technology (case #1)
- must always be under (case #1)
- (feels downgraded) from security management (case #1)
- we work for doctors, lecturers, professors and stuff (case #2)
- I know them but I want to make sure I stay away (case #2)
- sometimes you end up making friends (case #2)
- not knowing that you are saving his life or car or something (case #2)
- I have furthered myself studying my discipline (case #5)
- Working where we work you see the importance of education (case #4)

- My children must have more chance in life than me (case #4)
- I see the importance of university education being where I work (case #4)

b. Stimulation

- doing one thing from January to December is boring (case #1)
- this campus is no motivation (case #1)
- work just boring (case #3)
- without promotion and change the work is boring (case #5)

c. Job specific

- see what we have to see (crime) (case #2)
- Selected as one of the committee, that is the stress (case #1)
- may effect me (stress wise) sometimes (case #2)
- most of the time I like to spend standing so I have no problem (case #2)
- I don't feel comfortable to sit for a long time (case #2)
- Not sore, I just like standing (case #2)
- the problem is that I have been told by the doctor that I must wear training shoes, not boots that are issued standard for our uniform (case #10)
- there is much walking on my feet for my condition (case #10)

4. Helpful

- work itself gives me money it is OK (case #2)
- No (don't find work too stressful) (case #2)
- (less stressed since he became employed) (case #3)
- so far my colleagues are treating me well I have never seen any bad thing they are doing to me (case #7)
- it is better because if we work hard for the (stopping crime) (case #7)
- definitely I (enjoy) very much, I really enjoy it (case #7)
- at work some things are normal I have no problem (case #8)
- if I come to work I forget what was given to me (case #9)
- It was too stressful when I didn't have a job, now is easier (case #10)

Appendix G

Demographic Questionnaire