

Chapter 1

Introduction & Overview

1 INTRODUCTION

“A psychiatrist with the United States Eight Air Forces described how a B-17 bomber pilot was able to come seemingly untouched through a dreadful experience: On his tenth mission the plane in front of him exploded, and what he took for a piece of debris flew back towards him. It turned out to be a body of one of the gunners, which hit directly the Number two propeller. The body was splattered over the windscreen and froze there. In order to see, the pilot had to borrow a knife from the engineer to scrape the windscreen. He had a momentary twinge of nausea, but the incident meant but little to him. Two missions later; his own plane and crew were heavily damaged and he was himself involved in an emotionally distressing event. Memories of the first event came back to haunt and disturbed him. He could no longer fly” (Moorcroft, 2006:7).

The above experience paints an accurate picture of the intensity of traumatic experiences that individuals such as soldiers, police officers and other emergency personnel may be exposed to. Police work, which was the focus of this research study, has many traumatic experiences for the police officer. However, it is assumed that police officers, because of their job choice should somehow be immune to these traumatic experiences. The old saying ‘*cowboys don’t cry*’ became part of the police culture therefore allowing defenses such as emotional detachment and denial to infiltrate the lives of police officers. Henry (2004:69) researched the trauma associated with police work and explained that “occupational cultures play such a formidable role in shaping behaviour and interpreting work-related experience, we can easily infer that the police occupational culture shapes the officers’ experience of the death encounter”.

Denial or unawareness may cause the effects of the traumatic experience to go unnoticed. However, Van der Kolk (1994) claims that although people may ignore the effects trauma has had upon their lives, it is important to remember that with trauma “*the body keeps score*”. Police officers are human beings, and they are susceptible to the same universal human tendencies and transformations that would affect anyone who witnesses death (Henry, 2004).

Police work in South Africa is dangerous (Rothman and van Rensburg; 2002). With souring levels of crime and violence, the general public has become accustomed to experiencing traumatic events. It is however, the South African police officer who seems to have born the brunt. Cross (2004:1) explained that law enforcement officers experienced critical incidents that are “broad and far-ranging”. Police officers are therefore the individuals who have seen and experienced many gruesome scenes – more than the general public. Chabalala (2004) highlights the potential stressors of high crime levels and violence in the South African environment and the challenges for members of the South African Police Service. Rothmann and van Rensburg (2002) agree with this view that law enforcement is one of the most stressful occupations world-wide.

Trauma is defined by Chabalala (2004:26) as “the situation where an individual is confronted with a life threatening event that is outside the realm of individual coping strategies”. The experiences police officers are faced with on a daily basis in the execution of their duty perfectly fits the above definition of traumatic experiences.

Trauma literature indicates how the trauma experience is unique for each person. Marais (2005) highlights this when she describes how an integral interaction exists between individual temperament and individual response to stress and trauma. Marais (2005) determined that trauma could have an effect on a person’s expression of temperament traits. For the author a person with a vulnerable temperament responds to trauma and stress with bodily complaints, depression and anxiety. It is this interaction between individuals’ temperament and their response to trauma that was the focus of this study.

2 STATEMENT OF PROBLEM AND RATIONALE FOR UNDERTAKING THE STUDY

The South African Police Service (SAPS) provides its employees with formal debriefing services after traumatic events. According to the Formal Debriefing Training Manual the primary goal of the formal debriefing is to ‘*normalize*’ the situation for the employee affected by the traumatic incident (SAPS Formal Debriefing Training Manual; 2003). Personnel employed by the Employee Assistance Services of the SAPS, which includes social work services, spiritual services and psychological services, are trained in a generic trauma-debriefing model. This model is used for all traumatic events and for all employees, irrespective of the type of event, or the employee’s unique perceptions and experiences of the traumatic event. The trauma

debriefing model used by the SAPS is based upon J. Mitchells' Critical Incident Stress Debriefing model and was adapted for use by the SAPS by Jacobs in 1993. Whereas Mitchells' model has a more directive and educational emphasis, the Jacobs model focusses more on empowering the individual or group (SAPS, National Trauma Debriefing Project; 2000). This approach contradicts the generally accepted idea that no two people are alike and therefore no one person experiences a traumatic event or is affected by the traumatic event in the same way.

Thus the question is posed whether or not this model makes provision for individual differences and the possible impact of these differences in the way trauma affects police officers. Moreover, one can ask whether individuals with similar temperament styles experience similar effects after being exposed to trauma should also be determined. Literature (Weiten, 1995 and Everstine and Everstine, 1993) suggests that individuals experience trauma in different ways.

In particular this research focussed on police officers who worked as trained dog handlers within the SAPS Soweto and explained how these police officers' unique temperament styles were affected in unique ways to traumatic incidents. As mentioned by Scott and Palmer (2000) traumas such as divorce or loss of job can usher in depression, but not everyone experiencing such events becomes depressed. Therefore there appears to be something about the person-in-environment fit between a person and the traumatic event that can lead to depression.

3 RESEARCH QUESTIONS

The research questions pertaining to this study included: (1) Is it possible to identify what specific physical, emotional and/or behavioural effects traumatic experiences dog handlers experienced in their work setting? And (2) Is there a connection between traumatic effects experienced and individual temperament styles of police dog handlers?

4 ANTICIPATED VALUE OF THE RESEARCH STUDY

The information obtained from this research study may be beneficial to South African police officers as the findings may highlight the uniqueness of their trauma experiences. Moreover, the findings may assist the SAPS to approach trauma management with this perspective. Additional areas for further research could also be identified.

5 OVERVIEW OF THE RESEARCH DESIGN

An exploratory-descriptive design incorporating a combination of quantitative and qualitative research methods was selected to address the aims of the research study.

The qualitative and quantitative methods was used in what Niglas (2005) described as a multi-method design. Niglas (2005) in describing the combined use of qualitative and quantitative approaches identified multi-method designs as designs where both quantitative and qualitative approaches are used, but they remain independent until the interpretation stage. For the purpose of achieving the aims of the research study it was necessary to firstly conduct the quantitative method of the research design by determining the respondents' temperament styles where after the qualitative method of the research design was implemented through the use of a semi-structured interview schedule. Therefore the data remained independent until the interpretation stage.

6 LIMITATIONS OF THE STUDY

The limitations of the study were as follows:

6.1 POSSIBLE CATEGORIZING OF THE RESPONDENTS

When trying to determine an individual's temperament style there is a danger of putting an individual in a certain category. The Keirsey Temperament Sorter that was used to determine the respondents' temperament styles was developed with the consideration that individuals' preferences might change according to where people are in their lives as well as the environment in which they find themselves. The researcher therefore considered the information gained from the questionnaires not to be cast in stone but rather as the style individuals had chosen due to their current unique circumstances and that there is a definite possibility that temperament might change over time.

6.2 LANGUAGE BARRIER

Administrating the research tools in English brought another limitation to the study. English was not any of the fifteen respondents' first language. The language barrier could have caused confusion and valuable information might have been lost due to the respondents and the researcher not clearly understanding each other.

This limitation was partly addressed by the chosen research design. During the administration of the research tools, the researcher was present and available to clarify any confusion regarding any questions the respondents had in completing the research tools.

6.3 THE KEIRSEY TEMPERAMENT SORTER – QUESTIONNAIRE

The Keirsey Temperament Sorter might have contained terms that were difficult for some respondents to understand. It appeared as if some of the words used to formulate the questions were not always easy to understand. In order to help the respondents understand the questionnaire, an explanation list was attached to each questionnaire, thereby ensuring that each respondent would have the same explanations for terms that they may be uncertain about (Appendix C). This procedure facilitated understanding of the questions but in turn may also have affected the validity of the research tool.

6.4 LIMITATIONS OF THE SAMPLE

Using only men in the study limited the research to male dog handlers. The information used is therefore only applicable to the male dog handlers in Soweto SAPS and therefore constituted a limitation of the study.

6.5 THE RESEARCH DESIGN

When people complete questionnaires they have different insights into the questions asked which may have impacted on the way they chose to respond to the questions. As Burks and Rubenstein (1979) rightfully indicated it is very important for people to know their own style of reacting and have the capacity and ability to realize the way they act and how they are able to cope with the situation before they are able to communicate it to others. This factor may have limited the research in that the respondents might have had difficulty in giving a true reflection of their temperaments.

7 DEFINITION OF KEY TERMS

There are main two concepts linked to this research report. They are:

7.1 TEMPERAMENT

Heineman (1995) defines temperament as a characteristic indication of the individual's natural tendency of responding to and using stimuli. For Heineman (1995:1), "Temperament is the

characteristic phenomenon of an individual's emotional nature, including his susceptibility to emotional stimulation, his customary strength and speed of response, the quality of his prevailing mood and all the peculiarities of fluctuation and intensity of mood”.

7.2 TRAUMA

Lee (1997) suggests that the trauma experience creates feelings of being psychologically overwhelmed. For him a traumatic incident leaves the person incapable of coping either intellectually or emotionally. For the purpose of this research study traumatic effects are viewed as varying degrees of feeling psychologically overwhelmed by situations.

8 ORGANISATION OF THE RESEARCH REPORT

The following research report will focus on giving a detailed account of the research undertaken. Chapter one is the introduction chapter and explores the rationale for undertaking this specific research study. The research questions and aims of the study are clarified as well as a brief description of the research design. The motivators as well as the anticipated value of the study are also explored.

Chapter two gives a detailed description of the theoretical aspects linked to both personality and temperament. Many personality theorists used the terms personality and temperament interchangeable. The researcher therefore saw it necessary to give a detailed account of both concepts in order to clarify the uniqueness of the related concepts. Chapter two concludes by looking at how individuals choose careers as a result of their unique personalities and then more specifically looks at the different personality- and temperament styles associated with people choosing careers as police officers.

As trauma formed an integral part of the research study, chapter 3 explores the development of trauma theory. After creating an understanding of the historical development of trauma the chapter focusses on specific traumatic experiences that occur as a result of police work.

Chapter four gives a detailed account of the role that individual differences have in how people experience trauma. This chapter explores the importance of acknowledging that individuals have unique experiences when it comes to trauma and that no-one will experience trauma in the exact same way.

Following the literature review of the key concepts related to this research study, chapter five focusses on the research methodology used for achieving the aims of this study. This chapter

describes in detail how the research study was conducted along with descriptions of the tools used to determine the result that are described in chapter six and finally the methods of analyses are explained.

Chapter six gives a detailed account of the results obtained from the Keirsey Temperament Sorter, the Impact of Event Scale – Revised and the interviews.

Chapter seven concludes this research report with an overview of the main findings, conclusions and recommendations that emanated from the research study.

Chapter 2

Personality and Temperament

1 INTRODUCTION

As the concept of '*temperament*' plays a major role in this research study, chapter 2 takes an in-depth look at this concept. From the literature applicable to temperament theories it became evident that the concepts of '*temperament*' and '*personality*' are closely linked. Often used interchangeably it is necessary to distinguish between the two concepts. According to Buss and Poley as cited by Pervin and John (2001) researchers in the general area of trait psychology or individual differences have not been consistent in their terminology.

Many people in the area of trait psychology employ the term '*personality*' as synonymous with the term '*temperament*' and this according to Strelau (1983) creates unnecessary confusion. For Warr (2005) distinction is made when Cattell (1965) sees personality as the study of abilities, temperament, motives, moods, roles and interests. Eysenck (1967) on the other hand equates personality with temperament, yet he made an attempt to relate individual differences in temperament to individual differences in physiological measures, conditioning, perception and attitudes.

The aim of this chapter is to attempt to make a distinction between the two concepts. At this point it is important to acknowledge the interplay between the two concepts, personality and temperament. As mentioned earlier, many theorists often refer to these two concepts interchangeably.

The first section of this chapter will be devoted to creating an in-depth understanding of these two related concepts while the remainder of the chapter will focus on temperament and personality studies specific to people working as police officers.

2 PERSONALITY

The field of personality is concerned with what is generally true of people and human nature as well as with individual differences (Pervin and John, 2001). Individuals are unique in many ways: many definitions and various personality theories support this understanding. Meyer, Moore and Viljoen (1989) argue that personality is used to describe an individual's social

dimension, but also see it as something used in colloquial language to refer to someone's general behavior patterns or nature. Agreeing with both the social dimension and someone's general behavior, Ryckman (1978:4) argues that "personality is seen by many investigators as the scientific study of individual differences in thought and behavior that occur under given situational circumstances".

Many personality theorists seem to agree that personality mainly has to do with individual differences that particularly pertain to thoughts and behaviours. Hampson (1982:1) cites Child's influential definition of personality and argues that, "Personality refers to more or less stable, internal factors that make one person's behaviour consistent from one time to another and different from the behaviour other people would manifest in comparable situations". Meyer et al. (1989:8) agrees to a certain extent with Child emphasizing that personality "is the constantly changing but nevertheless relatively stable organization of all physical, psychological and spiritual characteristics of the individual which determine his behavior in interaction with the environment".

Acknowledging that people differ in many significant ways, Baron and Byrne (1997: 413) describe how many of these differences relate to only five underlying basic dimensions. These five dimensions are seen as the very basic foundations of personality. They are: (1) Extraversion; (2) Agreeableness; (3) Conscientiousness; (4) Emotional Stability and (5) Openness to experience. The table below gives a short explanation of the five dimensions.

Table 1: Five Dimensions of Personality

DIMENSION	DESCRIPTION
Extraversion	"A dimension ranging from sociable, talkative, fun-loving, affectionate, adventurous at one end to retiring, sober, reserved, silent and cautious at the other".
Agreeableness	"A dimension ranging from good-natured, gentle, cooperative, trusting, and helpful at the one end to irritable, ruthless, suspicious, uncooperative and headstrong at the other".
Conscientiousness	"A dimension ranging from well-organized, careful, self-disciplined, responsible, and scrupulous at one end to disorganized, careless, weak-willed and unscrupulous at the other".
Emotional Stability	"A dimension ranging from poised, calm, composed, and not hypochondriacal at the one end to nervous, anxious, excitable and hypochondriacal at the other".
Openness to Experience	"A dimension ranging from imaginative, sensitive, intellectual, and polished at one end to down-to-earth, insensitive, crude, and simple at the other".

(Baron and Byrne, 1997:413)

In order to create an understanding from where the different definitions and foundations of personality originate from, it will be useful to take a look at some of the most influential personality theories.

3 PERSONALITY THEORIES

The following section will give an overview of some of the most well know personality theories throughout time. However, special attention will be given to the personality theory of Carl Jung, upon whose work Keirsey and Bates based their temperament questionnaire. Waters and Cheek cited by Derlega, Winstead and Jones (2005) determine that personality theorists vary in their root assumptions, as can be seen in the table below.

Table 2: Overview of Basic Assumptions of Major Theoretical Approaches in Personality Psychology

Theorists	Innate Quality of Human Nature; at Birth, Infants are Inherently...	Inner / Outer Causes of Behavior	Free Will / Determinism	Importance of Infant and Early Childhood Experiences
Psychoanalytic (Freud)	Selfish (sex and aggression motives)	Inner / unconscious	Determinism	High
Behaviorism (Watson, Skinner, social learning theorists)	Neutral (blank slate)	Outer / Environmental	Determinism	Medium
Humanistic (Rogers)	Good (self-actualization motive)	Inner / conscious	Free Will	Low
Socio-cultural and biosocial (Adler, Horney)	A mix of positive and negative motives	Mix of inner and outer	Mix	Medium to varied

(Derlega, Winstead and Jones, 2005)

3.1 FREUD AND THE PSYCHOANALYTIC TRADITION

Many authors describe Freud's perspectives on personality as the first personality theory because of its comprehensive description of the human personality. According to Derlega et al. (2005:123), "Freud (1856 – 1939) believed that humans are innately selfish, subject to the will of powerful instincts; that human behaviour was largely motivated by intra-psychic conflicts - unconscious processes that dictate human behaviour. Early experience, he believed, provides the subject matter of these conflicts".

3.1.1 THE STRUCTURE OF PERSONALITY

Freud divided the adult personality into three parts: the *id*, *ego* and *superego*. According to Moller (1993) and Meyer et al. (1989) Freud added the following meanings to these dimensions:

- The id is the innate, primitive component of the psyche which is in direct contact with the body from which it obtains energy for all forms of behaviour. This energy is attached to the two different drives that Freud identified as the life drive and the death drive. The id functions according to the primary processes and the pleasure principle, and therefore appears to be selfish and unrealistic. Shaffer (1996) describes the id as the legislator of personality. At birth the personality is all id. The sole function of the id is to serve the instincts by seeking objects that will satisfy them. With the sole function of seeking gratification Ryckman (1978:30) sees the id as "a 'seething cauldron' which contained ever-bubbling primitive urges and desires". Freud believed that these urges insistently and indiscriminately sought expression in the external reality (Ryckman, 1978).
- The ego develops from the id. It serves the id's needs by striving for drive satisfaction. Contrary to the id, the ego takes both physical and social reality into consideration. The ego functions according to the secondary processes and the reality principle, where it uses sensory perception and rationale thinking to judge and weigh up situations before taking action. The ego is also called the executive of the personality.
- Lastly the superego, which also develops from the id through a complicated process in which the individual's contact with the behavioural and moral codes of society plays an important role, functions within the person. The superego functions according to the moral principle. Shaffer (1996:47) sees the superego as the: "Judicial branch of personality".

3.1.2 DEVELOPMENT OF PERSONALITY

Freud's theory of personality development focusses particularly on the development of the sex drive and on how society and the child deal with the accompanying problems. Freud describes the development of the individual as a succession of stages determined by maturation. For Freud an important aspect of development occurs with regard to the structure of personality. The id is inborn, while the ego and superego develop gradually. It is argued that the superego develops during the first six years of life while the ego develops throughout life.

Freud distinguishes between the following developmental stages:

Table 3: Freud's Developmental Stages

Developmental Stage	Description of the Developmental Stage	Impact on Personality Development
The Oral Stage	The sex instinct seeks pleasure through the mouth during this stage. Freud proposed that the child's later psychological development could be affected by the mother's feeding practices	Freud implied that early experiences can have a long-term effect on personality development
The Anal Stage	The anal area is the main source of sexual drive energy. According to Freud the child enjoys sexual pleasure in excretion as well as in retaining excretion	Freud believed that the emotional climate parents create while toilet training could leave lasting imprints on the personality. He claimed that children who are harshly punished for their 'accidents' are apt to become anxious inhibited adults who may be messy or wasteful
The Phallic Stage	Freud saw children at this stage to have matured to the point that their genitals become an interesting and sensitive area of the body. Libido presumably flows to this area as children derive pleasure by fondling their genitals. This stage is Freud's most controversial stage due to his belief that the phallus assumes a critically important role in the psychosexual development of both boys and girls	For Freud this stage is extraordinarily important in the genesis of many mental disorders, because the superego undergoes its main development during this stage
The Latent Stage	The sexual conflicts of the	The ego and superego continue to

	phallic stage have been repressed and energy is channeled into socially acceptable activities	grow stronger as the child gains new problem solving skills
The Genital Stage	The stage is characterized by maturation of the reproductive system. The underlying goal of the sex instinct now becomes biological reproduction through sexual intercourse	

Meyer et al. (1989:59) describe how Freud concentrates on the first three stages, “because he (Freud) maintains that the individual’s personality characteristics are permanently fixed during this period”.

Through his psychoanalytic theory Freud describes four different character types. Ryckman (1978) describes these characters as follows:

- *The Oral Character.* People with this character are fixated at the oral stage. These individuals experience problems in later life relating primarily to receiving or taking things from the external world. In contrast to this, people who have been over indulged during this oral phase are excessively dependent upon others for gratification. Ryckman (1978:39) argue that these individuals “tend to be trusting, accepting, and gullible”.
- *The Anal Character.* According to Freud anal characters have three primary characteristics. They are exceptionally stingy, orderly, and obstinate.
- *The Phallic Character.* Ryckman’s (1978) description of Freud’s character types describes that the difficulties experienced by phallic characters stem from inadequate resolution of the Oedipus complex. According to Ryckman (1978:40), “Phallic characters react to severe castration anxiety by behaving in a reckless, resolute, and self-assured manner”.
- *The Genital Character.* These are people who have made the necessary sexual adjustments. Thus individuals who are able to modify unacceptable impulses into acceptable ones.

3.2 BEHAVIORISM AND SOCIAL LEARNING THEORY

Behaviorism according to Derlega, Winstead and Jones (2005) is not a theory of personality but a general theory of behavior that rejects all explanations of the internal processes of the person. Pervin and John (2001) distinguish between two assumptions one needs to take into account

when trying to understand behaviorism. The first assumption is that nearly all behavior is learned and the second assumption is that objectivity and rigor in the testing of clearly formulated hypotheses are crucial. The preferred research method for behaviorism is laboratory experimentation that studies animals as well as humans. The following table gives a description of the different theorists of behaviorism:

Table 4: Behaviorism Theorists

Theorist	Type of Learning	Characteristics
J.B Watson	Classical conditioning	Passive, associative learning
B.F. Skinner	Instrumental conditioning	Active response selection through reinforcement or series of responses
A. Bandura	Observational learning	Modeling and vicarious reinforcement
A. Bandura and W. Mishchel	Learning rules and symbols	Concepts, strategies and expectancies

(Derlega, Winstead and Jones; 2005)

John B Watson (1878 – 1958) set out to change the definition of psychology from the study of mental life to the science of behavior. Derlega et al. (2005) describe how Watson assumed that human infants were a ‘blank slate’ at birth, and whether they became adults with good or bad habits would be determined by their environment.

The literature surrounding personality theory suggests that B.F Skinner (1904 - 1990) was one of the most influential supporters of an extreme behaviorist point of view, which caused considerable controversy. The uniqueness of Skinner’s theory according to Meyer et al. (1989) lies in the fact that all other personality theories regard factors within the person as determinants of behavior whereas Skinner regards references to internal matters as completely unacceptable and unnecessary for the explanation of behavior. Pervin and John (2001:361) agree with this statement when they indicate that, “the behavioural approach to personality emphasizes situational specificity and minimizes the importance of broad response predispositions relative to the importance of stimuli in the external environment”.

As an extreme behaviorist Skinner believes that all behaviour, from the simplest to the most complex, is learnt and those principles of learning provide a sufficient explanation of how behaviour is required. Meyer et al. (1989:181) describe Skinner’s view of personality as consisting of a person’s learned behavior and quotes Skinner as saying, “Personality is that organization of unique behaviour equipment an individual has acquired under the special conditions of his development”.

Meyer, Moore and Viljoen (1989:192) argue that although Skinner “does not deny the importance of genetic factors nor of maturation, his interest lies almost exclusively on the development of the behaviour of the organism”. For Skinner all responses are learned and remain under the control of reinforcement contingencies in the environment. In agreement with this, Ryckman (1978) considers Skinner’s study of personality to involve a systematic examination of the idiosyncratic learning history and unique genetic background of the individual. Citing Skinner, Ryckman (1978:223) points out that, “In a behavioral analysis, a person is an organism...which has acquired a repertoire of behaviour...(He) is not an originating agent; he is a locus, a point at which may genetic and environmental conditions come together in a joint effect. As such, he remains unquestionably unique. No one else (unless he has an identical twin) has his genetic endowment, and without exception no one else has his personal history. Hence, no one else will behave in precisely the same way”.

Albert Bandura on the other hand helped to pioneer the transition from traditional behaviorism to social learning theory. He studied the role of observation learning in the acquisition of human behaviour. During 1997, according to Derlega et al. (2005) Bandura extended his theory to focus on the most advanced cognitive type of learning - internalized goals, plans and strategies permit self-regulation of complex behaviour. As cited by Derlega et al. (2005:137) “Bandura now emphasizes self-efficiency expectancies as a central feature of personality. On the basis of their perceived self-efficiency, individuals will develop a set of expectations for the self, which have direct consequences for their behaviour”.

3.3 ROGERS AND HUMANISTIC PSYCHOLOGY

The literature surrounding Rogers considers him to be the founder of humanistic psychology. Rogers held an essentially optimistic view of human motivation and human nature. He believed that a central, organizing motive guides human behaviour – the actualizing tendency. The actualizing tendency is the natural human urge ‘to actualize, maintain and enhance the experiencing organism’ (Derlega, Winstead and Jones, 2005:138).

Weiten (1995) and Derlega et al. (2005) describe Rogers’ experiential approach to personality development: For them Rogers believes that the course of development is largely contingent upon the person’s ability to interpret his or her unique experiences without distortion. As Weiten (1995:489) elaborated, “Rogers viewed personality structures in terms of just one construct. He called this construct the *self*, although more widely known today as the *self-concept*”. In terms of personality development Rogers appeared to be concerned with how childhood experiences

promote congruence or incongruence between one's self-concept and one's experience. For Rogers, treating a child with unconditional positive regard provides the foundation for healthy personality development.

3.4 CARL JUNG'S ANALYTICAL THEORY

Carl G. Jung's (1875 – 1961) analytical theory is universally regarded as very complex. Ryckman (1978) goes as far as describing Jung's view not only as complex, but also as esoteric and obscure in many respects. Jung's analytical theory on personality incorporates and develops on some basic Freudian principles (Meyer, Moore and Viljoen, 1989). These authors suggest that although Freud's influence was quite clear in Jung's earlier work on personality he soon developed his own elaborate theory on the human personality. Moller (1993) sees Jung's theory as analytical because he goes much deeper into analyzing the unconscious than Freud did. In his analysis of the psyche Jung reveals its many composite elements and emphasizes its complexity. Boeree (2006) argues that Jung sees the human being as a complex organism whose totality contains opposing factors which can drive or attract him into action consciously or unconsciously. Meyer, Moore and Viljoen (1989:76) summarize Jung's perceptions regarding the dimensions of being humans as:

- A physiological dimension which includes all physiological processes and drives necessary for physical survival;
- A social dimension which is concerned with interaction with other people;
- A psychic dimension which refers to all those conscious processes which cannot be logically understood or explained; and
- A spiritual or religious dimension referring to people's dependence on and subjection to irrational experiences. For Jung the human being is both a rational as well as an irrational being.

3.4.1 THE STRUCTURE OF PERSONALITY

Moller (1996) describes Jung's analytical perception of personality. The latter refers to personality as the psyche, which is conceptualized as a complex network of systems that are in constant interaction. Meyer, Moore and Viljoen (1989) however, note that it is not always clear how Jung uses the concepts of psyche, personality and soul. It appears that psyche is a comprehensive concept referring to human traits whereas personality suggests specific individual

functioning. Meyer, Moore and Viljoen (1989:77) describe Jung's concept of psyche as "a dynamically structured totality or whole – not an indivisible whole, but rather a divisible or divided whole which continuously strives towards 'wholeness'". For Moller (1996) Jung's psyche of complex systems is in direct contrast with Freud's structure of personality which he describes in terms of three forces (id, ego and superego) that are in constant conflict with each other.

Literature (Meyer et al., 1989 and Moller, 1996) describing Jung's personality theory argues that although the various components of the psyche within the whole are connected to one another they function independent of each other. However, Jung points out that the components are often in a polar relationship. Meyer, Moore and Viljoen (1989) add that despite the contrasting nature of the psyche's components, the main purpose of all life is a striving towards 'wholeness' through reconciling the polarities to bring about the eventual integration of the conscious and the unconscious into a whole. Boeree (2006) indicates that Jung's theory of the psyche can be divided into three levels: the conscious, the personal unconscious and the collective unconscious.

For Jung the essence of the conscious is a prerequisite for its development. Meyer, Moore and Viljoen (1989) suggest that Jung maintains that the ego comprises all conscious aspects of functioning, including sensations, perception, feelings, thoughts, evaluations and active memory. For Jung the ego functions both externally and internally. External functioning is the process by which the ego helps to structure reality through sensory perception, thereby facilitating interaction with the external world. Whereas internal functioning refers to the way the ego structures individuals' awareness of themselves in order to bestow on them, their own identity which remains fairly constant over time.

Closely related to this idea of Jung is what he defined as the '*personal unconscious*'. According to Weiten (1995) Jung emphasized the unconscious determinant of personality. For Jung the unconscious consisted of two layers. The first layer is personal unconsciousness, which houses material that is not within one's conscious awareness because it has been repressed or forgotten. Meyer, Moore and Viljoen (1989) describe this personal unconscious layer as unique and regard it as a storeroom of individual experiences and interactions with the world and the accompanying interpretations of these experiences and interactions. Jung determined that the contents of this layer are usually available to consciousness and there is a continual interaction between the personal unconscious and the ego. Individual complexes, according to Meyer, Moore and Viljoen (1989) and Moller (1993), constitute for Jung the most important contents of the personal unconscious. A complex, according Jung is a transformed instinct or more specifically a

composite of ideas or experiences loaded with specific emotional intensity. A complex has two components: one which is determined by repeated personal experience in interaction with the environment and the other which is determined by 'archetypes'. According to Boeree (2006) Jung used this term to describe the contents of the collective unconsciousness. An 'archetype' is thus an unlearned tendency to experience things in a certain way.

The third and last level Jung divided the psyche into what he termed the collective unconscious. In the literature it is clear that this is one of Jung's most controversial concepts. According to Jung the collective unconscious represents the inherited potential which has been transmitted from previous generations. Also Boeree (2006) describes the collective unconscious as a storehouse of latent memory traces inherited from people's ancestral past. The collective unconscious is not necessarily peculiar to an individual but rather universal to all human beings which form the foundation of the individual psyche. Unlike the personal unconscious, the collective unconscious exists completely independently.

In Jung's personality theory the collective unconscious contains instincts and archetypes. The most important archetypes Jung identified are:

- *The Persona* - This describes a person's public self. Jung determined that the persona develops in relation to the role which the individual must fulfill in society. It also reflects that person's perception of his expected role in society.
- *The Anima and the Animus* - Meyer, Moore and Viljoen (1989:80) describes that Jung argues that a person possesses, "not only the physiological traits of both sexes, but also the psychological traits of both sexes. He therefore postulates the anima as the female archetype which is present in every male on an unconscious level and characterized by feelings and emotions. The animus, on the other hand, is the male archetype, which represents logic and rationality in every woman".
- *The Shadow* - This represents the primitive animal instincts inherited by man in the evolutionary process from the lower forms of life. This archetype is viewed as the strongest but also the most dangerous archetype due to its impulsive urges and emotions that are normally unacceptable to society and therefore repressed.
- *The Self* - This archetype motivates man to integrate the various components of the psyche into a harmonious whole. For Jung the self is the central archetype and forms the center of the personality around which all the other systems cluster. According to Jung, the self

archetype is not present at birth; it emerges only during the middle years of life when the psyche is fully differentiated in the various systems.

3.4.2 THE DYNAMICS OF PERSONALITY ACCORDING TO JUNG

Meyer et al. (1989) argue that understanding the fundamental premises underlying the dynamics of Jung's theory will lead to a greater understanding of his theory. The latter summarize these dynamics in eight points:

1. Casual and Teleological Approach

For Jung the individual's behaviour is not only the outcome of past forces which drive him to action, but also the result of his striving for completeness and wholeness of the self through self-realization.

2. The Human Being as an Energy System

In literature it is consistently said that Jung, just like Freud, regards man as a complex energy system. Jung according to Meyer, Moore and Viljoen (1989) uses the term 'libido' to refer to physical as well as psychic energy.

3. The Psychodynamics of the Psyche

Jung identified two principles he believed by which psychic functioning was determined: the 'principle of equality' and the 'principle of entropy'. The first principle, according to Jung, postulates that the psyche conserves energy and where energy is lost in one component of the system it will simply reappear in another component. The latter principle states that energy flows from a stronger element to a weaker element. The psyche, thus constantly tries to maintain a balance between the different sub-systems by redistributing energy from stronger to weaker components.

4. Interaction Between Subsystems of the Psyche

The subsystems, according to Jung, are in constant interaction in order to redistribute the energy. Jung differentiates between three forms of interaction in these sub-systems, namely: opposition, compensation and synthesis.

5. Use of the Libido

Jung uses the term ‘channeling of the libido’ to refer to processes whereby energy is replaced or transmitted. In his theory, Jung distinguished two ways of channeling the libido, namely progression and regression.

6. Attitudes of the Psyche

A very important aspect of Jung’s theory in terms of this study is the two types of attitudes or orientations he developed. In his research Jung was the first to describe the introverted – and extraverted personality types. For Jung these two concepts show the direction in which psychic energy is channeled. According to Jung each individual can be characterized as orientated primarily inwardly or outwardly according to the primary channeling of psychic energy. Jung describes introversion as an inner directedness of psychic energy based on the subjective experience of the ego. Boeree (2006:9) agrees with this in his research in saying, “Introverts are people who prefer their internal world of thoughts, feelings, fantasies, dreams and so on, while extroverts prefer the external world of things and people and activities”. Jung’s theory looks at the contrasting factors between introversion and extraversion by defining extraversion as directed towards external reality – thus people, objects and events outside the ego, thereby confirming Boeree’s definition of extroversion.

7. Functions of the Psyche

Over and above the two attitudes (extraversion and introversion) Jung distinguished between four other distinctive functions of the psyche – ‘thinking’, ‘feeling’, ‘sensation’ and ‘intuition’. He further differentiates between ‘irrational’ (sensation and intuition) and ‘rational’ (thinking and feeling) functions. Jung defines these four functions as follows:

- Sensation refers to the way in which the psyche experiences external impulses through the senses. Boeree (2006) argues that a sensing person is good at looking and listening and generally getting to know the world. This function Jung calls one of the irrational functions because it involves perceiving rather than judging information;
- Intuition according to Meyer, Moore and Viljoen (1989:87) is “unconscious perception on a subliminal level”. Boeree (2006:10) agrees with this by defining this function identified by Jung as “a kind of perception that works outside of the usual conscious process”. As with sensation Jung sees intuition as irrational;

- For Jung thinking is a logical and structuring function which is directed towards the objective of explaining and understanding the world; and
- Feeling is described as an evaluative function. For Jung information is judged and that forms the basis for the individual's experience of subjective feelings (Boeree, 2006).

8. *Personality Types*

The literature surrounding Jung's personality theory suggests that he never aimed to categorized people, but rather tried to create a framework which could be used to distinguish people from each other, based on their preferences for channeling psychic energy. According to Ryckman (1978) and Moller (1993) Jung distinguished between two main personality types – introvert and extravert which he further expanded into eight personality types. These types are:

- Extravert – thinking type: Jung determines that this person lives according to fix objective rules and all subjective feelings are repressed;
- Extravert – feeling type: This person is normally emotionally very labile and emotions fluctuate as situations change. For Jung this person is very sociable and experience intense relationships although these relationships are normally of a short duration;
- Extravert – perceptive type: Jung describes this type of person as very pragmatic and realistic, accepting life as it is without thinking too much about it;
- Extravert – intuitive type: According to this classification this type of person is continually looking for something new, finding it difficult to sustain anything;
- Introvert – thinking type: Jung sees this personality type as very intellectual, showing little feeling for everyday life;
- Introvert – feeling type: is intensely emotional and hypersensitive;
- Introvert – perceptive type: This type of person takes life as it comes without any great social involvement; and
- Introvert – intuitive type: For Jung this type can be best described as an eccentric daydreamer who creates ideas based on 'visions'.

Jung's theory on personality has been described in more depth than the other personality theorists due to the Keirsey Temperament Sorter being based upon Jungian theory. The work of Jung is therefore accepted as the framework for this study.

4 PERSONALITY OF ANIMAL LOVERS

With the focus of the study being on male dog handlers working at the SAPS Dog Unit one should acknowledge that these individuals may have a different personality type due to their choice of unit within the SAPS. Sussman (1985) argues that when people publicly identify with an animal it makes a symbolic statement of their personality and self-image. The folk-wisdom suggests that persons with pets are different from people without them and although some tentative support for this statement is available from research there is no conclusive evidence available (Sussman, 1985).

There appears to be relationships between personality characteristics and preferences in pet ownership. Sussman (1985) citing Kidd and Kidd found that personality differences in dominance, nurturance and autonomy between cat lovers and dog lovers. In a later study, Kidd, Kelly and Kidd found personality differences among horse, turtle, and snake and bird owners. Following research on this topic, Sussman (1985:14) suggests “the possibility of systematic differences in attitude patterns between dog owners and non-owners”.

5 TEMPERAMENT

Hamer and Copeland cited by Pervin and John (2001) bring the differences between the concepts of personality and temperament to light when they argue that, “You have about as much choice in some aspects of your personality as you do in the shape of your nose or the size of your feet. Psychologists call this biological, inborn dimension of personality ‘temperament’”.

Despite this argument it would appear that there is no formal, agreed upon definition of temperament. Researchers throughout time have tried to understand the difference between temperament and personality and through their findings compiled various definitions of the concept. For instance, Allport as cited in Halverson, Kohnstamm and Martin (1994:324) indicates that “Temperament refers to the characteristic phenomena of an individual’s emotional nature, including his susceptibility to emotional stimulation, his customary strength and speed of response, the quality of his prevailing mood and all peculiarities of fluctuation and intensity of mood”. Pervin and John (2001) agree with Allport about the emotional nature of temperament and they add to this the belief that the differences in temperament are largely inherited and biologically based.

Strelau (1983) making use of the work of Buss and Plomin argues that temperament refers to inherited personality traits which are present in early childhood. Goldsmith and Campos (1986)

agree with Buss and Plomin in terms of the early appearing dimensions of individual variability but to them the core individual differences lie in emotional reactivity and activity. In contrast to these definitions of temperament, Thomas and Chess as cited by Kim (1997) suggest that temperament refers to behavioural styles which are responses to environmental stimulus. To them, temperament includes not ability, emotionality or motivation but rather rhythmicity, approach or withdrawal about novel stimulus, sensory threshold, distractibility or persistence.

A more accurate description of the cardinal differences between temperament and personality is found in the work of Strelau (1983), who focused much of his research on temperament (Warr, 2005). According to Warr (2005) Strelau differentiates temperament and personality along five dimensions: (1) biological factors are assumed to play a relatively stronger role in temperament whereas social determinants are more prominent in personality; (2) temperament is manifested in early childhood whereas personality is more likely to become apparent in adults after learning and socializations have made their impact; (3) temperament can be seen in other species of animals whereas personality describes the phenomena that are specific to humans such as 'ego' and 'self,' or cognitive constructs such as 'locus of control'; (4) temperament describes the energetic, temporal and stylistic characteristics of behaviour whereas personality traits refer to the content or purposive direction of behaviour; and (5) personality is more modifiable than temperament because it expresses the regulating function over temperamental traits such as activity, in which it would determine the direction a person's activity level might take.

From the above mentioned ideas and definitions it is clear that temperament is a multilevel construct. Wachs (1998) citing Bates came to an understanding that within the framework of a working definition of temperament there appears to be a general agreement among the majority of temperament researchers on the following definitional aspects of temperament:

1. Temperament is not a thing or series of things; rather it is a hypothetical organizing construct used to label and define a complex set of processes;
2. The processes called temperament refer to the way in which behaviour is expressed, independent of the content of behaviour or the motivation for behaviour;
3. The behaviours defining temperament appear very clear early in life. Some argue within the first two months after birth;
4. Temperament is biologically based; and
5. Temperament is moderately stable across time as well as over situations.

6 HISTORICAL DEVELOPMENT OF TEMPERAMENT

Temperament theory, according to Berens (2001) and Grohol (2005) has its roots in the ancient four humors theory of the Greek Historian Hippocrates (450 B.C.) who believed that certain human behaviours were caused by body fluids (called ‘humors’). Then Galen, a physician of post-Hippocrates times, developed the first typology of temperament in his dissertation *De Temperamentis* (Strelau, 1983). According to Pervin and John (2001) Hippocrates and Galen suggested that the four humors (blood, black bile, yellow bile and phlegm) corresponded with temperaments identified as: sanguine, melancholic, choleric and phlegmatic. At this point early classification of temperament types were proposed based on basic body chemistry.

Historically it appears that *The Big Five Factor Structure* plays an important role in determining the components of temperaments. Goldberg and Rosolack cited in Halverson, Kohnstamm and Martin (1994) define the five factors as: Extraversion, Agreeableness, Conscientiousness, Emotional Stability and Openness to Experience. Strelau (1983) explaining Hans Eysenck’s (1916 – 1997) theory on temperament argues that Eysenck was one of the first psychologists to analyze personality differences using a psycho-statistical method. Eysenck proposed different dimensions of personality: (1) Neuroticism (N) which was the tendency to experience negative emotions; (2) Extraversion (E) which was the tendency to enjoy positive, social events (Warr, 2005). Eysenck’s theory on temperament will be discussed in detail later on in this chapter due to the important influence his ideas had in temperament theory.

Thomas and Chess (1996) also had a significant role in the conceptualization of temperament (Shafeer, 1996). Thomas and Chess (1977) found that certain components of infant temperament tend to cluster together, forming broader temperamental profiles. From research done with over one hundred children from birth to adolescence Thomas and Chess were able to identify three infant temperament types. Pervin and John (2001:304) identify these types as “*Easy babies* who were playful and adaptable, *difficult babies* who were negative and unadaptable, and *slow-to-warm-up babies* who were low in reactivity and mild in their response”. Subsequent studies have found a link between such early differences in temperament and later personality characteristics. After Thomas and Chess’s research, Buss and Plomin found four temperament dimensions by using parental ratings of behaviour of their children. These four temperaments as cited by Pervin and John (2001) are: emotionality, activity, sociability and impulsivity.

Strelau believes that temperament is a construct of which there is more agreement than disagreement. For this reason it is important to take a brief look at some of the most influential theories regarding temperament.

7 TEMPERAMENT THEORIES

7.1 PAVLOVIAN TYPOLOGY

Robinson cited by Strelau (2001) argues that Pavlov's study of brain-behaviour relationships led him to propose that it is possible to distinguish in dogs the four classical temperaments first described by Hippocrates and later by Galen. By observing the behaviour of dogs during his famous classical conditioning experiments Pavlov came to the conclusion that there exists strongly expressed individual differences in the speed and accuracy with which both positive and negative conditioned reflexes are elaborated. Strelau (2001) describe Pavlov's approach to the concept of 'nervism' as any behaviour governed and regulated by the central nervous system. Pavlov further hypothesized that certain properties of the nervous process exist which are responsible for the observed individual differences in conditioning and in a dog's behaviour.

Pavlov saw the nervous system as being innate and relatively immune to environmental influences, and referred to this as the genotype. He conceived the nervous system as a physiological basis of temperament. Strelau (1983) describes how one of Pavlov's students, Krasnogorsky investigated the inhibitory reactions in children, and distinguished two types of nervous systems – the normal and the inert type of higher nervous activity. Three basic properties of the nervous system were also distinguished namely: strength, equilibrium and mobility of nervous processes (Warr, 2005).

Despite Pavlov's apparent impact on the theory surrounding temperament it does appear to be rather limited and therefore it is necessary to include other theoretical approaches.

7.2 HANS EYSENCK'S BIOLOGICAL THEORY OF TEMPERAMENT

Pervin and John (2001) indicate the basic foundation of Eysenck's theory through explaining the importance and support he gave to trait theory. Eysenck emphasized the need to develop adequate measures of traits along with the importance of establishing biological foundations for the existence of each trait. Biological and innate aspects of an individual's character appear to be the basis of Eysenck's theory of temperament (Strelau, 2001).

In his earlier research Eysenck found two basic dimensions of personality that he labeled as introversion – extraversion and neuroticism. Following these initial dimensions Eysenck added a third dimension he termed psychoticism. These three factors became known as Eysenck's P-E-N three factor theory of personality (Pervin and John, 2001).

Pervin and John (2001:238) describe the theoretical underpinning of these dimensions as that, "individual variations in introversion-extraversion reflect differences in neuron-physiological functioning. Basically introverts are more easily aroused by events and learn social prohibitions more easily than extraverts". For Eysenck the introversion-extraversion dimension represents an important organization of individual differences in behavioural functioning that is rooted in inherited differences in biological functioning. The second dimension, neuroticism, according to Eysenck is also an inherited biological difference in nervous system functioning. People high on neuroticism according to Pervin and John's (2001:238) description "tend to be emotionally labile and frequently complain of worry and anxiety, as well as of bodily aches". The underlying principle is that individuals high on neuroticism respond quickly to stress and show a slower decrease in the stress response once the danger has disappeared than individuals low on neuroticism. Less seems to be known about the third dimension Eysenck identified. What theorists do agree on is that this dimension is associated with being tough-minded, and having antisocial tendencies vs. socialized humanness (Pervin and John, 2001 and Strelau, 1983). The key to understanding these three personality dimensions is to see them as existing independently from one another (Wilson cited by Strelau, 1983).

7.3 MODERN DAY VIEWS PERTAINING TO THE BIOLOGICAL FOUNDATIONS OF TEMPERAMENT

Eysenck's work has had a profound impact on temperament being understood in terms of its biological foundations. The importance of biological factors in temperament is continuously found in definitions and descriptions of temperament and therefore it is necessary to briefly look at research findings surrounding biological foundations relating to temperament.

Clark and Watson (1999) cited by Pervin and John (2001) developed a model in order to describe individual differences. According to Pervin and John (2001:332) these individual differences in temperament, "can be summarized in terms of three big super-factors similar to those suggested by Eysenck and also corresponding, roughly, to three of the Big Five dimensions: *NE* (Negative Emotionality), *PE* (Positive Emotionality) and *DvC* (Disinhibition vs. Constraint)".

Clark and Watson attributed to the following three ‘super-factors’ model on individual differences:

- Individuals who score high on the *NE* factor appear to experience high levels of negative emotions. These people would often see the world as threatening, problematic and distressing. However, people who score low on the trait appear calm, emotionally stable and self-satisfied;
- The *PE* factor according to Pervin and John (2001:332) “relates to the individual’s willingness to engage the environment, with high scores (like extraverts) enjoying the company of others and approaching life actively, with energy, cheerfulness and enthusiasm, whereas low scorers (like introverts) are reserved, socially aloof, and low in energy and confidence”; and
- The *DvC* factor relates to style of affective regulation. Individuals scoring high on this factor were related to concepts like being impulsive, reckless and oriented toward feelings and sensations of the moment. In contrast low scorers would be more carefully, controlled by long-term implications of their behaviour and avoiding risk and danger.

Continued research has found a biological correlation between these three factors and biological processes necessary for each. Pervin and John (2001) describe how the *PE* factor is associated with the action of *dopamine*. Dopamine is described as the ‘feel good’ chemical. Pervin and John (2001:333) citing Clark and Watson (1999) suggest that “individual difference in the sensitivity of this biological system to the signals of reward that activate incentive motivation and positive affect, and supportive cognitive processes, from the basis of the *PE* dimension of temperament”. Moving on the *DvC* factor, Clark and Watson suggest *serotonin* as the biological basis for this factor. Clark and Watson’s (1999) research found that individuals low in this neurotransmitter tend to be more aggressive and to show increased use of dopamine activating drugs such as alcohol (Pervin and John, 2001).

Clark and Watson suggest that very little is known about the neurobiology underlying the *NE* factor. According to Pervin and John (2001), there appears to be a relationship between low serotonin levels at the neuron synapses and depression, anxiety and obsessive-compulsive symptoms.

7.4 STRELAU'S REGULATIVE THEORY OF TEMPERAMENT

Warr (2005) argues that Strelau's regulative theory of temperament was developed by the activation theories of Western Psychology and the theory of action was primarily formulated by Russian psychologists. Strelau's main idea behind his regulative theory of temperament is that temperament, being a product of biological evolution, plays an important role in regulating the interrelations between humans and their environment. By temperament Strelau (1983) meant relatively stable features of the organism, primarily biologically determined, as revealed in the formal traits of reactions which form the energy level and temporal characteristics of behaviour.

Temperament, as seen by Strelau (1983), manifests in energetic levels of behavior. For him two dimensions of temperament are responsible for individual differences in the energetic level of behaviour namely: reactivity and activity. Reactivity according to Strelau (1983) is used to show how people differ in the intensity or magnitude of their reactions to stimuli and how these differences remain relatively stable. The latter concept of activity, according to Strelau (1983) is the feature of the organism which plays the basic regulatory function in providing the optimal level of activation. Strelau (1983) emphasizes the role of activity in regulating stimulation (Warr, 2005).

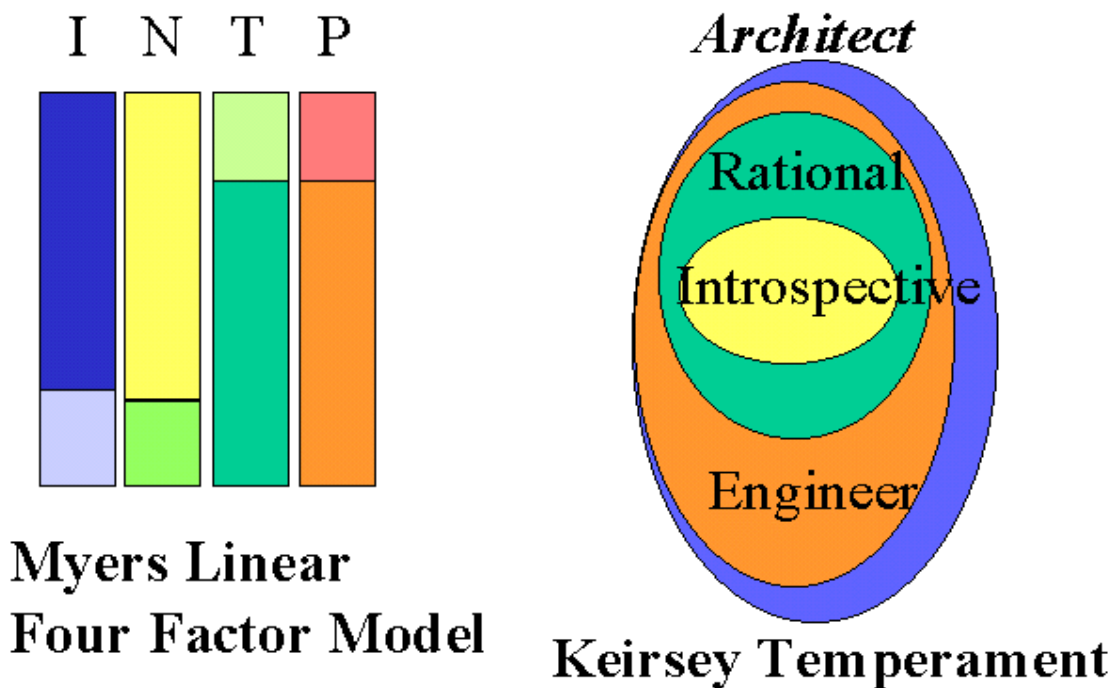
The key to Strelau's views on temperament lies in the fact that temperament doesn't determine what kind of behaviour an individual prefers or performs – this according to Strelau (1983) is determined by social factors (Warr, 2005). Temperament for him determines to a large extent whether an individual prefers activities of high or low stimulative value, stimulation-seeking or stimulation-avoiding activities.

7.5 KEIRSEY'S VIEW ON TEMPERAMENT

Keirsey and Bates (1978) reintroduced temperament theory in a more modern form when they identified the different temperament types as Guardian, Artisan, Idealist and Rationalist. For the purpose of this study it is important to take a look at Keirsey's views on temperament and personality due to the use of the Keirsey Temperament Sorter. The Keirsey Temperament Sorter was administered to determine the different temperament styles of participants in the study.

Keirsey and Bates (1978:2) see temperament as "a person's unique way of doing or unique way of experiencing things". In the literature Keirsey's work on temperament is often discussed in conjunction with the work of Myers and Briggs who developed the Myers-Briggs Type Indicator (MBTI) often used to identify different types of temperaments. According to Keirsey (2005)

there are major practical and theoretical differences between his work and that of Myers-Briggs. On his website, Keirsey (2006) determines that he aims to describe long-term observed behavioral patterns while Myers often describes what “people have in mind”. Another major difference according to Keirsey is the fact that Myers uses a linear four factor model to characterize ‘invariant’ patterns of behavior of individuals throughout their lifetime, whereas he uses a system field theory model to characterize these patterns. The following picture gives a clearer explanation of Keirsey’s description.



Keirsey (2005)

Keirsey and Bates (1978) in their temperament theory, make use of Extraversion, Intuition, Thinking and Judging as a way to determine temperament. According to Keirsey and Bates (1984:14-23) these functions could be defined as:

- **Extraversion vs. Introversion:** A person who chooses people as a source of energy have a higher degree of extraversion whereas a person who scores lower on this function would probably prefer solitude to recover energy and would rather tend toward introversion;
- **Intuition vs. Sensation:** People with a natural preference for sensation will most likely describe themselves as practical while people with a natural preference for intuition will

probably describe themselves as innovative. It would therefore appear that these two functions are likely to determine the way people think about things;

- **Thinking vs. Feeling:** People making choices on an impersonal basis Keirsey and Bates (1984) identified as thinking types whereas people making choices on a personal basis are viewed as feeling types; and
- **Judging vs. Perceiving:** The question that should be asked here, according to Keirsey (1984) is whether people prefer closure or if they prefer to keep their options open. People choosing closure are regarded as judging types while people who prefer to keep their options open are most probably perceiving types.

These are the four functions identified by Jung. Boeree (2006) suggested that everyone has these functions, but in different proportions. Each person will have a superior function which is preferred and best developed. There is also a secondary function which an individual is aware of and uses it in support of the superior function. By using these main identifying structures Keirsey developed four main temperament styles that could possibly be differentiated when completing the Keirsey Temperament Sorter. The four main temperament styles Keirsey and Bates (1984:31-66) summarize as follows:

1. Artisan Temperament (SP)

This temperament type must be free. The person scoring high on this temperament style will not be tied or bound, confined or obligated. For the Artisan temperament the ideal is to do as he/she wishes. This temperament style according to Keirsey and Bates (1984) is very impulsive and such people appear to enjoy and thrive on situations where the outcome is unknown. Of all the styles identified by Keirsey and Bates the Artisan functions best in crises. This temperament style also appears to have endurance beyond that of other types. That person is able to put up with discomfort, deprivation, hunger, fatigue and pain and show courage in a way other types do not;

2. Guardian Temperament (SJ)

Individuals manifesting this temperament style, according to Keirsey and Bates (1984:40), “must belong and belonging must be earned”. Dependency for the Guardian (SJ) is neither a legitimate condition nor desire. The SJ feels guilty for his or her dependency;

3. Rational Temperament (NT)

Keirsey and Bates (1984) determined that power fascinates the NT – not power over people but power over nature. It appears to be important for persons with this temperament style to be able

to understand, control, predict and explain realities. The NT always wants to improve him- or herself; and

4. Idealist Temperament (NF)

This temperament style pursues a self-reflected end. The person identified with this particular temperament style has one purpose and that is a search for the self. He or she hungers for self-actualization and needs to find meaning in life. Living a life of significance or making a difference in the world satisfies the NF's hunger for a unique identity.

For the purpose of this study, Keirsey and Bates's view on temperament are accepted along with the extended perceptions of Jung, as Jung's work has had a large influence on the work of Keirsey and Bates.

8 CAREER CHOICES AND TEMPERAMENT

It is commonly assumed that specific types of people make certain choices when it comes to career choice. Rubenstein (2006:751) confirming this assumption argues that, "Empirical evidence indicates that people of different professional sectors are characterized by different personality patterns".

In looking at how personality influences career choice, Brown (2003) argues that personality develops as a result of the interaction of inherited characteristics along with activities individuals are exposed to, their interests and competencies and this in turn largely influences the person's choice of career later in life. For Holland, as cited by Momberg (2005) the choice of vocation is an expression of personality. This for Momberg (2005) implies that an individual's vocational satisfaction and achievement depends on the congruence between a person's personality and his or her work environment.

Lokan and Taylor (1986) argue that there is a long history within vocational psychology in relating personality variables to occupational choice. Holland's theory on career choices and the impact of different personality factors appears as one of the major theories on this topic throughout the literature. As Brown (2003:26) indicates, "Holland believes that to some degree 'types beget types,' but recognizes that children shape their own environments to an extent, and they are exposed to a number of people in addition to their parents who provide experiences and reinforce certain types of performance. The combination of these influences produces 'a person who is predisposed to exhibit a characteristic self-concept and outlook and to acquire a characteristic disposition'".

Holland identified six pure personality types. However it should be noted that these types seldom appear in their 'pure form'. Brown (2003:26) describes the six types as:

- *Realistic*: These people deal with the environment in an objective, concrete, and physically manipulative manner. Brown (2003) describes these individuals as people who avoid goals and tasks that demands subjectivity, intellectual or artistic expressions. These individuals would rather prefer agricultural, technical, skill-trade and engineering vocations;
- *Investigative*: People with this type of personality deal with their environment by using their intellect – manipulating ideas, words and symbols. For Brown (2003) they prefer scientific vocations, theoretical tasks, reading, collecting, algebra and foreign languages but would rather avoid social situations as they often view themselves as unsociable, masculine and introverted;
- *Artistic*: As originally identified by Holland, Brown (2003:26) describes artistic individuals as people who “deal with the environment by creating art forms and products. They rely on subjective impressions and fantasies in seeking solutions to problems”. These individuals prefer musical, artistic, literary and dramatic vocations;
- *Social*: The key in describing this personality type has to do with their skills to interact with and relate to others. Brown (2003:26) sees these individuals as “typified by social skills and the need for social interaction”. They would prefer educational, therapeutic and religious vocations as they see themselves as sociable, nurturing and responsible;
- *Enterprising*: According to Brown (2003) people with this personality type cope with their environment by expressing adventurous, dominant enthusiastic and impulsive qualities. For Brown (2003) these include sales people as well as supervisory and leadership vocations; and
- *Conventional*: Conventional people deal with their environment by choosing goals and activities that carry social approval. These are individuals who prefer clerical and computational tasks.

Miller and Miller (2005) shortly summarize the six single characteristics with the accompanying personality traits as determined by Holland as follows:

- Realistic (R): asocial; frank; conforming; inflexible; practical and un-insightful;
- Investigative (I): analytical; complex; critical; independent; introspective; rational and reserved;
- Artistic (A): emotional; expressive; introspective; intuitive; open and sensitive;

- Social (S): cooperative; empathic; helpful; patient; sociable; understanding and warm;
- Enterprising (E): agreeable; domineering; energetic; extroverted; optimistic and self-confident; and
- Conventional (C): careful; conforming, conscientious, inhibited; persistent and practical.

Rubinstein (2006:751) citing Holland (1977) emphasizes the importance of understanding personality differences in the choice of a career in arguing that “several personality theories focusing on specific personality variables in career choice and job satisfaction are based on the assumption that individuals choose certain career choices because they believe that they may be able to meet their emotional needs”. It thus appears that in addition to various aspects influencing an individual’s career choice, that an individual’s personality type does play a major role.

Miller and Miller (2005) focussed mainly on research correlating different personality types to the characteristic types that Holland identified. Citing Gottfredson, Jones and Holland (1993) Miller and Miller (2005) describe the reported similarities between the big five dimensions of personality and Holland’s theory. Social and Enterprising types were correlated with Extraversion while Artistic and Investigative types were correlated with Openness and Conventional was related to Conscientiousness. Miller and Miller (2005) also looked at Eysenck’s three-dimensional model where Leong and Goth found Enterprising to be associated with Extraversion and Realistic with Psychotism. Interestingly the Myers-Briggs Type Indicator, according to Miller and Miller (2005:27) hypothesized “a link between Social type and Feeling, the Enterprising type and Extroversion, the Artistic type and Intuitive, the Investigative type and Introversion and the Conventional and Realistic types were associated with Sensing/Thinking”.

8.1 THE TEMPERAMENT OF A POLICE OFFICER

Gomá-i-Freixanet and Wismeijer (2002) describe how arguments for and against a personality profile that are distinctive for police officers have appeared in literature since the 1970s. These two authors identified two models which have vastly different view points regarding the personality profile that is distinctive for police officers. The first model Gomá-i-Freixanet and Wismeijer (2002:387) identify is aimed at, “those who argue for the existence of such a profile favor the *dispositional model* that states that police candidates show some determined personality traits that distinguish them from the general population”. In contrast to the dispositional model, the second model proposed by Gomá-i-Freixanet and Wismeijer (2002) is

identified as the *socialization model*. This model argues that the profile of a police officer is formed during training at the training academy.

It seems that research conducted on this topic has identified various aspects correlating specific personality characteristics to police officers. The identified aspects seem to find a mid-way between the two models identified earlier on. For the purpose of this study the researcher believes that in some way there are certain pre-determined personality traits police officers have but the importance of the socialization model should not be ignored. This is evident in various research findings over an extended period of time. Balch (1972) argues that a certain cluster of traits consistently emerge in the make up of the police mentality. He identifies these as: suspicion, conventionality, cynicism, prejudice and distrust of the unusual.

Other researchers in later and more recent studies agree with Balch's initial studies. Crochran and Butler (1980) as cited by Gomá-i-Freixanet and Wismeijer (2002) observed that police candidates are more conservative and authoritarian than the general population. Rubinstein (2006) also found that the authoritarian personality type could be linked to that of police officials. Rubinstein (2006:751) describes the authoritarian personality as a "syndrome of conservative attitudes: religious, nationalistic or attitudinal intolerance: inflexibility at the cognitive and emotional levels". Other research cited by Gomá-i-Freixanet and Wismeijer (2002) identified that police officers scored higher on Impulsivity, Venturesomeness and Extraversion and lower on Psychoticism than the general population. This was found when these police officers completed the EPQ – personality questionnaire.

Carpenter and Raza cited by Gomá-i-Freixanet and Wismeijer (2002:388) argued that in comparison with the general population norms "the police applicants were less depressed and anxious, more assertive and were more interested in developing and maintaining social relationships".

On the aspect of extraversion, it appears that many research studies have found that police officials would often score very high on the extraversion function. Burbeck and Furnham's (1984) research as cited by Gomá-i-Freixanet and Wismeijer (2002) found that police personnel were accepted as more extraverted and less neurotic than the general population. Wagner (2005) agrees with the fact that police officers appear to be less neurotic. Fenster and Locke conducted research using Eysenck's three factor model, where they conclude that police personnel scored lower on the neuroticism scale than did civilians (Wagner, 2005).

Gomá-i-Freixanet and Wismeijer (2002) recall Eber's (1991) research on law enforcement officers in the United States. Eber evaluated police officers using the 16PF and found the participants to be highly controlled, low on anxiety, with a strong characters and often independent. Research that measured police personality using Cattell's 16 PF found that aggressiveness and tough-mindedness are the two main factors that predicts superior police performance (Wagner, 2005).

Accepting that specific personality factors has an impact in the choice of a career, the before mentioned research clearly indicates that individuals choosing a career as a police officer have certain characteristics that sets them apart from others in the general population.

Although most of the previous research was done overseas, Westraat (2002) conducted specific research on personality traits of individuals that worked as dog handlers in the South African Police Service, Dog Unit, Durban. Using the 16PF questionnaire (SA 92 edition) he assessed thirty three (33) male dog handlers from the Durban Dog Unit. Westraat (2002) focussed specifically on the very high and very low scores participants achieved and didn't spend much time on the middle group. On *Factor A* of the 16PF – questionnaire 27,3% of dog handlers had high scores. This according to Westraat (2002) relates to a sincere, kind, easy-going compassionate personality. Low scores on this specific factor however relates to a more detached and reserved personality. In Westraat's research 18,2% of respondents from the Durban Dog Unit had low scores on this factor.

A summary of Westraat's (2002) study of some of the different factors measured with the 16PF (SA 92 edition) with dog handlers can be seen as follows:

- *Factor B:* 9,1% of participants had high scores on this factor which indicates heightened sharpness and abstractive imagination. On the lower score 6,1% of respondents measured very low, indicating a strong affinity for concrete thinking and according to Westraat shows to a lower intelligence level as normal.
- *Factor C:* Low scores on this factor indicate relatively unstable emotional types. This also includes people who get upset rather quickly and have a lower ego-strength. In contrast individuals who score high are more stable emotionally and have high levels of ego-strength. Results from Westraat's (2002) research showed that 21,2% of respondents scored low on this factor while 12,1% scored high.
- *Factor E:* This factor relates to a personality that applies assertiveness, independence, aggressiveness and dominance. The majority of respondents scored very high on this factor.

- *Factor F:* Westraat (2002) found that 12,1% of the dog handlers who participated in his study measured low on this factor which indicated a more serious, quiet personality trait. However, few (15,1%) of respondents had very high scores indicating a passionate, care-free personality trait.
- *Factor H:* High scores on this factor indicate a sense of adventure and boldness whereas low scores tend to apply to individuals who are more shy and conservative. Only 12,2% of respondents scored low on this factor while 21,2% of respondents scored very high.

9 CONCLUSION

From the contents of this chapter it should be clear that the views, theories and opinions regarding the concepts of '*temperament*' and '*personality*' are very unique and different from each other. However it would appear that all these views and ideas bring together a rich source of information which helps us to understand the two concepts better.

For the purpose of this study the focus is on temperament and therefore the importance of the biological basis of behaviour will be the main focus of the study.

Chapter 3

Trauma

1 INTRODUCTION

In the South African context the word '*trauma*' has become so regularly used in everyday conversation that it seems to be a word synonymous with South Africa and its current environment. Hamber and Lewis (1997) confirm this when arguing that violent crime and trauma have become what they termed 'normative' within South African society.

For the purpose of this study, trauma plays an imperative role and will be discussed in-depth in this chapter. The chapter will initially look at the definition of trauma, followed by a short history of trauma as well as provide a discussion about selected trauma theories. In concluding, a more specific focus on police work and how trauma impacts on this specific work environment will be addressed.

2 TRAUMA DEFINITIONS

Van Houten (2004) describes the origin of the word '*trauma*' as found in the Greek language, originally meaning '*to wound*' or '*to penetrate*'. Agreeing with the original Greek meaning allocated to the word the world reference dictionary (<http://www.worldreferencedictionary.com>, 2007) describes trauma as "an emotional wound or shock often having long lasting effects".

Various individuals, who have researched exactly what trauma is, appear to build on these original meanings attached to the word. Lee (1997) adds to this basic definition of trauma when he focusses on the experience trauma creates of being psychologically overwhelmed. For him a traumatic incident leaves the person incapable of coping either intellectually or emotionally. Lee (1997:1) cites van der Kolk and van der Hart, who advocate that "Trauma leaves a person changed both psychologically and physiologically". Flannery (2000) agrees with this when looking at the impact an extreme stressor has on an individual's psychological and biological functioning.

Hamber and Lewis (1997) understand trauma from a South African perspective and view trauma as an event that overwhelms an individual's coping resources. Hamber and Lewis (1997:1)

identify situations that are traumatic as “those in which the person is rendered powerless and great danger is involved”.

Everstine and Everstine (1993:3) explain that psychological trauma “occurs in the wake of an unexpected event that a person has experienced intimately and forcefully”. These definitions strongly link to the definition of traumatic events as found in the Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (1994). This definition states that a traumatic event “has an unpredictable onset which involves an individual experiencing, witnessing or being confronted with actual or threatened death”. In contrast Ursano, Fullerton and McCaughey (1994) suggest that a traumatic event is mostly recognized by the nature of an event as well as by the effects and responses of individuals and groups to an event.

Van Houten (2004), in his definition of traumatic events, moves away from the nature of events and argues that traumatic events should be seen as those critical incidents that not only challenge but also cuts through our usual coping skills. Giller (2003) also focusses on the impact that traumatic events have on an individual’s ability to cope, when he maintains that the key to understanding traumatic events is to understand that it refers to *extreme stress* that overwhelms a person’s ability to cope. For this *extreme stress* to overwhelm a person, Ursano et al. (1994:5) identify that such an event has the following specific characteristics “traumatic events have a high intensity, are unexpected, infrequent, and vary in duration from acute to chronic”. With these characteristics, Garland’s (1988:10) description of traumatic events seems to link everything together. For him a traumatic event can be summarized as, “one which, for a particular individual, breaks through or overrides the discriminatory, filtering process, and overrides any temporary denial or patch-up of damage”. In contrast with the abovementioned views, Everstine and Everstine (1993) saw it as a great necessity to distinguish between the event as cause of the trauma and the trauma as effect. Thus for these authors the event itself may not be traumatic. Everstine and Everstine (1993:3) reinforce that “A person must experience the event before trauma can be said to have occurred. The more intense the person’s experience of the event, the greater may be the trauma”.

3 HISTORICAL BACKGROUND

Contemporary views regarding trauma assume that there is nothing unusual about trauma and it is commonly agreed that trauma responses, as Figley (1986) describes it, are normal reactions to extraordinary circumstances. However this view of trauma has not always been accepted.

Jones and Wessely (2006) support this statement when describing how before the 1970s anyone who suffered long-term psychiatric effects after a frightening event was considered constitutionally predisposed to mental illness or subject to a repressed childhood trauma. A view in sharp contrast with modern day understanding of the trauma experience.

3.1 DEVELOPMENT OF THE CONCEPT OF TRAUMA

Everstine and Everstine (1993) describe how a gentleman named Samuel Pepys in 1666 witnessed the Great Fire of London which caused considerable loss of life. Six months later, unable to escape the emotional and psychological effects of the horrific event, Pepys described his psyche as unwilling to abandon the catastrophe. At that point in time no-one was able to identify Pepys's experience and his subsequent reaction to the event as that of a traumatic experience. Considering the historical development of trauma it took a long time before the experience Pepys had was accurately defined and treated.

3.1.1 TRAUMATIC NEUROSIS

Traumatic events were initially thought to produce a disruption of the nervous system that led to behavioural changes. This idea was replaced in the late 19th Century by the notion that response to trauma resembled the symptoms of hysteria, then being described by Charcot, Breuer and Freud (Everstine and Everstine, 1993). Herman (1992) describes how the first time, trauma studies emerged into public consciousness was the '*era of hysteria*'. According to Healy (1993:1) in 1895 Freud and Breuer first entered the 'scientific limelight' with their *Studies on Hysteria* and they advocated "that hysteria was a disorder of reminiscences, a disorder predicated on traumatic memories".

The notion of trauma appears to be crucial in Freud's early thinking. For Shmukler (1989:2) Freud saw trauma "as an etiological factor and subsequently as a casual agent reaching back into early childhood". When explaining the repetitive dreaming and the re-experiencing of traumatic events, Shmukler (1989) argues that the answer might lie in the functioning of the ego; that discharges energy, organizes, anticipates and builds up reserves of counter energy.

The theoretical history of trauma continues when Everstine and Everstine (1993:6) argue that, "This (the before mentioned era of trauma research) was later supplanted by one which the symptoms caused by trauma were classified among those in the general category of 'neurosis'. Once trauma reactions were labeled as neurotic symptoms, they were then linked, in psychoanalytic theory, to unconscious conflicts with their origin in childhood".

3.1.2 TRAUMA AND WAR

A major influence in trauma research has occurred through studying individuals exposed to war. '*Combat stress reaction*' is a term commonly used to describe the many different influences on individuals exposed to war. Combat stress reaction is a military term that comprises a range of adverse behaviours in reaction to stress of combat and combat related activities (wikipedia.org, 2006). Recalling the many different ideas surrounding combat stress, Catherall (1992:2) explains how combat veterans have been described with terms like "*shell-shock*"; '*battle fatigue*' and '*combat neuroses*'". In order to understand these terms and where they were found in history a more in-depth look will be taken at the different time periods in trauma research.

(A) THE AMERICAN CIVIL WAR

During the American Civil War two conditions describing stress related to combat were identified. These two conditions were termed, '*soldiers' heart*' and '*nostalgia*' (Catherall, 1992 and Barlow and Durand, 1999) Figley (1978) argues that during this time period, soldiers suffering from psychological casualties due to the war were merely seen as soldiers who were weak, lacking military discipline or both. In addition, Kelber and Brom (1992) articulated that the concept of '*soldiers' heart*' suggested coronary symptoms due to the strains of battle. It therefore appears that the reactions of soldiers after exposure to traumatic events were understood in terms of physical conditions linking the belief that the individual had a weak heart and were therefore unable to deal with traumatic situations.

Herman (1992) describes how investigations into trauma have been lined to political movements. Herman's argument is justified when it is clear that after the American Civil War very little research was done in terms of trauma. It was only with the First World War that there is a new found discourse in trauma research.

(B) WORLD WAR I AND WORLD WAR II

It was during World War I that the term '*shell shock*' was introduced, to describe the psychiatric symptoms resulting from violent acts of war. Subsequently, during World War II the term '*war neurosis*' referred to all abnormal reactions of soldiers in war time. In addition to the shocking perceptions of trauma during this time, was the horrific treatment offered to those suffering from '*shell shock or war neuroses*' (Kelber and Brom; 1992). Barker (2000) describes how sufferers from war neurosis were treated by electrical shocks and other tortures.

It wasn't until the late 1950's that through the growing awareness in the United States that the potential long-term psychological effects of disasters were acknowledged. Trauma symptoms could be present even in a person who had no former history of psychological problems (Barlow and Durant; 1999). Barlow and Durant (1999) identify how a disorder called "Gross Stress Reaction" was listed in the first edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM) in 1952. The DSM-II, published in 1968, abandoned the word 'stress' and classified it as "Transitory Situational Disturbance". This disturbance was described as a defense reaction when experiencing extreme fear. As research surrounding the concept of trauma evolved so did the definitions that were described by the Diagnostic and Statistical Manual of Mental Disorders. This is evident when looking at the current description of traumatic events contained in the DSM-IV which were cited earlier on in this chapter. Today an understanding of trauma focusses on the unpredictable onset which involves an individual experiencing, witnessing or being confronted with actual or threatened death or fear thereof.

3.1.3 TRAUMA DEVELOPMENT IN THE SOUTH AFRICAN CONTEXT

In the South African context the acknowledgement of the immense impact of trauma on individuals appears to have been under acknowledged. Jones and Wessely (2006:165) describe how, "it was believed by British military physicians that 'no war neuroses were observed in the Boer War', the first 'traces' being detected by Royal Army Medical Corps' doctors sent to observe the Russo-Japanese War of 1905".

Thompson (2006) describes various life experiences of South African National Servicemen, all involved in the war in northern Namibia and Angola between 1970 and the early 1990s. A common denominator during the stories told is the lack of proper and effective care for emotional casualties during the war.

This phenomenon is also evident in the history of the SAPS. Formal debriefing for traumatized employees has not been seen as necessary and important until recently when a trauma committee was established to deal with the issue of trauma within the SAPS. According to Chabalala (2004) the first debriefers were only trained during March 1993 in the Western Cape while other regions in South Africa started training debriefers during August 1993.

4 POTENTIALLY TRAUMATIC EVENTS

Various situations and events are often experienced as traumatic by the individuals exposed to them. Everstine and Everstine (1993) identify twelve major categories of potentially traumatic events include forty specific events.

Table 5: Potentially Traumatic Events

Natural Disasters	- earthquake - flood - fire - landslide - volcanic eruption - tornado, hurricane
Physical Assault	- being mugged - being beaten and battered - being kidnapped, held hostage
Sexual Assault	- rape - molestation
Property Loss	- burglary - theft, robbery
Physical Loss	- severe illness - accidental injury - self-inflicted injury - unplanned pregnancy
Violent Agency	- causing death willfully (as in war) - causing death accidentally - causing injury accidentally
Loss by Death	- death of spouse - death of child - death of parent - death of close friend - death of close relative - death of colleague at work - death of beloved pet
Loss of Relationship	- end of love relationship - end of close friendship
Bearing Witness to Tragedy	- seeing loved one or friend kill - seeing a loved one or friend seriously injured
Portent of Danger	- being threatened with bodily harm - being the target of a credible death threat
Threatened Loss	- learning that a loved one or friend is terminally ill - disappearance of a family member
Loss of Status	- being fired - being demoted - being refused promotion - bankruptcy - public humiliation

(Everstine and Everstine, 1993:5-6)

5 POLICE WORK AND TRAUMA

Exposure to trauma appears to be inherent in police work. Dowling, Moynihan, Genet and Lewis (2006) argue that about one-third of police officers exposed to work-related traumatic incidents develop significant post traumatic stress symptoms. Police work in South Africa as described by Marks (1995:1) is one of the “most stressful areas of work in our country”. Storm and Rothmann (2003) agree with Marks and indicate that police work has been identified as one of society’s most stressful occupations. They believe that this is particularly true for South African circumstances where high levels of crime and violence are prevalent.

South Africa has become known for its high levels of violence and crime. In describing this culture of violence, Hamer and Lewis (1997) refer to a 1996 study that indicated that approximately seventy percent of the urban populations in South Africa were victimized at least once. Today’s news is filled with news about murder, hijackings, rape and many other crimes. All these crimes become part of a police officer’s life and contribute to the trauma that the police officer is exposed to. Cross (2004) summarizes this when arguing that the traumatic incidents faced by police officers are events that could be described as typically unexpected and sudden, and fall well beyond the bounds of normal experiences; hence they have profound physical, emotional, and psychological impacts.

Contemporary literature surrounding South African police officers and the amount of continuous violence and trauma they are exposed to indicates that not much has changed since earlier studies. Storm and Rothmann (2003:1) who cites Kopel and Friedman highlight that “Statistics regarding continuous exposure to violence, retirement as a result of stress-related psychological disorders as well as the high suicide rate in the South African Police Service are indicative that many police officers experience their circumstances as stressful and traumatic”.

For Flannery (2000:78) traumatic events “may arise when an individual is confronted with actual or threatened death or serious injury or some other threat to one’s physical integrity. It may also occur by witnessing these events occurring to others”. This definition of Flannery summarizes the type of situations police officers are continuously exposed to.

Regehr, Johanis, Dimitropoulos, Bartram and Hope (2003:383) describe the role of a police officer as “multifaceted and complex”. It is within this multifaceted and complex role that police officers are daily exposed to situations that might lead them to experience psychological trauma. Everstine and Everstine (1993:10) argue that, “When something happens in a person’s life that threatens the natural balancing system, psychological symptoms may soon appear. Experiencing

a traumatic event is that quality of threat taken to an extreme". In the daily work of a police officer it is very often found that this "quality of threat" is something that happens regularly.

Based upon this research, Everstine and Everstine (1993) formulated the term: *high-risk career*. A high-risk career for them is a career where there is an increased possibility for the individual to be exposed to a traumatic event. They identify fire-fighters as people who have chosen a high-risk career, seeing that these individuals are often faced with events that threaten their well-being and their lives. With the definition of high-risk careers in mind, it is argued that police officers are also involved in high-risk careers. Marks (1995) rightly indicates that the work of South African police officers is mostly exhausting and dangerous. She further suggests that South African police officers are often people who put their lives at risk as soon as they leave home every day. Marais (2005) also focusses on how various occupations require individuals to confront or experience traumatic situations. The author highlights occupations including emergency service personnel, rescue workers, police officers and journalists as some of the occupations labeled as highly stressful and traumatic.

Violanti (1997:1) studying the residuals of police occupational trauma indicates that "during the span of a career, police officers are generally exposed to traumatic events more often and more intensely than those in other occupations". He further explains that: "Police officers are in many ways similar to military combatants experiencing events in their work that involve treachery, violence and death. Police officers with long-term exposure to trauma may, like soldiers, experience the after-effects of trauma, long after separation from the war".

Carmichael (2006) agrees with Violanti when he suggests that up to thirty five percent of police officers will experience psychological symptoms as a direct consequence of their exposure to traumatic incidents.

5.1 SOURCES OF TRAUMA FOR POLICEMEN

Patterson (2001:2) describes four major categories of traumatic stress for police officers. These four categories include:

1. External Stressful Events

These events are work related events or situations that arise outside the bureaucratic law enforcement organisation. These events include shooting incidents and attending gruesome scenes.

2. Internal Stressful Events

Patterson (2001:2) argues that these events are “those work events and situations that arise from the bureaucratic policies and procedures within the law enforcement organisation”. This is also emphasized by Charmichael (2006:1) when he argues that, “In addition, coping with accumulated police trauma is made worse by stressors that now go with the territory of being a police officer in the 21st century including inadequate staffing levels, policies that require more work and time on each file, frequent changes, increased scrutiny (by politicians, media, public and internal mechanisms), funding realities requiring officers to do more with less, community anger at the police for the actions of judges when convicted persons receive little or no consequences for their actions, the investigation of officers by internal affairs following what appear to be frivolous reports to the Public Complaints Commission, and the need for attention to minute details in regards to cultural diversity and political correctness”.

3. Task-Related Stressful Events

These are events and situations that take place when the police officer performs work tasks involved in law enforcement.

4. Individual Stressful Events

These individual stressful events describe those life events that police officers experience that do not emanate from within the working environment.

It is generally accepted in literature that police work and trauma go hand in hand. Violanti (1997:3) argues that police officers spend much of their careers preparing for the worst, despite the fact that police work is “mostly routine it is also interspersed with acts of violence, excitement and trauma”. Although there are many routine aspects allocated to police work Patterson (2001) determined three categories that would generally be defined as traumatic incidents in law enforcement. These categories are: incidents involving injury or violence to the officer or others; incidents associated with major disasters such as mutilated bodies and fatalities; and incidents managing public disorder. Patterson (2001) cites Kruschman when he observes that most traumatic incidents experienced by police officers are intentional, human-made disasters as opposed to natural, accidental disasters. These include incidents such as: rape, assault and abuse, officers involved in shootings, hostage situations, the death of an officer in the line of duty and the death or serious injury of children.

Marks (1995) argues that police officers in townships, such as Soweto, are placed under far more stress than those in the suburbs. For Marks (1995) townships are often the places where the most violent crimes are carried out and furthermore police officers in townships are exposed to extreme poverty and hardship on a continuous basis. A recent study by Kynoch (2003) indicates that crime and violence in South African townships has increased dramatically since the 1990s. Kynoch's (2003:1) study indicates that the general feeling of residents from several different Soweto neighborhoods was that "the townships of the apartheid era were much safer than they are today". Focussing on Meadowlands in Soweto Burton (2003) describes how this neighborhood is experiencing high levels of crime, also arguing that certain violent crimes are a common phenomenon.

With the release of the crime statistics in South Africa (April 2005 – March 2006) the Minister of Safety and Security acknowledged that certain crimes had increased. Louw (2006) argues that according to recent crime statistics the trends relating to crimes that are generally highly organized, including car hijacking, car theft and cash-in-transit robberies are of concern. These specific crimes, as well as many other types of crime not mentioned by Louw take on extremely violent forms. All these types of crime together with the traumatic experiences they create for the individuals exposed to the situation becomes apart of a police officers daily life.

The South African Police Service in National Instruction 18/1998 identifies the following events as traumatic within their specific context:

- A shooting incident, whether the employee was the victim or not, and whether or not persons were injured or killed
- A suicide or attempted suicide
- A bomb explosion
- A gruesome scene, such as murder, serious collision or a disaster
- A hostage situation, and
- A case of provocation, which may cause frustration or aggression, or any other incident causing trauma.

South African Police Service members trained as dog handlers are exposed to all of the abovementioned situations. Being trained dog handlers these police officers are specialists in their field, forming part of an elite reaction unit. The employees of this unit are people who have already completed their basic police training and thereafter have undergone intensive training in:

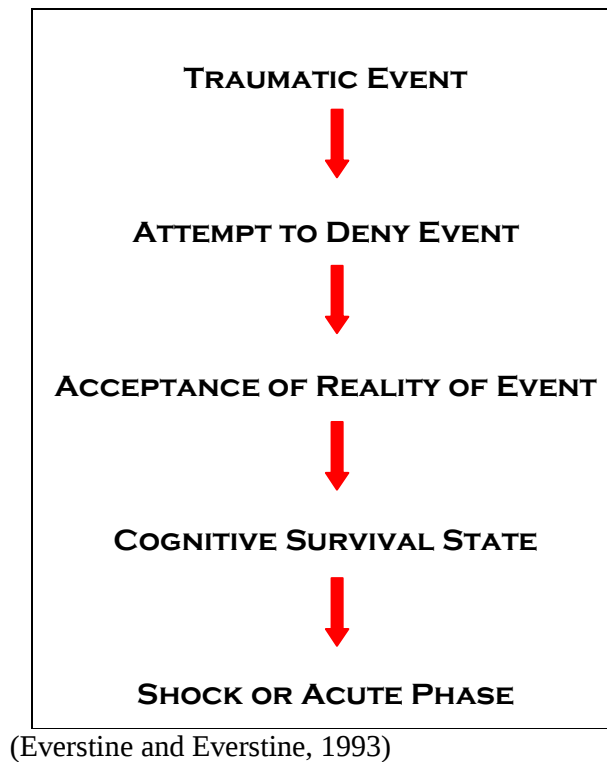
patrol dog handling; tracker dog handling; search and rescue dog handling; narcotics detection dog handling; explosives detection handling; protected species detection dog handling; fire investigation dog handling; tactical dog handling or sheep-dog handling. Working in all these mentioned fields exposes dog handlers to various traumatic events.

6 EFFECTS OF TRAUMA ON INDIVIDUALS

Trauma, as has been seen throughout this chapter, impacts on individuals in many ways. The following section will specifically focus on the many effects individuals could experience following a traumatic event. Holloway and Fullerton cited by Ursano et al. (1994:31) argue that traumatic events “create terror – before, during and after the trauma”. This might explain the experiences described by many who have been exposed to traumatic events. For Holloway and Fullerton “this state of extreme fright is evoked by the experience of vulnerability, helplessness, loss of control, uncertainty, and threat to life”.

Using Maslow’s hierarchy of human needs, Everly (2001) tries to explain why trauma has such a profound impact on individuals. Maslow’s hierarchy of human needs places safety and security as the second most basic of human needs. Everly (2001:2) states that “If Maslow is correct about the critical role of safety, then, it becomes clear why psychological trauma can be so devastating to a person’s human growth, development, self-esteem and self-actualization”.

The schematic illustration below gives an overview of Everstine and Everstine’s (1993:16) description of the thoughts and feelings experienced by people in sequence after a traumatic event:



This section of the chapter will focus on the specific effects trauma has on individuals. Research over the years has determined specific effects experienced by individuals after exposure to extreme traumatic incidents.

Tedeschi and Calhoun (1995) identified various negative effects that might follow a traumatic incident. These effects could be identified as:

6.1 PSYCHOLOGICAL EFFECTS

Psychological effects include the possible effects that a traumatic event might have on a person's thought patterns. When an event is sudden and unexpected, as most traumatic events normally are, initial reactions of shock, disbelief and psychological numbness are not uncommon. The trauma affects the individual on a cognitive level, where it is often found that the traumatic event intrudes into the person's thoughts. Thoughts, images and recollections of the event break into consciousness with disturbing regularity. This intrusion may also happen during sleep, in the form of nightmares about the events or about related circumstances.

According to Tedeschi and Calhoun (1995) a significant way, in which an individual's thoughts are affected has to do with the struggle to achieve an understanding of what has occurred. Wilson

(1989) describes the following cognitive effects that may occur due to trauma exposure: denial/avoidance, distortion and intrusion. Garland (1988:110) agrees with this when he argues that it “is not surprising that those survivors of traumatic events can feel overwhelmed with confusion, demoralization and a sense of persecution”. Garland (1988:113) maintains that with the traumatized response “there is our powerful inbuilt drive to make sense of our own experience”.

6.2 EMOTIONAL EFFECTS

Literature pertaining to studies of traumatic experiences highlights the significance of emotional affects after trauma exposure. Tedeschi and Calhoun (1995:21) however, emphasize the importance of individual differences when discussing emotional effects of trauma, when they argue that “The specific kinds of emotions that predominate vary among individuals and across specific circumstances”. Some emotional effects identified in literature and specifically by Tedeschi and Calhoun (1995) include: guilt; anger; irritability; fear; anxiety and depression.

Wilson (1989) in his research surrounding the emotional effects following traumatic events describes three concepts pertaining to the emotional impact of a traumatic experience:

- The first concept Wilson (1989) identifies is *affective distress*. Here the person feels overwhelmed emotionally, fearful, flooded with distressing affect and possibly extremely anxious;
- *Affective numbing* is the second concept identified. For Wilson this affective numbing takes place when the person shuts down emotionally when confronted with an intense and upsetting event; and
- The third and last concept Wilson sees as important to the emotional effects traumatic events have on people is termed *affective balance*. When affective balance appears according to Wilson (1989) the person is able to successfully modulate affective states.

6.3 BEHAVIOURAL EFFECTS

Tedeschi and Calhoun (1995) identified various behavioural changes that may occur as a result of trauma exposure. These changes included: possible increase in the use of legal- and illegal drugs, withdrawal from others, depression and possible aggressive behaviour.

7 TRAUMA EFFECTS ON POLICE OFFICERS

7.1 RESEARCH FINDINGS FROM WAR AND VIOLENT SITUATIONS

War situations contributed significantly to creating a better understanding of trauma and its affects on individuals. It is not surprising that many effects following traumatic incidents have been identified in research conducted with soldiers returning from war. Laurier (2004:1) indicates that “research conducted after other military conflicts has shown that deployment stressors and exposure to combat results in considerable risks of mental health problems, including post-traumatic stress disorder (PTSD), major depression, substance abuse, impairment in social functioning and in the ability to work and the increased use of health care services”.

Welch (2005) found that many of the symptoms discussed in the preceding section were evident in war veterans returning from Iraq and argues that trauma events are sometimes re-experienced at a later stage through intrusive memories, nightmares, hallucinations or flashbacks. Other responses he identified in his study include: troubled sleep, irritability, anger, poor concentration, hyper-vigilance and exaggerated responses.

A lot of research conducted about the Iraq war confirmed many of the assumptions and theories surrounding trauma effects. Greene (2005) for example, comments on a study at the US Army’s Walter Reed Hospital in Washington DC which found that up to seventy percent of Iraqi veterans suffered from depression, anxiety or PTSD. Welch (2005:1) confirms this finding by stating that, “Individuals may feel depression, detachment or estrangement, guilt, intense anxiety and panic, and other negative emotions”.

Describing some of the most common signs and symptoms of operational fatigue in rank order by frequency Wilson (1988:83) list these signs and symptoms as:

Table 6: Signs and Symptoms of Operational Fatigue (Grinker and Spiegel: 1945)

1. Restlessness	10. Personality changes and memory loss
2. Irritability or aggression	11. Tremor
3. Fatigue on arising, lethargy	12. Difficulty concentrating, confusion
4. Difficulty falling asleep	13. Alcoholism
5. Anxiety, subjective	14. Preoccupation with combat
6. Frequent fatigue	15. Decreased appetite
7. Startle reactions	16. Nightmares
8. Feeling of tension (e.g. vomiting, diarrhea)	17. Psychosomatic symptoms
9. Depression	18. Irrational fears (phobias)
	19. Suspiciousness

(Wilson, 1988:83)

Trauma appears to have an effect on every aspect of the exposed individual's life. Investigating the impact on an individual's personal life Laurier (2004) concludes that there was a forty percent divorce rate for male Vietnam veterans, with twenty three percent having high levels of parenting problems. Greene's (2005) study also with military US Army veterans, found that the divorce rate among US Army officers had tripled in the past three years. Laurier (2004:3) further determines that "Almost half of all male Vietnam veterans suffering from PTSD between 1986 and 1988 have been arrested or jailed at least once and the estimated lifetime prevalence for substance abuse or dependency among male Vietnam veterans is nearly forty percent".

7.2 RESEARCH FINDINGS SPECIFIC TO POLICE OFFICERS

Examining police officers who had been involved in shootings Stratton et al. cited by Karlsson and Christianson (2003) found a variety of psychological reactions such as disturbed time perception, sleep problems, fear of legal consequences, and a variety of emotional reactions such as anger, elation and crying. Studies focussing specifically on police officers also identified various other symptoms after trauma exposure. Regehr, Johannis, Dimitropoulos, Bartram and Hope (2003:384) looked at post-traumatic stress symptoms in police officers subsequent to experiencing traumatic events. The symptoms they identified include "sleep loss, high levels of intrusion and avoidance symptoms such as fears and flashbacks and depression". The degree of these symptoms according to Regehr et al. (2003) is related to the severity and proximity of the trauma exposure and the number of successive traumatic events to which they've been exposed to.

From the literature it is apparent that various trauma responses are identifiable. Specifically focussing on the impact of traumatic scenes on police officers Greene (2001) identifies various effects through a summary of personal observations. In her argument Greene determines that most police officers consider handling human remains and death scene investigation as routine daily tasks. Greene (2001:2) finds that the tasks of police officers are "laden with emotional significance and are often accompanied by sights, sounds, smells, tastes, and touch sensations of the most unpleasant kind".

Through her observations Greene (2001) identifies transient responses of police officers to what she calls 'bad bodies' and 'bad scenes'. These responses are: (1) no outward emotional response; (2) awakening of core emotion, fantasies, and fears; (3) dissociative symptoms; (4) sensory symptoms; (5) arousal symptoms; (6) mood symptoms; (7) behavioral symptoms; (8) personal boundary symptoms; (9) secondary symptoms associated with substance use; (10) re-awakening

or exacerbation of major psychiatric disorders and (11) symptoms related to the psychological struggles of fellow police officers. For Greene (2001:4) “Civilians and members of the military may have similar groups of symptoms under situations of extreme stress. However, I have found that police officers have characteristic expression of specific symptoms within each group”.

Due to the nature of Greene’s study and the relevance of it to this study the following section will take a look at some of the major aspects she identifies.

1. No outward emotional response

Some police officers never outwardly manifest an apparent immediate, short- or long-term emotional response to situations experienced as traumatic. For Greene this ‘non-response’ is actually a response. Describing this ‘non-response’ Greene (2001:4) indicates that “these police officers usually are older, have great life experience, and have come to a personal conclusion and philosophy about the roles of good and evil in life and death”. Repeated exposure to aggression and death leads to fine honing of successful mature psychological coping mechanisms.

2. Transient and long-term psycho-sensory responses

Observing police officers response to traumatic circumstances Greene (2001) found that many police officers have a temporary response to these situations. The effects of these situations on the police officer may range from not being bothered by the trauma to feeling so overwhelming by a scene that it brings many difficulties.

3. Symptoms

- Dissociative symptoms including: selective amnesia, depersonalization, de-realization, total lack of feeling emotion;
- Sensory symptoms including: intrusive and recurrent images, sounds, smells, tastes and touch memories of the event;
- Arousal symptoms including: sleeplessness; distractibility; constant hypervigilance; and
- Mood symptoms including: rage, anger, irritability, increasing inability to trust, helplessness. Greene (2001:10) argues here that repeated exposure to traumatic events “changes the officer’s view of life”.

In contrast to Greene’s research and observations done specifically at what she terms ‘bad scenes’ which could include any number of events, Klinger (2006) focused his research on the responses of police officers after involvement in shootings. Klinger’s (2006) study explores the

emotional, psychological, and physical reactions of 80 police officers during and after 113 different shooting incidents.

Table 7: Emotional, Psychological and Physical Reactions of Police Officers after a Shooting Incident

Officers' Responses Following a Shooting					
Physical response	At any time (n = 113)	First 24 hours (n = 112)	First week (n = 113)	Within 3 months (n = 111)	After 3 months (n = 105)
Trouble sleeping	48%	46%	36%	16%	11%
Fatigue	46%	39%	26%	7%	5%
Crying	24%	17%	7%	2%	2%
Appetite loss	17%	16%	8%	2%	1%
Headache	7%	6%	4%	1%	1%
Nausea	4%	4%	4%	0%	0%
Other physical response	19%	18%	11%	12%	6%
Thoughts and feelings					
Recurrent thoughts	83%	82%	74%	52%	37%
Anxiety	40%	37%	28%	13%	10%
Fear of legal or administrative problems	34%	31%	25%	19%	11%
Elation	29%	26%	19%	11%	5%
Sadness	26%	18%	17%	5%	5%
Numbness	20%	18%	7%	4%	3%
Nightmares	18%	13%	13%	10%	6%
Fear for safety	18%	9%	10%	9%	8%
Guilt	12%	10%	5%	6%	2%
Other thoughts or feelings	42%	33%	23%	20%	14%

(Klinger, 2006:2)

7.3 TRAUMA EFFECTS ON DOG HANDLERS

The effects of trauma on members of the SAPS are not any different from the effects identified in trauma literature. Addressing the traumatic experiences of dog handlers in the SAPS, Westraat (2002) looked at the different physical, emotional, cognitive and behavioural effects. In his study of dog handlers in the SAPS Westraat (2002) found that a large number of respondents indicated

that tension head-aches were quite common for them following traumatic incidents. Other physical symptoms included: a difference in normal eating patterns and an overall tiredness. Some of the emotional effects identified by Westraat's study include: frustration; aggressiveness, feelings of anger and sometimes feeling out of control. When it comes to traumatic incidents' effect on the behavior of dog handlers Westraat's (2002) study indicates that some respondents indicated some impulsiveness along with dreams and flashbacks. Dog handlers in Westraat's (2002) study indicated an optimistic, perfectionist thought pattern.

8 CONCLUSION

When creating an understanding of trauma and its effects it is obvious that trauma is an incredibly real aspect of life. Increasingly more real is the constant exposure of police officers to traumatic incidents. As a police officer in South Africa today, the chance of attending a scene described as traumatic to the police officer is extremely likely. Forming part of the SAPS reaction unit members of the SAPS Dog Unit finds themselves in the front lines when it comes to attending these gruesome scenes and being exposed to dangerous situations.

While the previous two chapters focussed on the two main concepts of this research study, chapter 4 will now focus on creating an understanding of the role temperament plays in the trauma experience.

Chapter 4

Temperament & Trauma

1 INTRODUCTION

Whilst the previous two chapters addressed the concepts of temperament and trauma the following chapter aims to address the question of how these two concepts interlink.

Traumatic events, as seen by Wilson (1989), occur inside the psyche of individuals. Because of this unique experience inside the psyche of individuals, this '*subjective experience*' as described by Wilson (1989) varies from one person to another and from one event to another. These subjective experiences form an important basis for this research study and therefore it is necessary to understand the significance of individual difference when it comes to being exposed to traumatic events.

2 ASPECTS IMPORTANT TO THE TRAUMA EXPERIENCE

Over time the conceptualization of trauma has undergone a paradigm shift. Jones and Wessely (2006) describe how a normal psychological reaction to a terrifying event was considered short-term and reversible. According to Jones and Wessely (2006:164), "long-term effects, characterized as 'traumatic neurosis' were regarded as abnormal. Enduring symptoms were explained in terms of hereditary predisposition, early maladaptive experiences or a pre-existing psychiatric disorder". In sharp contrast to these ideas Everstine and Everstine (1993) note that trauma should not be seen as some sort of 'disaster' but should rather be seen as a response pattern, where the goal is to heal rather than prolong the trauma. These contemporary views towards the trauma experience bring with it an important view of unique personal experiences related to trauma. Everstine and Everstine (1993:13) support this and agree, "The trauma reaction is event-specific, and helping the person recover from trauma must take into account the personal significance of the event".

2.1 INDIVIDUAL VULNERABILITY TOWARDS TRAUMA

Garland (1988) suggests that individual differences or individual vulnerabilities are immensely important when looking at the impact of trauma on an individual. For Garland (1988:23) "The

individual has a constitution and a history which have shaped his internal world; hence a character and personality. He also has a culture. So he is someone who is more or less vulnerable to that particular event at that particular moment in his developmental history”.

The concept of individual vulnerability towards trauma has been given a lot of attention in contemporary trauma literature. Yehuda and McFarlane (1995) identify genetic risk factors, family history, the individual’s personality and a past history of trauma as aspects that could lead to greater vulnerability to trauma.

Agreeing with this view, Schiraldi (2000) identifies three factors that could possibly make an individual more vulnerable to trauma. The first of these factors has to do with individual differences. For Schiraldi (2000:37) “people are different; we meet traumatic events at varying degrees of preparedness”. A few risk factors he mentions include: (1) a history of prior traumatization; (2) underdeveloped protective skills, problem-solving skills, self-esteem, resilience, creativity, humour and discipline; (3) personality and habitually negative thought patterns and (4) biology – some people appear to have over reactive nervous systems. Except for individual differences, Schiraldi (2000) also identifies family characteristics and recent life stressors as possible vulnerabilities towards trauma.

However, for the purpose of this study the importance of individual differences in the trauma experience is immensely important and therefore needs to be looked at in-depth. Wilson (1989) argues that the importance of personality variables in determining individuals’ reactions to traumatic stress should not be overlooked. Personality variables relating to reactions to traumatic stress include: motives; traits; beliefs; values; abilities; cognitive structure; mood; defensive and coping styles and genetic propensities (Wilson, 1989).

According to Wilson (1989) personality traits are often directly associated with cognitive styles of information processing, especially in the acquisition, processing and goal setting dimensions of understanding the information of the situation. For Wilson (1989:8) traumatic stress implies “that personality processes affect and dynamically interact with all four categories of environmental variables to influence the specific nature of the individual subjective response to the trauma”.

From these explanations in the literature it appears that the effects of trauma on individuals differ significantly from one person to another. Confirming this Paton, Smith and Stephens (1998:1) agree with Wilson in observing that “differences in post-trauma reactivity have heightened awareness of the role of individual differences as determinants of reactivity. Demographic,

cultural, personality, biological, historical and psychological factors have been implicated as playing a mediating role in this process”.

David and Klein (2006) focussing on the trauma associated with terrorism agree with the before mentioned authors when identifying three groups of factors that shapes the effects of traumatic events on individuals. For David and Klein (2006:5) “The first group comprise those which are ‘pre-trauma’, e.g. personality (introverts are more vulnerable), age (young children and the elderly are at greater risk), and gender (woman of child bearing age are also more at risk)”.

It is obvious that different factors appear to influence the effects traumatic events may have on an individual. The remainder of this chapter will focus on how different personalities and temperaments are affected by traumatic events.

3 PERSONALITY AND TRAUMA

Dulmus and Hilarski (2003) emphasize how imperative it is to understand that an event or circumstance is not a stress, trauma and/or a crisis. For Dulmus and Hilarski (2003:27), “The level of personal distress regarding an event or circumstance relates to the individual’s perception of the event, depending upon personal characteristics and context”. Thus the perception of the individual defines the event. Personality traits according to these authors influence individuals to interpret their worlds and the circumstances in it as benign or threatening.

3.1 SPECIFIC PERSONALITY TRAITS AND THE IMPACT THEREOF ON THE TRAUMA EXPERIENCE

Studies that were conducted explain the link of certain personality traits and the effect of trauma on those personality traits. Usually this explanation describes the difference between two traits or temperament styles and then indicates how those styles or traits are affected by trauma.

Bramsen, Dirkzwager and van der Ploeg (2000) describe how research found that the personality disposition termed ‘hardiness’ is a significant and strong predictor of post-traumatic stress disorder.

Describing Myers’ primary structural dissociation Nijenhuis, van der Hart and Steele (2004) identify dividedness between the ‘*apparently normal personality*’ and the ‘*emotional personality*’. Studying acutely traumatized World War I combat soldiers, Nijenhuis et al. (2004:1) highlights that “Myers observed that the emotional personality recurrently suffers vivid

sensorimotor experiences charged with painful affects which, subjectively, closely match the original trauma”. It would therefore appear that the emotional personality is stuck in the traumatic experience as the experience persistently fails to become a narrative memory.

In contrast the ‘*apparently normal personality*’ as described by Nijenhuis et al. (2004) is associated with avoidance of the traumatic memories, detachment, numbing and partial or complete amnesia. For the authors this personality type appears to have trouble integrating the trauma.

In order to create a better understanding of the importance that different personality types play in the effects traumatic events have on individuals it is worthwhile to take a look at one of the more common personality differentiations. Type A and Type B personality theory has been widely used as a measure of how individuals deal with stress. More attention will be given to these personality types in section 3.2.2.

3.2 STRESS AND PERSONALITY

3.2.1 THE RELATIONSHIP BETWEEN TRAUMA AND STRESS

Seyle in 1958 was the first to describe the phenomenon of stress, describing it as “the result of an imbalance between the level of demand placed on a person and the person’s perceived ability to deal with the demand”. Also linking to the aspect of a personal imbalance, Jaffe–Gill, Smith, Dumke, Larson, and Segal (2007) describe stress as a psychological and physiological response to events that upset our personal balance in some way. Stress, like trauma, creates specific experiences for an individual and this can manifest in some of the following symptoms:

3.2.1.1 INTELLECTUAL SYMPTOMS (How stress can affect the mind)

- Memory problems
- Difficulty in making decisions
- Inability to concentrate
- Confusion
- Seeing only the negative
- Repetitive or racing thoughts
- Poor judgment
- Loss of objectivity

- Desire to escape or run away

3.2.1.2 EMOTIONAL SYMPTOMS (How stress can make you feel)

- Moody and hypersensitive
- Restlessness and anxiety
- Depression
- Anger and resentment
- Easily irritate and 'on the edge'
- Sense of being overwhelmed
- Lack of confidence
- Apathy
- Urge to laugh or cry at inappropriate times

3.2.1.3 PHYSICAL SYMPTOMS (How stress can affect the body)

- Headaches
- Digestive problems
- Muscle tension and pain
- Sleep disturbances
- Fatigue
- Chest pains, irregular heartbeat
- High blood pressure
- Weight gain or loss
- Asthma or shortness of breath
- Skin problems
- Decreased sex drive

3.2.1.4 BEHAVIORAL SYMPTOMS (How stress can affect your behaviour)

- Eating more or less
- Sleeping too much or too little

- Isolating yourself from others
- Neglecting your responsibilities
- Nervous habits (e.g. nail biting, pacing)
- Teeth grinding or jaw clenching
- Overdoing activities such as exercising or shopping
- Losing your temper
- Overreacting to unexpected problems

(Jaffe–Gill, Smith, Dumke, Larson, and Segal, 2007)

Different types of stress have been identified in literature these include acute stress, episodic acute stress and chronic stress. These types of stress are defined as:

- Acute stress onset is immediate but is usually not long-lasting and usually does not have the same repercussions as chronic stress;
- Episodic acute stress is apparent in those individuals that are always in a hurry, always late for appointments. They take on too many responsibilities and their interpersonal relationships may suffer. They may be ceaseless worriers and be prone to having aggressive personalities; and
- Chronic stress is seen as more serious. Stressors, real or imagined, are experienced almost everyday and this overexposure to stress hormones causes havoc on the body and mind (<http://www.ivillage.co.uk>, 2008).

Jaffe-Gill et al (2007:1) specifically looks at traumatic stress, which they describe as “severe stress reactions can result from a catastrophic event or intense experience such as a natural disaster, sexual assault, life-threatening accident, or participation in combat. After the initial shock and emotional fallout, many trauma victims gradually begin to recover. But for some people, the psychological and physical symptoms triggered by the trauma don't go away, the body doesn’t regain its equilibrium, and life doesn’t return to normal. This is a condition known as post-traumatic stress disorder (PTSD)”.

3.2.2 TYPE A- AND TYPE B PERSONALITY FACTORS AND STRESS

In 1959, Friedman and Rosenman conceptualized the Type A and Type B personality factors which have subsequently become an easy way to identify different types of people.

Type A personalities according to Jenkins (2000) have an observable set of behaviours or style of living characterized by extremes of hostility, competitiveness, hurry, impatience, restlessness, aggressiveness and a high state of alertness. In contrast Type B behaviour patterns are more relaxed and cooperative. Ladd-Phillips (2007) sees Type B personalities as less likely to suffer from stress, unless there appears to be a specific cause. He further argues that Type B people are more relaxed, less driven and they are calm individuals with a rational outlook.

In agreeing with Jenkins, Ladd-Phillips (2007) adds to the description of a Type A individual and says that this individual is often driven by feelings of insecurity. It is commonly acknowledged in the literature that Type A behaviour is linked to high stress levels and the risk of cardiovascular problems.

A study by Kirmeyer and Diamond (1985) indicated that police officers with a strong Type A personality selected strategies that were more active and narrowly focussed on the problem at hand. Therefore, internalizing the events that they were exposed to.

3.2.3 TEMPERAMENT AND STRESS

The functional significance of temperament can be understood when an individual is confronted with a situational demand. In understanding the link between temperament and stress it is necessary to take a look at transactional stress theory. This theory states that temperament not only affects the appraisal of and coping with stress, but it is also important with regard to the selection and shaping of stressful situations (Marias, 2005). According to Strelau (1998) when an individual experiences a stressful life event, he is faced with certain demands. These are two types of demands described by Marais (2005:42) as “objective and subjective demands. Objective demands are stressful situations that are beyond the control of the individual such as trauma, war, death and disaster. Subjective demands are understood to be the individual’s interpretation of the event, for example the amount of threat or harm the individual perceives”.

There are three ways in which temperament can influence the effects a certain stress phenomenon has on an individual. “Firstly, the stimulus value of the stressful situation has an impact on the manner in which an individual will respond. Secondly, the individual’s normal baseline level of arousal will have a contribution as people who tend to be generally anxious are most likely to respond with intense anxiety in stressful situations. Lastly, temperament traits associated with emotionality and the tendencies to generate negative emotions could make an individual vulnerable to severe stress reactions” (Marias, 2005:43).

Referring to Strelau's work, Marais (2005) argues that temperament acts as a moderator of stress. Thus arguing that temperament traits associated with low arousability (including extraversion, high sensation-seeking or strong type of nervous system) will cause an increase in stress levels when interaction occurs with life events characterized as demands of low stimulative value. Where in contrast temperament traits characterized by high arousability (including introversion, neuroticism and low sensation-seeking) will produce higher levels of stress when interactions with events of high stimulative value like traumatic stressors occur.

Taking a different angle from Strelau and Marias, Berens (1999:1) identifies what she terms temperament related stress, to be, "from not getting the core needs and values of the temperament pattern met".

Taking Keirsey's four main temperament styles Berens (1999) assesses that each temperament has a core from which all growth and rejuvenation originates. Related to these core needs are the core values which give an individual the greatest nurturance. Berens (1999) postulates that for each temperament there are different stressors according to different core needs, different expressions of stress and different antidotes for that stress. They are:

Table 8: Core Needs of Temperaments

	Idealist	Rational	Guardian	Artisan
Core Needs	Meaning and Significance Unique Identity	Mastery and Self-Control Knowledge and Competence	Membership or Belonging Responsibility or Duty	Freedom to act on needs of the moment Ability to make an impact
Stressors	Insincerity Betrayal Lack of Integrity	Powerlessness Incompetence Lack of Knowledge	Abandonment Insubordination Lack of Belonging	Constraint Boredom Lack of Impact
When Stressed	Dissociates become Phony	Obsesses becomes Mindless	Complains become sick, tired, sorry, worried	Retaliates becomes rebellious and is restricted
Antidotes for Stress	Affirmation and nurturing from self and others New 'quests'	Reconfirmation of competence and knowledge A new project	Appreciation and inclusion in news and activities New membership	Find options and new ways to impact New activities

(Berens, 1999)

4 CONCLUSION

Although research identifying specific temperament traits or personality characteristics that could be linked to the effects experienced as a result of exposure to traumatic circumstances is not as extensive as other areas of research, what is apparent is that there is agreement in literature that individual differences do play a role in how individuals are affected by traumatic events or situations. Certain personality characteristics appear to be linked to specific ways that trauma is experienced.

For Marais (2005) two characteristics have been identified as vulnerability factors: trait anxiety and introversion. Trait anxiety according to Marais (2005) has also been identified as an important factor of neuroticism. People with high neuroticism and trait anxiety appear to have sensitive autonomic nervous systems. Therefore they respond distressingly to situations of trauma as their arousal levels takes longer to normalize.

Citing a study from Henning (1999), Marais (2005) focusses on the role personality traits play in the development of post-traumatic stress disorder in a group of South African police officers. The study indicates that police officers who suffered from post-traumatic stress disorder were more: compulsive; ordered; introspective; neurotic; sensitive and defensive when compared to police officers without post-traumatic stress disorder. It therefore appears that traumatic events have different meanings for the people exposed to them due to perceptual differences and cognitive attributions (Marais, 2005).

Chapter 5

Research Design & Methodology

1 INTRODUCTION

The following chapter aimed to explain the structure of the research study. Babbie (2001) argues that social research is able to serve many purposes, which includes exploration, description and explanation. In order to explain the purpose of this study the information in this chapter focussed on explaining the specific research design used for this study and on how the research process evolved.

2 RESEARCH AIMS AND OBJECTIVES

2.1 PRIMARY AIM

The aim of this research study was to explore the relationship between temperament styles and the effects traumatic events had on male dog handlers attached to the SAPS Dog Unit, Soweto. Specifically the study aimed to determine whether any link could be drawn between the temperament styles of dog handlers at the SAPS Dog Unit, Soweto and the way in which trauma affected them.

2.2 SECONDARY OBJECTIVES

The secondary objectives of the research study were:

- To explore the different temperament styles of male dog handlers at the SAPS Dog Unit, Soweto;
- To determine the various perceptions of physical, emotional and behavioural effects that traumatic events have had upon male dog handlers at the SAPS Dog Unit, Soweto;
- To compare the temperament styles of the male dog handlers with their trauma reactions and determine whether any patterns exist.

3 RESEARCH DESIGN

Trochim (2006) defines the research design as the structure of research. The structure for this research study took the form of an exploratory-descriptive design incorporating a combination of quantitative and qualitative research methods.

Swanepoel (2005) citing Neuman argues that if an issue under investigation is new and little or nothing has been reported on it, the design is exploratory in nature. de Vos et al. (2002:124) confirms this in arguing that “an exploratory study explores a research question about which little is as yet known”. Agreeing, Babbie (2001:91) states that “exploratory studies are most typically done for three purposes: (1) to satisfy the researcher’s curiosity and desire for better understanding, (2) to test the feasibility of undertaking a more extensive study, and (3) to develop the methods to be employed in any subsequent study”. This research study explored the different effects that traumatic work events had on the respondents.

Where the nature of the research outcome is descriptive it indicates a depiction of a behaviour or a domain. Swanepoel (2005) indicates that a descriptive study presents a picture of specific details of a situation, social setting or relationship focusing on how and why questions. Swanepoel (2005:155) citing Ventry and Schiavetti argue that “in every case descriptive research is employed to provide an empirical picture of a situation by examining that situation as it is”. By determining the various respondents’ temperament styles the researcher was able to create this type of empirical picture.

Both the qualitative and quantitative methods were used in what Niglas (2005) would describe as a multi-method design. Niglas (2005) in describing the combined use of qualitative and quantitative approaches identifies multi-method designs as designs where both quantitative and qualitative approaches are used, but they remain independent until the interpretation stage. For the purpose of achieving the aims of the research study it was necessary to firstly conduct the quantitative method of the research design by determining the respondents’ temperament styles and administering the Impact of Event Scale – Revised, there after the qualitative method of the research design was implemented through the use of semi-structured interview schedule. Therefore the data remained independent until the interpretation stage.

4 THE SAMPLE

As the SAPS was a large organisation comprising of various sections and units, it was necessary to choose a specific section of the organisation for the purpose of the study. Sampling, according

to Trochim (2006), is the process of selecting units from a population of interest so that by studying the sample we may fairly generalize the results back to the population from which they were chosen. From a population as large as the SAPS the choice was made to select the Dog Unit as a unit of analysis.

The Dog Unit was chosen because being part of this specialized unit requires people with unique personal qualities. Not all people have the ability to work with animals which makes the employees who form part of this specialized unit already unique in profound ways. The unit that was the focus for this research study was the Dog Unit of the SAPS Soweto. Permission to conduct the research study at the SAPS Dog Unit Soweto was received from the unit commander (Appendix A).

Police officers attached to the dog unit are specialists in their field. As dog handlers these individuals have already completed their basic police training and thereafter underwent intensive training in: patrol dog handling; tracker dog handling; search and rescue dog handling; narcotics detection dog handling; explosives detection handling; protected species detection dog handling; fire investigation dog handling; tactical dog handling; or sheep–dog handling.

For the purpose of this study the focus was on the police officers who successfully completed any of the above courses and who are currently working as an operational police dog handler, therefore excluding management and administration staff of the Dog Unit Soweto.

The unit that was used for the study consisted predominantly of male police officers. As only one female dog handler worked at the SAPS Dog Unit Soweto the study only incorporated the male police officers. Thus the criteria for participation in the study included qualified male dog handlers at the SAPS and should have at least one year's experience in the dog unit.

The reason for that specific time criteria was that after one year of working as dog handlers, it is assumed that the police officers would have been exposed to the environment of police officers attached to the Dog Unit as well as to most events expected of them to attend to as dog handlers.

At the time of the study 22 police officers were attached to the Soweto Dog Unit who met the above-mentioned inclusion criteria. From the 22 police officers who met the inclusion criteria a non-probability sample was drawn. Rossouw (2003) citing Uys and Puttergill argues that where access to the elements in the population being studied is limited, the representativeness of the sample cannot be determined because it is impossible to specify the chance that each case has being included in the sample. Non-probability samples are therefore often used for qualitative research and where statistical analyses, representation and generalization are not used. There are

various types of non-probability samples; however for the purpose of this research study the researcher made use of purposive sampling.

To ensure that the prospective respondents were approached in a neutral manner a female administrative clerk was asked to present an information sheet containing information surrounding the proposed research study to the trained dog handlers at the Soweto Dog Unit during their monthly unit meetings. An envelope containing a letter was handed to each dog handler that fell within the selection criteria. The letter gave each individual the option to indicate whether they were willing to participate in the study or not. The sealed envelope was returned into a box provided.

5 METHODS OF DATA COLLECTION

For the purpose of this study the researcher decided to utilize a combination of qualitative – and quantitative research methods. In achieving the aims to the research study it was necessary to incorporate both types of research methods in order to get obtain the necessary information.

The first step in the research process was to assess the temperament styles of police officers who were working as dog handlers. The research tool used in order to determine the respondents' temperament styles was a questionnaire designed by David Keirsey (1984), called the Keirsey Temperament Sorter (Appendix B). The researcher has been trained in administering the Keirsey Temperament Sorter (Appendix F).

As part of the quantitative research method, the Keirsey Temperament Sorter together with the Impact of Event Scale-Revised questionnaire was administered in what de Vos et al. (2002) call making use of personal questionnaires. According to de Vos et al. (2002:154) the personal questionnaire “is handed to the respondent who completes it on his own, but the researcher is available in case problems are experienced. The researcher limits his own contribution to the completion of the questionnaire to the absolute minimum”. The purpose of using the Impact of Event Scale-Revised was to assess respondents' current subjective distress for any specific life event (Appendix D).

The third research tool administered during the research process was a qualitative semi-structured interview schedule (Appendix E). Due to the nature of the information required, the researcher advocated that a semi-structured interview schedule would be one of the most appropriate ways to achieve the aims of the study.

Rossouw (2003:148) explained that in a semi-structured interview “an open-ended question is asked and the interviewer follows up on the clues about a specific topic that the participant provides”. Thus the questions formulated in the third research tool were compiled in such a way that the specific effects experienced by individuals were explored.

6 RESEARCH INSTRUMENTATION

6.1 QUANTITATIVE RESEARCH METHOD - DETERMINING TEMPERAMENT STYLES

In order to obtain the information needed to engage in the research study, the researcher firstly determined the participants’ temperament styles by using the Keirsey Temperament Sorter developed by Keirsey and Bates in 1984. According to Grohol (2005:1) the Keirsey Temperament Sorter is a “personality test which attempts to identify which of four temperaments, and which of sixteen types, a person prefers”. The choice of this questionnaire was based upon Keirsey’s research studies and assumptions in the development of this instrument. Most of Keirsey’s research and the way in which he developed this questionnaire was based upon the work of the well know psychologist Jung. Keirsey (1984) indicated that people have certain preferences in terms of how they function. According to him, it is possible for these preferences to change according to where people are in their lives and the environment in which they find themselves. Therefore by completing this questionnaire participants were not categorized but it is rather assumed that the individuals’ temperament styles at that time were specifically due to the situations they found themselves in, in their unique life circumstances and that it was possible to change over time.

The questionnaire contained 70 questions, which needed to be answered by choosing one of the two options. These questions ultimately measure four different pairs of preferences, including:

- Extraversion versus Introversion.
- Intuition versus Sensation.
- Thinking versus Feeling.
- Judging versus Perceiving.

The Keirsey Temperament Sorter has been used within the South African context with great success. An interview, conducted by the researcher, with Antoinette Struwig, who is responsible for the training of South Africans in the administration of the Keirsey Temperament Sorter,

indicated that using the temperament sorter within the setting of the proposed research would be a useful way to derive the information needed for the proposed study.

Struwig (2006), in her research towards determining the usefulness of the Keirsey Temperament Sorter within the South African context argued that the questionnaire was developed in order to determine individuals' temperament styles and can be used with great effect by social workers living in South Africa. As Struwig (2006) highlighted the Keirsey Temperament Sorter was developed in order to create understanding between individuals. The instrument moved away from the labeling concepts of 'abnormal' and 'normal' temperaments. Moreover, using this questionnaire was not a way of determining any 'abnormalities'.

Struwig (2006) looked at the Keirsey Temperament Sorter through the scope of statistical analysis with a critical view of the tool in order to determine whether the model could be used by social workers in the South African context. In order to evaluate the Keirsey Temperament Sorter she conducted a study using Faul's Model for Scale Development. According to her findings, Struwig (2006:268) concluded "it appears that the overall reliability of the instrument is not very high, with an average Alpha of 0.648 for the English instrument and an average Alpha of 0.694 for the Afrikaans instrument". This study further found that the instrument scored high in terms of validity which made it acceptable as an ecometric instrument. One of the disadvantages of the instrument, as identified in Struwig's study, was the fact that the instrument was only available in Afrikaans and English and therefore could not include optimal participation from people who were not able to speak either of the two languages.

Struwig (2006) further indicates that the Keirsey Temperament Sorter is not used to diagnose conditions. The focus of this questionnaire places it within what the social work profession terms 'ecometrics'. Cited by Struwig (2006) the South African Council for Social Work Professions in their Position Paper on Ecometrics and Other Measurement Instruments (2003:3) defined 'ecometrics' as "the measurement (or quantification) of people-in environment. 'Ecometrics' is concerned with the measurement of the degree of fit (or adaptation) between people and their bio-psycho-social environment". Struwig believes the Keirsey Temperament Sorter should be an accepted ecometric tool within social work. Various social workers in private practice as well as the South African Police Service's Colleague Sensitivity Programme have already successfully used the Keirsey Temperament Sorter in the South African context.

6.2 QUANTITATIVE RESEARCH METHOD – ASSESSING RESPONDENTS’ SUBJECTIVE DISTRESS

The researcher in assessing the subjective distress of specific life events for each respondent administered the Impact of Event Scale-Revised (IES-R). This tool was developed by Daniel S. Weiss and Charles R. Marmar and parallels the DSM-IV criteria for PTSD. The IES-R is a 22 item self-report measure that assesses subjective distress caused by traumatic events. Respondents were asked to identify a specific stressful life event related to their work as dog handlers and then indicate how much they were distressed during the last 7 days (Weiss and Marmar, 1996). Carlson (1997) recommended that the IES-R be used in clinical or research settings to screen for a measure PTSD symptoms related to a single identified life event.

The IES-R has 22 items, 7 of which have been added to the original 15 item IES. These 7 additional items comprise 6 items that assess hyperarousal symptoms such as: anger and irritability, heightened startled response, difficulty concentrating, hypervigilance and one new intrusion item that assess dissociative-like symptoms such as re-experiencing. Respondents were asked to rate each item in the IES-R on a scale ranging from 0 (not at all), 1 (a little bit), 2 (moderately), 3 (quite a bit) and 4 (extremely) according to how distressing each event was experienced during the past 7 days.

The IES-R has no specified cutoff points as Weiss and Marmar (1996) note that cutoff points were not related to diagnostic status. They recommended that the means of the total IES-R scale and the three subscales were used instead of the raw scores. However, many researchers have developed cutoff scores, based on the raw scores to give a better indication of the moderation of symptoms. Derluyn et al. (2004) determined that the IES-R self-report had a maximum total score of 88 where a score greater than 24 indicated clinically significant symptoms. For the use of this research study the purpose was not to determine whether possible PTSD symptoms existed but rather to determine whether the respondents experienced avoidance, intrusion or hyperarousal symptoms after being exposed to traumatic incidents.

In reporting the scale reliability and validity, Hutchings and Devilly (2005) indicated that in a study of four different population samples Weiss and Marmar (1997) reported that the internal consistency of the 3 subscales was found to be very high, with intrusion alphas ranging from .87 to .92, avoidance alphas ranging from .84 to .86, and hyper-arousal alphas ranging from .79 to .90.

Briere (1997) cited by Hutchings and Devilly (2005) noted that “The hyper-arousal subscale has good predictive validity with regard to trauma”. It was further noted that the intrusion and avoidance subscales, which are original IES components, have been shown to detect change in respondents’ clinical status over time and detect relevant differences in the response to traumatic events of varying severity.

Hutchings and Devilly (2005) in reporting content validity indicated that although no content validity was available for the hyper-arousal subscale, the intrusion and avoidance subscales which are original IES items had high endorsements of up to 85%.

6.3 QUALITATIVE RESEARCH METHOD - EXPLORING THE EFFECTS OF TRAUMA ON DOG HANDLERS WITHIN THE SAPS

After completing the two quantitative research tools the researcher interviewed respondents using a semi-structured interview schedule. The interviews were conducted in order to understand each individual’s unique experience of the physical, emotional and behavioral effects experienced after trauma exposure at work.

Conducting interviews was one of the most effective ways to ensure that information received was a true reflection of the effects trauma had on each individual partaking in the study. As indicated by Rossouw (2003) semi – structured interviews are useful when the researcher is interested in participants’ opinion about the effect of a particular situation on them. The semi-structured interview schedule incorporated open-ended questions which allowed the respondents to elaborate on their traumatic experiences as dog handlers and the effects it had upon them.

These interviews were treated confidentially and participants were given the assurance that the information would only be used for the purpose of this study and that it would have no implications what so ever on their work.

7 PRE-TESTING THE RESEARCH TOOL

In order to test the proposed research tools for the study the tools were tested with two police officers from the SAPS Dog Unit Area West Rand, who met the sample requirements, but were excluded from the final study. The goal with this pre-test was to determine whether the chosen research tools were beneficial and whether participants could understand the questions. No amendments were made to the research tools.

8 DATA ANALYSIS

Data were analyzed using different methods, namely: descriptive statistics, thematic content analysis and trend analysis.

8.1 DESCRIPTIVE STATISTICS

Descriptive statistics were used in order to create an understanding of the data derived from the quantitative research tools so that the different temperament styles of the respondents could be determined. Babbie (2001:436) explains that descriptive statistics “present quantitative descriptions in a manageable form”. According to Trochim (2002) descriptive statistics are used to describe the basic features of the data in a study. Trochim (2002) further determines that with descriptive statistics you are simply describing what is or what the data shows. Typically researchers deal with large volumes of data and descriptive statistics provide a way for researchers to summarize the main properties of large amounts of data into just a few numbers. Gayten (2000) indicated that descriptive statistics are simply used to describe the sample with which you are concerned.

Using descriptive statistics allowed the researcher to describe the temperament styles of each respondent by making use of the standardized method identified by Keirsey and Bates (1984). In the development of the Keirsey Temperament Sorter, Keirsey and Bates (1984) developed a standardized method whereby the questionnaire could be evaluated in order to determine a person’s temperament style. Descriptive statistics were also utilized to describe the information obtained from the IES-R scale, including the avoidance-, hyperarousal- and intrusion subscales of the IES-R questionnaire.

8.2 THEMATIC CONTENT ANALYSIS

In analyzing the qualitative data the researcher made use of thematic content analysis. Libarkin and Kurdziel (2003) indicated that to find order in the myriad layers of qualitative data generated by various qualitative data collection methods, a method generally known as thematic content analysis was developed. Thematic content analysis is defined as a standard methodology in the social sciences on the subject of communication content (Wikipedia.org; 2006).

Libarkin and Kurdziel (2003) identify three types of analyses that are common in qualitative research, namely thematic content analysis, indexing and quantitative descriptive analysis. In

order to analyze the data obtained from the interviews the researcher made use of thematic content analysis.

Libarkin and Kurdziel (2003) describe thematic content analysis as the most subjective of the qualitative analytical techniques. In conducting thematic content analysis Libarkin and Kurdziel (2003:197) assert that: “themes are usually identified inductively, such that themes emerge naturally from the data. Once dominant themes have been identified in the data through open coding the researcher links and reorganizes themes in an attempt to develop a dominant structure”. Therefore when analyzing the data from the interviews the researcher identified dominant themes about respondents’ trauma experience.

For the analyses of the semi-structured interview schedules it was necessary for the researcher to find dominant themes surrounding the effects that traumatic events had on respondents. The themes identified by the respondents were used to identify a pattern or dominant structure. This dominant structure according to Libarkin and Kurdziel (2003:197) will eventually “evolve into a conceptual framework of the systems under study”.

8.3 TREND ANALYSIS

After analyzing the data from all three research tools, the researcher made use of trend analysis in order to compare the temperament styles identified with the various traumatic effects identified in order to determine whether possible patterns exist. Trend analysis, according to Jones (2005) is the process of analyzing data to identify underlying longer-term trends.

9 ETHICAL CONSIDERATIONS

The following were ethical considerations that were taken into account upon conducting this study:

9.1 HARM TO THE RESPONDENTS

As the study focused on the effects of traumatic events on individuals, the police officers involved in the study were asked to recall effects they experienced following a traumatic incident. It was possible that respondents might have recollections of events that were disturbing.

In order to protect respondents against possible harm the researcher informed them before hand about the potential impact of the study. Should any member be negatively affected due to

participating in the research, arrangements were made with a social worker working for SAPS to provide counselling for the individual.

9.2 INFORMED CONSENT

A very important ethical consideration was to ensure that the respondents were properly informed regarding the purpose of the study, the possible risks and benefits that they might be exposed to.

In order to ensure that this ethical principal was adhered to, the respondents were informed of the goal of the study and what the information would be used for. This allowed the respondents to make informed decisions regarding their participation in the study. The researcher obtained signed consent forms from each participant (Appendix G).

9.3 VIOLATION OF PRIVACY

De Vos et al. (2002) described the right to privacy as the individual's right to decide when, where, to whom and to what extent his or her attitudes, beliefs and behaviour will be revealed. Taking this ethical principle into account the researchers was aware of the fact that some of the police officers attached to the Dog Unit might not have felt comfortable in sharing the effects that traumatic experiences had on them. Their right to privacy and refusal to participate was respected and for that reason police officers who were not comfortable to participate were not included in the study.

10 CONCLUSION

From the information in this chapter it was clear that the structure of the research study was unique and that information collected helped to address the aims of the study. The next chapter will give a detailed account of the research findings.

Chapter 6

Discussion of Results

1 INTRODUCTION

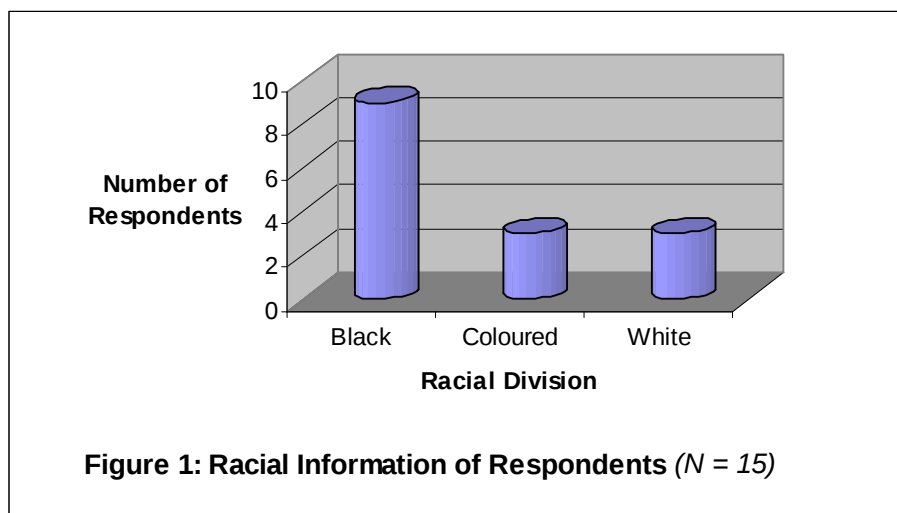
This chapter will give a detailed description of the data obtained from the research tools used. This chapter will firstly describe the demographic information of the fifteen respondents where after the information found in the three research tools used will be analyzed.

The first of the research tools that will be discussed in this chapter will be that of the Keirsey Temperament Sorter. This will be followed by the Impact of Event Scale – Revised questionnaire. The semi-structured interview schedule will be the last of the research tools to be described. The semi-structured interview results will be presented according to themes that emerged from the study. Upon considering all the data that has been identified the researcher will make use of trend analysis to identify trends within the data.

2 DEMOGRAPHIC INFORMATION

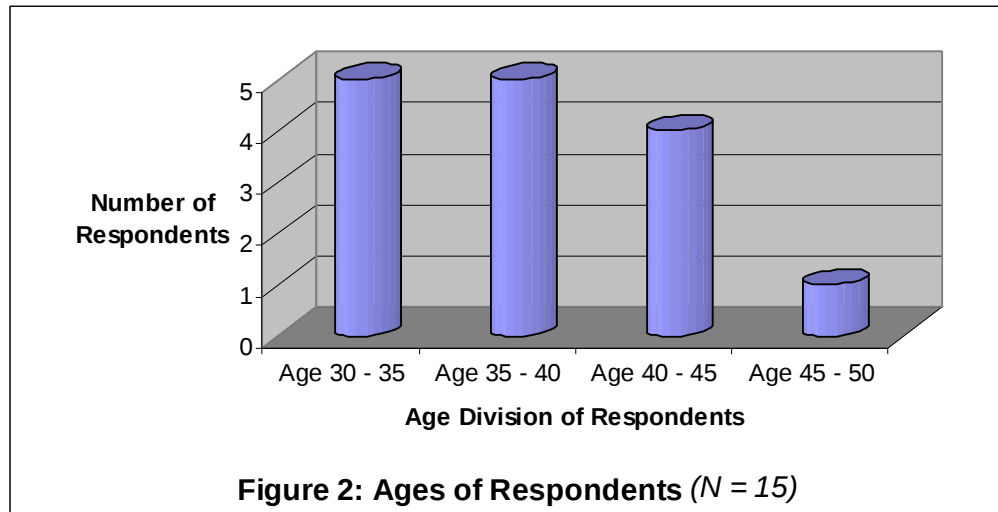
2.1 RACIAL INFORMATION

As indicated by the figure below, the majority of the respondents (9 of the 15) were of African descent. Coloured and White respondents made up the remaining 40% of the total with three Coloured respondents and three White respondents.



2.2 AGE OF RESPONDENTS

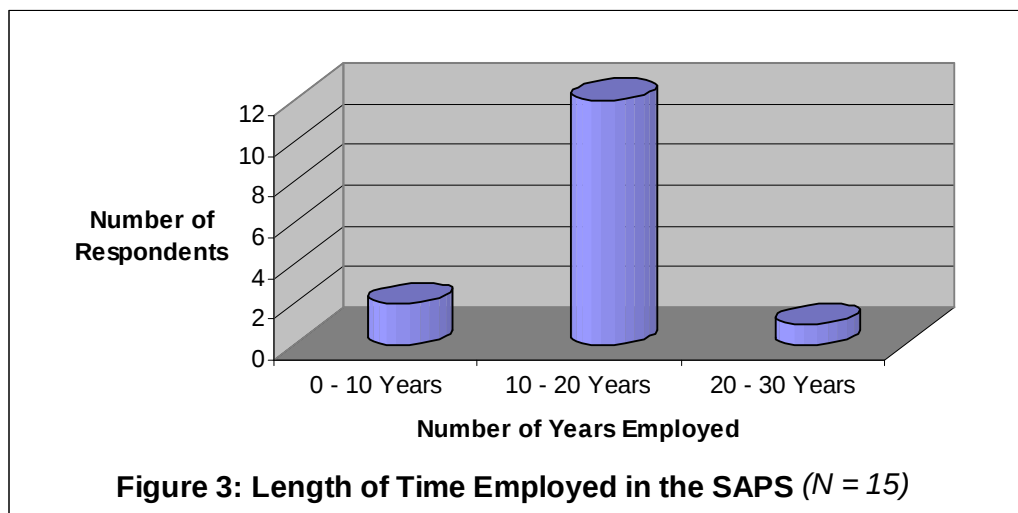
The ages of the dog handlers that participated in this study ranged from 30 years old to 50 years old. The mean age of the respondents was 38 years. The figure below gives an illustration of the ages of the respondents.



Erik Erikson's Stage Theory describes the life stage of these respondents. The respondents mostly fell between the life stages that Erikson describes as *Intimacy versus Isolation* and *Generativity versus Stagnation*. Weiten (1995) describes that during the *Intimacy versus Isolation* phase which takes place in early adulthood (20 – 40 years) the key concern is whether one can develop the capacity to engage in intimate relationships while the middle adulthood stage (40 – 65 years) challenges the individual to acquire a genuine concern for the welfare of future generations.

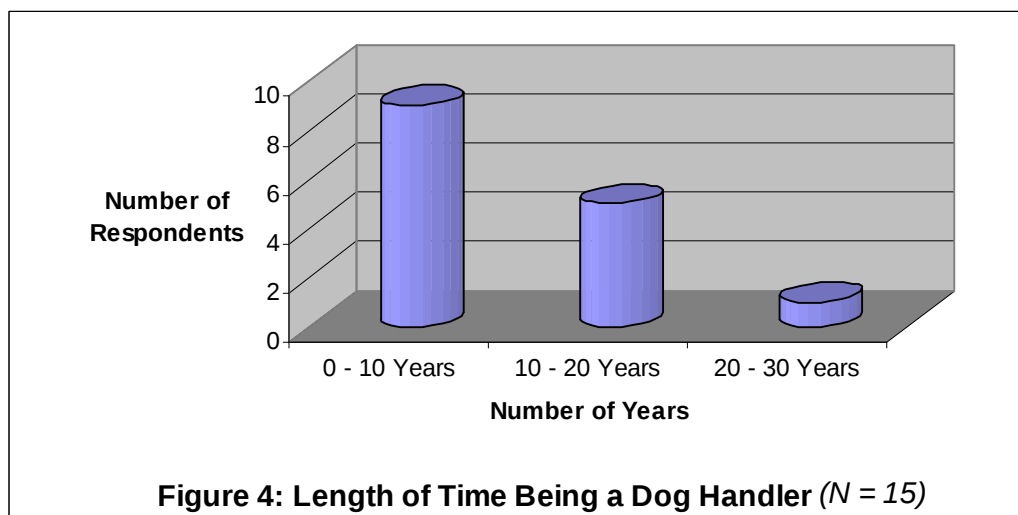
2.3 LENGTH OF TIME EMPLOYED IN THE SOUTH AFRICAN POLICE SERVICE

The period of employment of respondents ranged from a minimum of 5 years to a maximum of 30 years. Respondents' mean employment period in the SAPS was 16 years. See the figure below for a schematic illustration of the length of time respondents have been employed in the SAPS.



2.4 LENGTH OF TIME BEING A DOG HANDLER WITHIN THE SOUTH AFRICAN POLICE SERVICE

Three years was the shortest length of time that participants had in being dog handlers while 21 years was the longest time period being a dog handler. The mean of these time frames calculated was 10 years.



3 THE KEIRSEY TEMPERAMENT SORTER

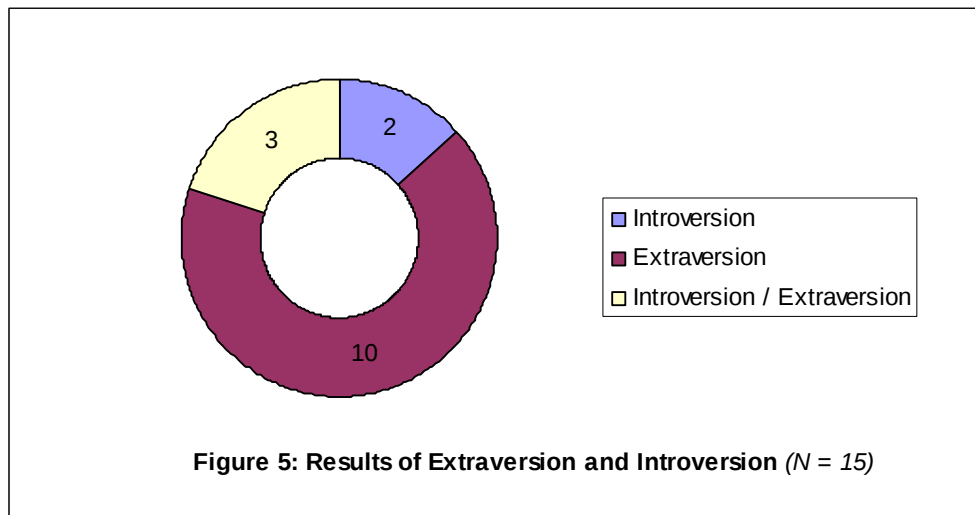
The information obtained from this questionnaire will be described firstly in terms of the 4 main temperament styles of the respondents where after the different temperament styles will be described.

3.1 THE FOUR PAIRS OF TEMPERAMENT

The section will discuss the four pairs of temperament as identified by the respondents.

3.1.1 EXTRAVERSION VERSUS INTROVERSION

The figure below gives a summary of the respondents' scores on the Keirsey Temperament Sorter for introversion and / or extraversion.



For Keirsey and Bates (1984) the person who chooses people as a source of energy is likely to be extraverted (E), while the person who prefers solitude to recover energy may tend toward introversion (I). In this sample of dog handlers ten individuals' scores indicated that they were more extraverted. Two out of the fifteen respondents' scores indicated that they were more introverted.

When differentiating an extravert from an introvert the key would be found in the word *sociability* as opposed to *territoriality*. In terms of sociability, extraverts enjoy talking to people, playing with people and working with people, while territoriality for introverts indicates a desire for their own space. These individuals seem to draw their energies from a different source than extraverts. Pursuing solitary activities, working quietly alone, reading, meditation and participating in activities which involve few or no other people energizes the introvert (Keirsey and Bates, 1984). From the interviews with the respondents it appeared that police work attracted individuals with more extraverted qualities. This might explain why the two introverted respondents indicated that after being in the police for an extended period of time they found themselves being less withdrawn and reserved and having developed more extraverted qualities.

In the interviews one respondent said: *“I used to be very quiet and shy but after working in the SAPS for a long time I have a lot more outgoing qualities than what I used to have”*. Literature (Furnham, 1992 and Marks, 1995) describes the extraverted quality as fundamental to police officers’ temperament. Furnham (1992) for example, in reporting various research findings about police officials indicated that they tend to be highly extraverted.

Three of the respondents demonstrated a balance between extraversion and introversion.

3.1.2 INTUITION VERSUS SENSATION

The difference between intuition and sensation is clarified as follows: The person who has a natural preference for sensation would be more practical, while the person who had a natural preference for intuition would be more innovative (Keirsey and Bates; 1984). All fifteen respondents’ scores in this study indicated that they were more sensing than intuiting.

Keirsey and Bates (1984) see the differences between sensation and intuition as very important when understanding ourselves and others. The sensation preferring person as described by Keirsey (1984:17): *“wants facts, trust facts, and remembers facts. He believes in experience and knows through experience (history), both personal and global”*. Facts in the work environment of a police officer play a major role in the execution of their job. As may be expected, all fifteen respondents preferred sensing over intuiting. During the semi-structured interviews, many of the respondents indicated that learning from their own experiences helped them to deal more effectively with situations as police officers.

The sensation types notice the facts about situations. One police officer mentioned during the interview that: *“When I get to the scene I focus on the job at hand. I need to deal with the reality. I cannot daydream or wonder about other things”*. Thus, the sensation type focus on what actually happened rather than worrying about what might have been or what will be in the future. Sensing individuals remain focused in reality. They are usually accurate in observing details. When approaching something the sensation person’s eyes tend to pick up a specific element. All these elements are imperative for the police officer to effectively fulfill his or her job requirements.

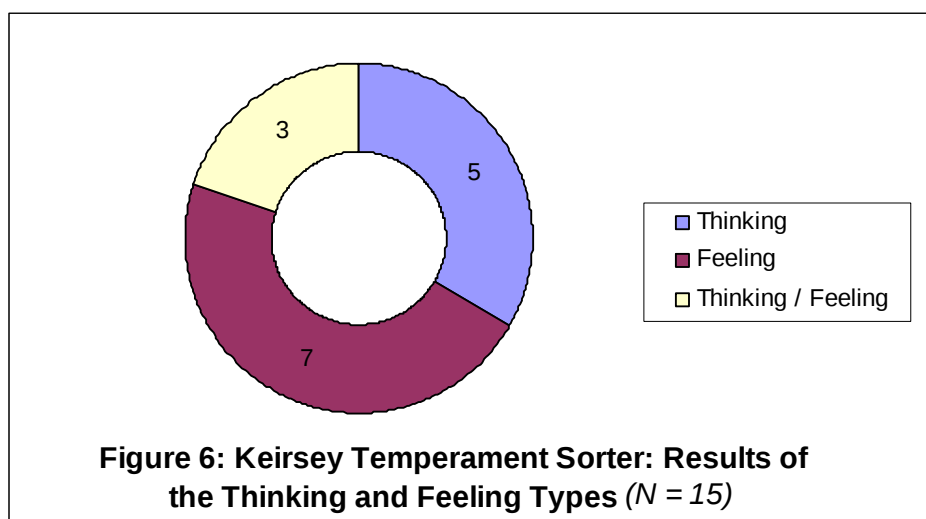
The qualities allocated to the sensation seeking individual differ dramatically from the more intuitive seeking individual. Comparing the two preferences Keirsey and Bates (1984) argue that the intuitive person, when entering a situation, seems to scan and glance at the situation and

people. In contrast to the sensation type person, the intuitive finds appeal in the metaphor and enjoys vivid imagery. This person often daydreams, reads poetry and enjoys fantasy and fiction.

3.1.3 THINKING VERSUS FEELING

Seven of the fifteen respondents tended to display feeling rather than thinking while five of these respondents' scores indicated that they were more thinking types. The majority of respondents' scores indicated that they were feeling types. This indicated an interesting phenomenon as one would assume that police officers, due to their work environment, would rather have chosen an impersonal basis for making choices. In his study with dog handlers from the SAPS Dog Unit Durban, Westraat (2003) also found that respondents measured high on the emotional factor of the 16PF personality questionnaire.

Participants who indicated the impersonal basis of choice are called the thinking types while people who indicated the personal basis are called the feeling types. The figure below gives a schematic view of the preferences:



Keirsey and Bates (1984) indicate that sometimes the feeling types are seen as more emotionally sensitive than the thinking people, but this is not always the case. Both types can react emotionally with the same degree of intensity. The feeling person, however, tends to make his or her emotional reactions more visible, and others may see him or her as warmer and capable of deeper feelings than a thinking person.

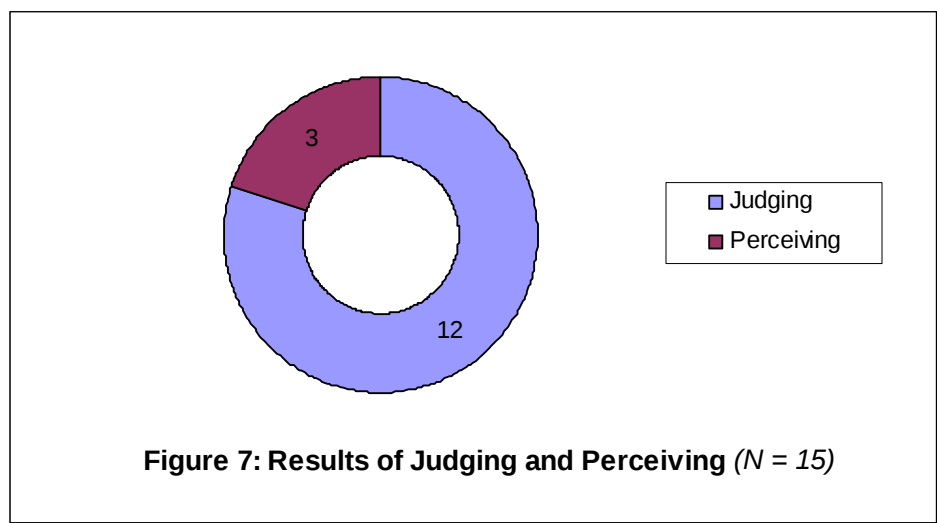
When describing people who prefer an impersonal choice as a way of making decisions (thinking people) Keirsey and Bates (1984) indicate that these individuals tend to respond positively to objective words such as principles, policy, laws, criteria and firmness in contrast to

feeling people who tend to react positively to subjective words such as values, social values, extenuating circumstances, intimacy and persuasion.

Three of the respondents in this study indicated that they were comfortable with making choices on both a personal and impersonal basis.

3.1.4 JUDGING VERSUS PERCEIVING

People who prefer closure over open options are likely to be “the judging types” whereas people who prefer to keep things open and fluid are probably “the perceiving types” (Keirsey and Bates, 1984). The majority of respondents indicated that they would opt for closure rather than keeping things open. Only three of the respondents predominantly felt comfortable in keeping their options open and fluid as illustrated in the figure below.



For the judging types there is a sense of urgency until he / she has made a pending decision. In contrast the perceiving type is more apt to experience resistance when making a decision, wishing that more data could be accumulated as the basis for the decision. Judging types tend to establish deadlines and take them seriously, expecting others to do the same. The following table gives a summary of the differences between judging and perceiving types:

Table 9: Differences between Judging and Perceiving Types

Judging (J)	Perceiving (P)
Settled	Pending
Decided	Gather more data
Fixed	Flexible
Plan ahead	Adapt as you go
Run one's life	Let life happen
Closure	Open options
Decision-making	Treasure hunting
Planned	Open ended

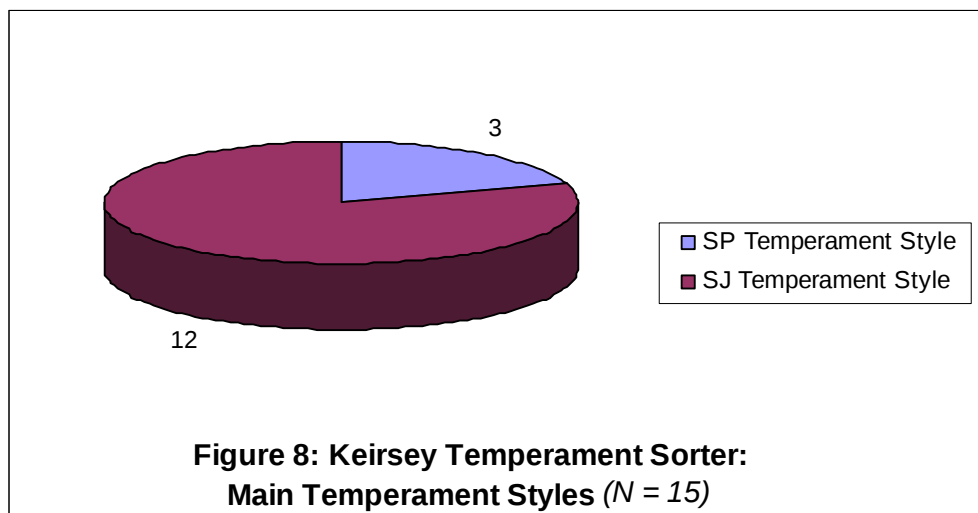
(Keirsey and Bates, 1984:25-26)

Taking into account the nature of police work, and the urgency with which decisions need to be made, it is understandable that the judging element of the temperament styles would probably be the more natural choice for police officers.

3.2 THE FOUR TEMPERAMENTS

The Keirsey Temperament Sorter allows for individuals to be sorted into one of four main temperaments. Keirsey and Bates (1984) identify these main temperaments as follows: *The Dionysian Temperament, better known as the SP, The Epimethean Temperament, known as the SJ temperament, The Promethean Temperament also known as the NT temperament and lastly the Apollonian Temperament better known as the NF temperament.*

Of the fifteen respondents who completed the Keirsey Temperament Sorter twelve fell in the SJ temperament category, while the remaining three respondents fell into the SP temperament style category.



3.2.1 THE SJ TEMPERAMENT STYLE

Within the SJ temperament style four specific variations of the SJ can be found. They are as much alike as they are different from each other. These four variations are known as: *ISFJ*, *ESFJ*, *ISTJ* and *ESTJ*. The first part of this section will give a broad description of the SJ temperament style as explained by Keirsey and Bates whereafter the variation styles applicable to respondents will be discussed.

For the SJ belonging is essential. Belonging to social units and any other unit in society is of utmost importance to the SJ. This belonging however must be earned. The SJ doesn't want to be dependent on anything or anyone. Should persons with this temperament style be dependent on others for whatever reason feelings of guilt may arise. Due to the SJ's desire to earn acceptance this temperament style has a desire to serve others and to be useful. Upon serving other persons the SJ temperament style also have a keen sense for detecting ingratitude and a lack of appreciation from others. The SJ however, does not ask for appreciation or gratitude as he / she sees it as his / her duty to serve. Police officers serve their community yet there appears to be a general lack of support and gratitude from not only the communities they serve but also their management. When one understands what Keirsey and Bates suggest with the SJ temperament style this might explain why many police officers (who prefer the SJ temperament style), despite the lack of appreciation and gratitude, continue to provide services as they see it as their duty to provide these services.

The individual SJ temperament style usually has an extremely strong work ethic. This strong work ethic brings a strong desire for responsibility and hierarchy. SJ preferring individuals

believe that rules should govern all aspects of life (Keirsey and Bates, 1984). Through the semi-structured interviews held with the fifteen respondents the majority (twelve out of the fifteen) mentioned their desire for responsibility. Their work environment and the aspects that govern this environment focus on rules and on living within the boundaries of these rules.

In her summary of Keirsey's SJ temperament style Struwig (2004) highlights the value SJs add to tradition. If traditional ceremonies and celebrations according to Keirsey and Bates (1984:42) "are nonexistent, the thorough-going SJ soon manages to establish some and thereafter maintain them". For the dog handler tradition is very important. From the moment a dog handler completes his training there is a strong tradition laid down from generations of dog handlers. An example of true tradition is the way in which the newly trained dog handler is presented with his 'badge' upon completion of the dog handlers' course. This is a very proud tradition and it is important for the older generation of dog handlers to pass this on to younger dog handlers.

Conservation also plays a major role in the life of an SJ in that it could colour most of the SJ's actions or attitudes. This desire for conservation is very obvious in the SJ's choice of work. For the SJ the institution they work for called them and they came to establish, nurture and maintain the institution's continuity. The SJ is the conservator no matter where they go or who they're with or what they do. This can make the person with the SJ temperament incapable of refusing added responsibility. There appears to be an endless amount of responsibility that the SJ is willing to accept. They may become exhausted, worried, sad and/or ill. At times, this may take the form of depression, a condition to which the SJ is particularly vulnerable. Ironically, the SJ's tendency to be responsible does not always gain him or her appreciation. The care of others, especially the young and old, and those in positions of authority, are of special concern to the SJ (Struwig, 2004).

Keirsey and Bates (1984) refer to the SJ's deep commitment to standards of society. As the majority of respondents are SJs and taking into account the goal of every police officer in terms of maintaining standards in society this quality can closely link to each of the respondents. The SJs usually attempt to live up to those standards themselves and to transmit them to the young. It is important to the SJs that the framework in which they work reflect standards also; SJs generally do not like to be associated with people or institutions which are outside of the social norm. Due to the SJs' dedication to established social norms and institutions, there is a high frequency of SJs in service occupations.

3.2.2 THE SP TEMPERAMENT STYLE

As with the SJ temperament style the SP temperament style can also be divided into four different styles. There are known as the *ISTP*, *ESTP*, *ISFP* and *ESFP*. Although very similar they also differ from each other in important ways.

As described by Keirsey and Bates (1984) the main purpose of the SP temperament style is to be free. The person with this temperament style will not be tied, bound, confined or be obligated. To do as they wish when they wish is the ideal. Unlike the SJ who focusses on waiting, saving and preparing for the future the SP focusses on action. This action element of the SPs temperament style is in many instances fulfilled by the job requirements of a dog handler. This action element is taken up in the type of work done by the police officer, the idea of waiting and saving and preparing is of less importance to the police officers.

To understand the SP it is necessary to understand the kind of action that they insist upon. Action must be its own end. It cannot serve a purpose or be instrumental in achieving a goal. The SP does things because he or she has the urge to do them (Keirsey and Bates, 1984). Due to this spontaneity, the SP may come across as very impulsive. Keirsey and Bates (1984:32) describe it as follows “More than other temperaments the SP is subject to what Karl Buhler calls ‘function lust’: a hunger for action without fetter or constraint, an exploratory action without the necessity for rules or practice”.

Struwig (2004) argues that the SPs thrive on situations where the outcome is unknown, because in a situation like that there is freedom to test the limits. Keirsey and Bates (1984) advocate that this quality of the SP makes them the most suitable temperament style to work in crises situations. The deeper the crisis the more apt they would be to respond quickly and dramatically. If a situation with little variation occurs, the SP becomes disinterested. These qualities of the SP temperament style add tremendous value to the work of the dog handler as most situations they find themselves in have that element of uncertainty.

Keirsey and Bates (1984) recall that man has three things that animals don’t have, namely: symbols, gods and tools. For the person with the SP temperament style the first two aspects have no particular value but tools are said to be his master. The tool is to use and the SP cannot not put it to use. He or she must be the person to fire the gun, fly a plane or drive a bulldozer. It is argued that somehow the tool becomes an extension of the self. Thus for the police officers who function as dog handlers the tools they use in the execution of their job will be that ‘extension’.

In the dog handler's case the tools used as an extension could be the dog along with weapons used in the daily execution of the job.

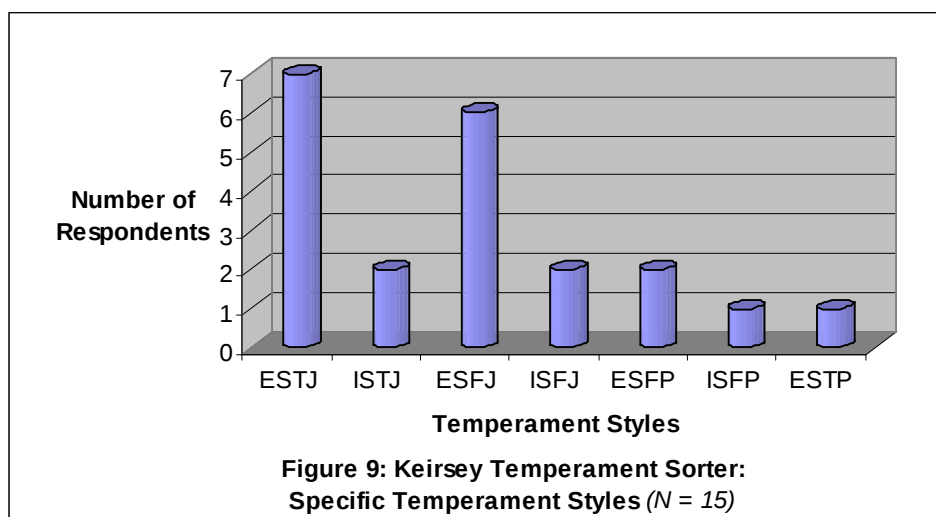
Socially, individuals with the SP temperament style tend to be charming and witty conversationalists, often having an inexhaustible repertoire of jokes and stories. Wherever they go, SPs lend electricity to the environment and people in the environment. The SP have a sense that something exciting is about to happen.

Due to their constant need for action the SP can very easily become bored with the status quo. They like to vary their work patterns each day which makes them likely to enjoy randomness.

Struwig (2004:2) observes that "The SP seems to have endurance beyond that of other types, he seems able to put up with discomfort, deprivation, hunger, fatigue, pain and show courage in a way other types do not". This according to Keirsey and Bates (1984) is because other types are goal oriented and reluctant to exert themselves unless there is a reason. Thus, other types suffer hardship, discomfort and fatigue as they work and shortly begin to wonder how much more they can stand. These SP qualities could be very useful for the police officers who often face circumstances that require endurance.

3.3 SPECIFIC TEMPERAMENT STYLES

The figure below gives an exact account of the specific temperament styles of the respondents:



Six of the fifteen respondents measured equally strongly on two different temperament styles. This most often happens when the person feels equally comfortable being either introverted or extraverted. Three of these six respondents indicated being comfortable in being either

extraverted or introverted whereas the remaining three respondents measured strongly on making decisions based on both thoughts and feelings.

3.3.1 THE ESTJ TEMPERAMENT

The majority (7 of the 15) of the respondents fell in the ESTJ temperament style. Keirsey and Bates (1984) describe the ESTJ as someone who is in touch with the external environment. These individuals know their community and usually are pillars of strength. The best word to describe ESTJs would be *responsible*.

ESTJs are outstanding at organizing orderly procedures and in detailing rules and regulations. They like to see things done correctly and tend to be impatient with those who do not carry out procedures with sufficient attention to those details, prescribed by those with the most experience. This specific temperament style is comfortable in evaluating others and tends to judge how a person measures against the standard operating procedures. They may at times be abrupt with those who do not follow the rules correctly. ESTJs are realistic, matter-of-fact, and more curious about new devices and processes than about new principles and theories (Keirsey and Bates, 1984).

In further describing the portrait of an ESTJ Keirsey and Bates (1984) recall that ESTJ's generally are loyal to their institutions, work and community and make excellent faithful partners and parents. They see where their duty lies and are not likely to shirk the doing of that duty, even when this requires considerable sacrifice on their part. They frequently rise to positions of responsibility in their jobs, the community and in their religious affiliations. ESTJs themselves are punctual and expect the same of others.

ESTJs may not always be responsive to points of view and emotions of others and may have a tendency to jump to conclusions too quickly. They may not always be willing to listen patiently to opposing views and this is particularly evident when they are in positions of authority.

Human relations are approached by the ESTJ through traditions and rituals they believe in, promoting harmony and contentment in their relationships through creating well-worked-out routines and procedures (Keirsey and Bates, 1984).

3.3.2 THE ISTJ TEMPERAMENT

Two of the respondents fell into this temperament style. Both respondents also fell into the ESTJ temperament style as they indicated seeking both introversion and extraversion on the results of the Keirsey Temperament Sorter.

The ISTJ temperament style is described by Keirsey and Bates (1984) as follows:

The ISTJ is characterized by decisiveness in practical affairs. They are the guardians of time-honored institutions and where responsible would be the word to describe the ESTJ *dependable* will best describe this temperament style.

Whether at home or at work this type appears to be rather quiet and serious. ISTJs are extraordinarily persevering and dependable. The thought of dishonoring a contract would appall a person of this type. ISTJs can be counted on to conserve the resources of the institution they serve and bring to their work a practical point of view. They perform their duties without flourish or fanfare thus the dedication they bring to their work may go unnoticed and unappreciated. The person with this temperament style has a profound interest in thoroughness, detail, justice, practical procedures and a smooth flow of personnel and material. This often leads them to occupations where these preferences are useful.

ISTJs can handle difficult, detailed figures and make sense of them. They communicate a message of reliability and stability. However they are often experienced as individuals who have 'ice in their veins'. This is purely because people often fail to see the ISTJ's vulnerability to criticism.

ISTJs have a distaste for and distrust of fanciness in speech, dress or home. Ostentation is abhorred, and a neat, orderly and functional home and work environment is preferred (Keirsey and Bates; 1984).

3.3.3 THE ESFJ TEMPERAMENT

Six of the fifteen respondents fell into this temperament style. Keirsey and Bates (1984) describe the portrait of the ESFJ temperament style as follows:

This temperament style is seen as the most sociable of all types as they are energized by interactions with people. *Harmony* is the key to describing this style.

ESFJs are great nurturers of established institutions such as the home, school, church and civic groups. Wherever they go they promote harmony and harmonious relationships. They are

outstanding hosts and hostesses, able to call people by name, usually after one introduction. At a social gathering they can be observed attending to the needs of others, trying to ensure that all are comfortable and involved. Social ties matter to the ESFJs and their conversations often drift to nostalgic recounting of past memories.

Because harmony plays such a large role in their lives that ESFJs are hurt by indifference and they need to be appreciated both for themselves and for their generosity, typically in the form of service, they give others.

Career choice for the ESFJ leans toward service occupations. Due to their outgoing personalities they tend to choose people-to-people jobs.

ESFJs wear their hearts on their sleeves and are outgoing in their emotional reactions. They need to be needed, loved and appreciated and may spend much energy in reassuring themselves that that is indeed the case. They can become melancholy and depressed and even suicidal if they take the blame for whatever might be wrong in their institution or their personal relationships.

3.3.4 THE ISFJ TEMPERAMENT

Two of fifteen the respondents fell into this temperament style. One of them also fell into the ESFJ style.

For Keirsey and Bates (1984), the ISFJs primary desire is to be of service and to minister to individual needs. ISFJs carry a sense of history, a sense of continuity with past events and relationships. ISFJs believe work is good and play must be earned. They are willing to work long hours and when undertaking a task they will complete it. Adhering to an established way of doing things and doing them well is highly valued and respected. The efficiency and effectiveness of an established procedure is not often questioned. Procedures dictated by handbooks are regarded as law. If others violate or ignore these standard operating procedures ISFJs tend to become annoyed and irritated, although they may not always display this reaction. Usually such irritation is turned inward and may be experienced as fatigue and muscle tension.

People reflecting this temperament style are super-dependable and are seldom happy working in situations where rules are constantly changing. ISFJs have an extraordinary sense of responsibility and an outstanding talent for executing routines which call for repeated, sequential procedures. Speculation and theory do not intrigue ISFJs as they are very practical and down-to-earth. ISFJs tend to be devoted and loyal to a boss and tend to identify with a person rather than with an institution.

3.3.5 THE ESFP TEMPERAMENT

Two of the fifteen respondents demonstrated this temperament style. One of these respondents also fell in the ESTP temperament style which will be looked at later.

Keirsey and Bates (1984) describe the ESFP as follows:

Individuals who score high on the Keirsey Temperament Sorter with this temperament style radiate attractive warmth and optimism. They are often experienced as witty, smooth, charming, clever and open to the environment. They are great fun to be with and are the most generous of all the types. The best word to describe this style is *performer*.

ESFPs will avoid being alone and seek the company of others whenever possible. They find it easy to find company for others are usually highly entertained by the presence of the ESFP. The ESFP loves excitement and tries to create it wherever they are. Their joy of living is contagious and generally they wear happy faces. Often outstanding conversationalists, their following banter is amusing in its wit. ESFPs have an air of sophistication and are likely to be dressed in the latest fashion, displaying an enjoyment of all the good things in life.

This temperament style can be very generous. What is theirs is yours, and what is yours is still yours. They give assistance to one and all without expectation of a return.

ESFPs' tolerance for anxiety is the lowest of all the types. Anxiety is avoided by ignoring the dark side of a situation as long as possible. They are inclined to be somewhat self-indulgent, but, rather than make an outward show of resistance or make waves, the ESFP will give apparent compliance.

This temperament style prefers active jobs and does not function well when given lonely solitary assignments. They also enjoy working with people. The ESFP often makes decisions with personal warmth based on personal reference or reference to significant others. This type relies heavily on their personal experiences and generally shows good common sense.

3.3.6 THE ISFP TEMPERAMENT

Of the fifteen respondents only one fell within this specific temperament style. Keirsey and Bates (1984) describe the portrait of the ISFP as follows:

In contrast to the other SPs the ISFP seems more inclined to the 'fine arts'. This temperament style is very difficult to observe and therefore the ISFP is probably the most misunderstood of all the types.

A major source of misunderstanding is the tendency of ISFPs not to express themselves directly, but through action. If they find a medium of expression, some art form, then their character is expressed to some degree via the medium. If not, it simply doesn't come out, and no one knows them.

Because the ISFP is always caught up, so to speak, in whatever actions are underway, rather than practicing toward some distant goal, there is no question of the ISFP becoming aware of fatigue, pain or danger. They are usually quite oblivious to these accompaniments of many of their favorite activities. It is not that ISFPs are inured to them as much as the fact of being wholly engaged by an action; they simply do not notice them.

3.3.7 THE ESTP TEMPERAMENT

One out of the fifteen respondents fell within this temperament style. This respondent also fell into the ESFP temperament style. Keirsey and Bates (1984) describe the portrait of the ESFP as follows:

ESTPs are men and woman of action. When this temperament style is present things begin to happen. One word which effectively describes the ESTP is *resourceful*.

It is said that life is never dull around ESTPs. Their attractive, friendly style has a theatrical flourish which makes even the most routine event seem exciting.

The ESTP is uncanny at observing people's motivations, somehow being hypersensitive to minimal nonverbal cues which other types might miss.

These are individuals who are outstanding as initiators of enterprises that bring people together to negotiate. They make invaluable itinerant administrators who can pull troubled companies or institutions out of the red very quickly. They can sell an idea or project in a way no other type can, but won't follow through on the tedious administrative details of a project.

4 IMPACT OF EVENT SCALE – REVISED

Traumatic responses are divided into three types of symptoms. Regeher and Bober (2005) identify them as (1) *Avoidance Symptoms* where individuals try to limit their exposure to certain events by blocking out memories of the event by refusing to talk or think about it; (2) *Arousal Symptoms* which include irritability, anger, difficulty concentrating, hypervigilance and exaggerated startle responses and (3) *Intrusion Symptoms* which include sleeplessness as a result

of intrusive images and flashbacks. Regeher and Bober (2005:69) look at these responses on a continuum of traumatic responses:

Table 10: Continuum of Traumatic Responses

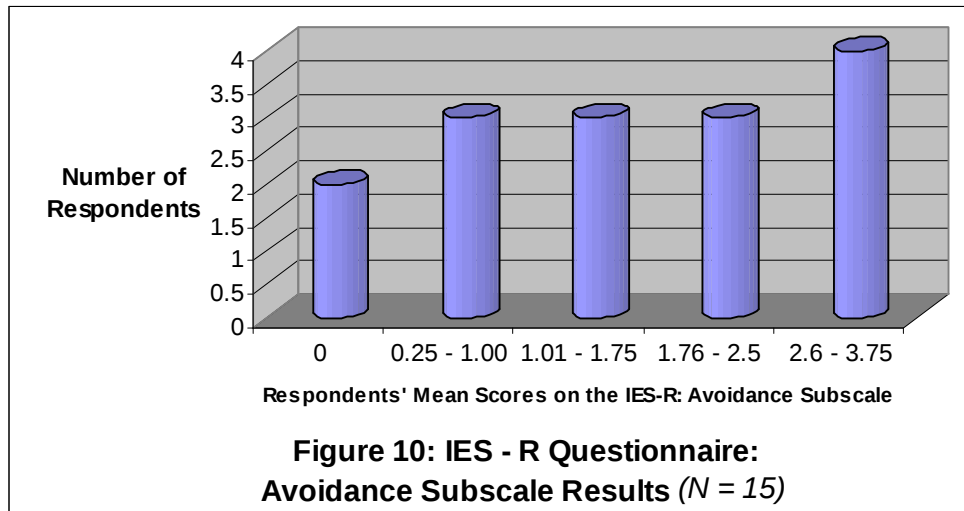
Crisis or Adjustment Disorder	Acute Stress Disorder	Posttraumatic Stress Disorder	Chronic PTSD
- Identifiable stressor - Marked distress - Impaired functioning - Lasting less than 6 months	- Exposure to a traumatic event - Intrusion, avoidance and arousal symptoms - Lasting 2 days to 4 weeks	- Exposure to a traumatic event - Intrusion, avoidance and arousal symptoms - Lasting 1 – 3 months	- Exposure to a traumatic event - Intrusion, avoidance and arousal symptoms - Lasting more than 3 months

The Impact of Event Scale – Revised (IES-R) questionnaire incorporated three subscales, including Arousal; Intrusion and Avoidance subscales and then gave an indication of the impact trauma has had on the respondent through the IES-R total. The following section will report the results of the three sub-scales. Note that no clinical cutoff scores exist for this questionnaire. Wilson and Keane (2004:287) describe this as follows: “There are no ‘cutoff’ points for the IES-R, nor are they envision or appropriate, despite analyses that present them. The IES-R is intended to give an assessment of symptomatic status over the previous 7 days with respect to the three domains of PTSD symptoms stemming from exposure to a traumatic stressor. Neither the IES-R, nor the original IES for that matter was intended to be used as a proxy for a diagnosis of PTSD, and with the very well-developed stable of clinical interviews”. For these authors it is inappropriate to require or attempt to set any cutoff that will universally apply.

In using the mean scores obtained from the respondents’ it is assumed that a high score on each subscale should indicate the presence of that particular symptom after exposure to traumatic incidents.

4.1 AVOIDANCE SUBSCALE

The results obtained from the IES-R in terms of the avoidance subscale indicated a minimum of 0 to a maximum of 3.75 in the mean scores. Figure 10 gives a schematic illustration of the responses in terms of the avoidance subscale.



Two of the fifteen respondents indicated no avoidance symptoms after a traumatic incident whereas the majority of the respondents identified avoidance symptoms ranging in scores from 1.75 to 3.75. Avoidance symptoms occur because thinking about the trauma and the thoughts associated with the events might be so upsetting that the police officer would like to avoid any reminders of the trauma. Tull (2007) identifies various ways in which avoidance symptoms could manifest:

- Actively avoiding trauma-related thoughts and memories
- Avoiding conversations and staying away from places, activities or people that might remind the person of the traumatic incident
- Having trouble remembering important parts of what happened during the trauma incident
- “Shutting down” emotionally or feeling emotionally numb
- Feeling disconnected from the world around them or from things happening to them
- Avoiding situations that might make the individual have a strong emotional reaction.

From the mean scores obtained from the avoidance subscale it is apparent that most of the respondents experienced avoidance symptoms after exposure to traumatic incidents relating to their work environment. This was also found during the interviews conducted with the respondents where emotional detachment and denial were evident as significant defenses. After being wounded when attending to an attempted bank robbery one respondent said: *“I was shot many years ago but to this day I still avoid going to that specific bank and I’m also very hesitant to attend similar scenes”*.

In order to determine the possible relationship between temperament preferences and avoidance symptoms after exposure to traumatic incidents in their workplace the researcher made use of Spearman's Correlation Coefficient. Due to the small sample size of this study it should be noted that these findings may be limited to this study.

Table 11: Correlation between Temperament Preferences and Avoidance Symptoms

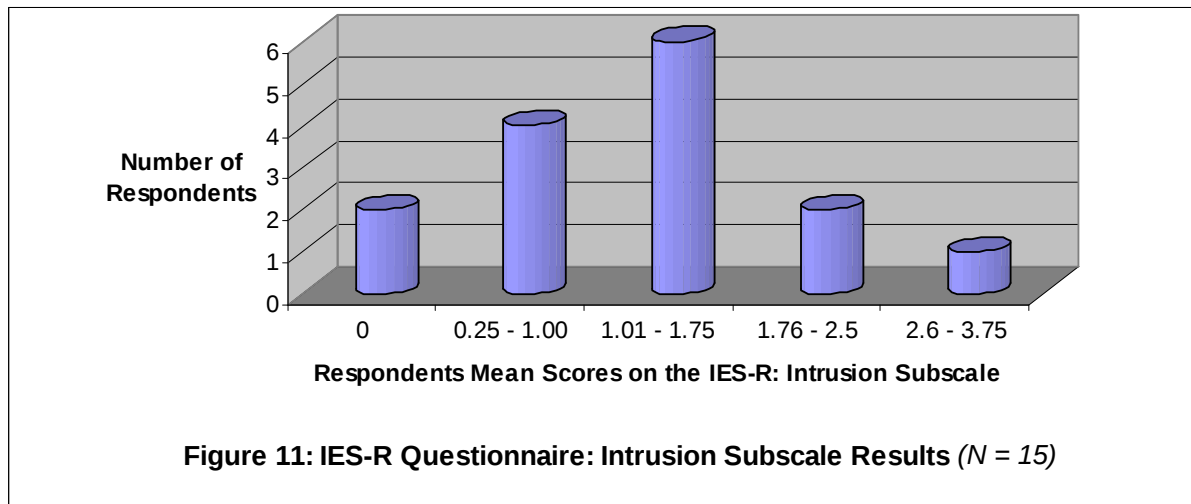
N	Temperament Preference	Correlation	Significance (p-value)
15	Extraversion and Avoidance	-0.31	0.25
15	Introversion and Avoidance	0.31	0.25
15	Sensation and Avoidance	0.27	0.31
15	Intuition and Avoidance	-0.32	0.23
15	Thinking and Avoidance	0.1	0.7
15	Feeling and Avoidance	-0.12	0.65
15	Judging and Avoidance	0.24	0.38
15	Perceiving and Avoidance	-0.28	0.30

None of the correlations between the temperament preference of the respondents and avoidance symptoms in the wake of a traumatic workplace event showed any significance ($p > 0.05$). Extraversion, Intuition, Feeling and Perceiving all indicated a weak negative relationship toward Avoidance symptoms, therefore as one increases the other decreases. A weak positive relationship was determined for the temperament preferences of Introversion, Sensation, Thinking as Judging, therefore as one increase the other would also increase. It should however be noted that in both instances the relationship was weak and not significant.

4.2 INTRUSION SUBSCALE

Intrusion symptoms occur suddenly and occur when memories of the past traumatic event invade the individual's current life. The most common intrusion symptom mentioned by many appears to be flashbacks, however other symptoms could include: nightmares, difficulty falling asleep or staying asleep as well as hypervigilance or constantly being 'on guard' (Smith et al., 2008; Roberts, 2005). Mean scores obtained from the intrusion subscale determined that except for two

respondents the majority of respondents experienced intrusion symptoms following a traumatic event. The figure below gives an illustration of the results obtained.



The impact of intrusion symptoms were confirmed through the interviews where ten of the respondents indicated that their sleep was affected following traumatic incidents. Some of the responses included, “After a bad scene I don’t always want to eat and I struggle to fall asleep”; “When I’ve attended a scene that was traumatic for me I would often wake up at night dreaming of what happened”. Another respondent also argued that “A few days after the event I still find myself alert”, therefore confirming the feeling of constantly being on guard.

Again, Spearman’s Correlation Coefficient was used to determine the possible relationship between the chosen temperament preferences of the respondents and the intrusion symptoms they indicated that they experienced after a traumatic event.

Table 12: Correlation between Temperament Preferences and Intrusion Symptoms

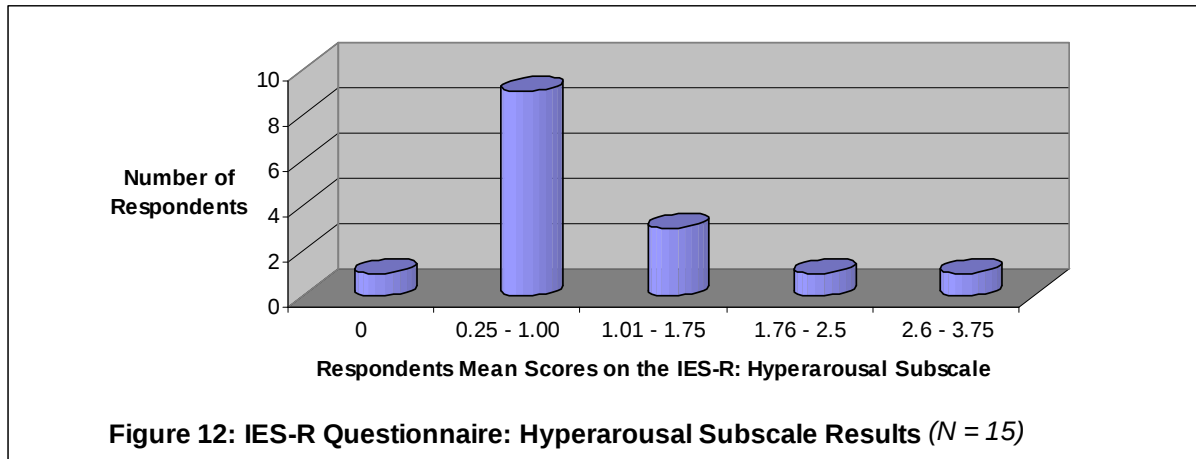
N	Temperament Preference	Correlation	Significance (p-value)
15	Extraversion and Intrusion	-0.54	0.03
15	Introversion and Intrusion	0.54	0.03
15	Sensation and Intrusion	0.21	0.43
15	Intuition and Intrusion	-0.26	0.33
15	Thinking and Intrusion	-0.03	0.91
15	Feeling and Intrusion	-0.03	0.90
15	Judging and Intrusion	0.28	0.29
15	Perceiving and Intrusion	-0.31	0.24

The correlations found in this section, including the Sensation / Intuition; Thinking / Feeling and Judging / Perceiving temperament preferences all indicated weak relationships that were not significant ($p>0.05$). Both the Sensation (0.21) and Judging (0.28) temperament types had a weak positive relationship with the intrusion subscale. Thus as one increases or decreases so would the other. For the Intuition (- 0.26), Thinking (- 0.03), Feeling (- 0.03) and Perceiving (-0.31) temperament preference weak positive relationships were identified although not significant.

The only significant relationship identified was between Intrusion, Extraversion (- 0.54) and Introversion (0.54), both with p-values of 0.03, thus indicating moderate relationships between Extraversion, Introversion and Intrusion. For the Extraversion temperament preference there appeared a moderate negative relationship with intrusion, therefore as one increases the other would decrease. The opposite was determined for the Introversion temperament preference where a moderate positive relationship was identified. Thus, indicating that when the level of introversion increases so would the level of intrusion.

4.3 HYPERAROUSAL SUBSCALE

Hyperarousal symptoms could manifest in the following symptoms: anxiety, startled responses, intrusive thoughts and sleep problems. Figure 12 illustrates the results obtained from this subscale. As can be seen while only one respondent indicated no hyperarousal symptoms the majority of respondents did indeed experience hyperarousal symptoms, although it should be noted that the larger proportion of the group only indicated mild hyperarousal symptoms following a traumatic incident. This was also apparent from the interviews as none of the respondents indicated any major hyperarousal symptoms after attending to a traumatic incident.



In terms of determining the possible relationship between hyperarousal and the various temperament preferences of the respondents the researcher, again, used Spearman's Correlation Coefficient. The following information was obtained:

Table 13: Correlation between Temperament Preferences and Hyperarousal

N	Temperament Preference	Correlation	Significance (p-value)
15	Extraversion and Hyperarousal	-0.63	0.01
15	Introversion and Hyperarousal	0.63	0.01
15	Sensation and Hyperarousal	0.25	0.3
15	Intuition and Hyperarousal	-0.24	0.3
15	Thinking and Hyperarousal	0.08	0.7
15	Feeling and Hyperarousal	-0.16	0.5
15	Judging and Hyperarousal	-0.0	0.9
15	Perceiving and Hyperarousal	-0.04	0.8

It appeared reasonable to say that a fairly strong negative relationship existed between Extraversion and hyperarousal. Thus indicating a correlation of – 0.63 between the two variables and the correlation was indeed significant. For the purpose of this research study it would therefore appear that the higher the level of Extraversion the lower the level of hyperarousal.

5 THE SEMI-STRUCTURED INTERVIEW SCHEDULE

The semi-structured interview schedule consisted of six questions that aimed to create a greater understanding of the traumatic experiences and the response to these situations by dog handlers at the SAPS Dog Unit, Soweto.

The information obtained from the semi-structured interview schedule was organized into the themes that emerged from these interviews.

5.1 LACK OF SELF-KNOWLEDGE

All fifteen respondents found it difficult to identify how their work impacted on their lives. Despite being adamant that the traumatic experiences in their work environment had a profound impact on their lives they were unable to identify specific ways in which their lives had been affected. Throughout the fifteen interviews the respondents exhibited an apparent lack of self-knowledge and emotional intelligence. Covey (1992:57) talks about what he calls self-alienation and quotes Fromm as saying, “Today we come across an individual who behaves like an automaton, who does not know or understand himself and the only person that he knows is the person that he is supposed to be, whose meaningless chatter has replaced communicative speech, whose synthetic smile has replaced genuine laughter and whose sense of dull despair has taken the place of genuine pain”. To a large extent this quotation represents what was found with some of the respondents in this study. As mentioned previously, it’s often assumed that because of the occupation choice the police officer should somehow be immune to the effects of the trauma related to the work environment. Moreover, due to the occupational culture and organizational socialization of the SAPS police officers tend to become what their organisation and colleagues expect them to be. Therefore not allowing themselves to engage or reflect on any experience and thus just trying to cope. Lack of self-knowledge linked strongly to the rest of the themes identified, including emotional detachment and denial.

The value of better self-knowledge or a strong sense of emotional intelligence in terms of the trauma experience is looked at through the relationship between burnout, occupational stress and emotional intelligence in the nursing industry, by Brand (2007) where research found a significant negative relationship between ‘*emotional exhaustion*’ and ‘*emotional management*’. Defining ‘*emotional exhaustion*’ as the trauma associated with the work environment and the ‘*emotional management*’ being the ability to effectively respond and deal with the trauma. For Brand (2007:87) “These results suggest that individuals that generally report lower levels of

emotional exhaustion would report higher levels of emotional management. Henceforth, these results imply that individuals with higher reported levels of emotional management will possess a greater ability to manage positive and negative emotions within themselves and in others”.

5.2 EMOTIONAL DETACHMENT

A common theme that constantly emerged during the interviews was that of emotional detachment. The majority of the respondents indicated that they used to be, what they termed ‘more soft’, they were forced by their work environment to become ‘hard’. A respondent explained this in saying: *“I grew up being a soft hearted child, but with my work all that has changed. After 20 years in the SAPS, nineteen of those years as dog handler, I have become hard and stubborn”*. Another respondent linked the length of his time in the SAPS with his level of emotional detachment in saying that *“the longer I’ve been in the SAPS the more I found that traumatic experiences became like a light switch. I will turn off emotionally whenever I have to face a traumatic situation”*. The ability to emotionally detach from a traumatic situation appears a common theme for police officers. Twersky – Glasner (2005) describes how police officers surround themselves in ‘image armor’ because it is perceived that the expression of emotion is a weakness. One respondent related the reality behind his work experience in expressing *“I became harder due to the reality of life I’ve been confronted with”*. While attending to a traumatic scene one respondent said *“I am emotionally distant when I attend a scene that I perceive as traumatic”*.

A number of respondents acknowledged that they did not allow themselves to focus or ponder on any traumatic scene they had attended. One respondent argued that *“in my work trauma is part of the package and because of that I must accept it and deal with it”*.

5.3 DENIAL

Many of the respondents indicated that they were unable to identify any specific changes or responses they had experienced after a traumatic event. One respondent argued, *“It is unnecessary for me to think about the situation”*. For him it was fitting to *“throw away memories from scenes”*, thereby not having to deal with them. Dyregrov et al. (2002) points out that denial is not an isolated omission or distortions but a pattern that spends overtime, crosses, national and cultural boundaries and defies accumulated scientific knowledge. This pattern was described by another respondent when he indicated that *“I try to forget what happened as soon as possible. I force myself to continue with my routine as usual”*.

Another respondent argued that it was extremely difficult for him to recall any impact that traumatic events had on his life because: *“I don’t allow myself to reflect on my experiences. I try to get things back to normal as soon as possible”*. Consciously choosing not to allow the trauma impact on their lives one respondent also indicated *“I chose not to let what I see or experience impact the way I live my life or the way I see things in life”*.

Two of the respondents were determined to not allow themselves to reflect on any of the so called traumatic experiences. Both indicated that there was *“nothing to think or reflect about”*.

5.4 CHANGE IN EATING PATTERNS

All fifteen respondents found it extremely difficult to identify specific physical changes that became evident when they underwent a traumatic experience. Although most of the respondents indicated that they believe there were certain physical changes that they had experienced they were unable to identify those changes. McCraty, Tomasino, Atkinson and Sundram (1999) emphasized that following an acutely stressful incident encountered in the line of duty, bodily systems must recover from an extreme degree of psychological arousal. One of the themes that was applicable to most of the respondents was that of a change in their eating patterns. It seems that after traumatic events the respondents all felt that their appetite decreased. This was especially true when they attended gruesome scene with lots of blood and evidence of violence.

However, not all of the respondents lost their appetite after exposure to a traumatic incident. One respondent indicated that he *“is an emotional eater and after a traumatic event I would eat a lot more than normal”*.

A few of the respondents’ comments are quoted below:

- *“I struggle to eat and sleep after a terrible scene”*;
- *“My eating is mostly affected, as I eat less after a traumatic incident”*;
- *“My appetite is very low after attending a bad scene”*.

5.5 SLEEPING PROBLEMS

Eight out of the fifteen respondents indicated that their sleep was affected on a regular basis when they had been exposed to a traumatic incident. One respondent said, *“I always experience sleep problems after scenes that were traumatic for me - especially when children were involved”*. Another respondent also recalled how *“I remain physically alert after an incident which makes it difficult for me to get a good nights’ rest”*. Sleep problems are a common

occurrence for individuals who have been exposed to trauma. Swales (2005) divides sleep problems after exposure to trauma into (1) difficulty falling asleep and (2) difficulty staying asleep. A large number of respondents indicated that they struggled to fall asleep but one reflected; *“I sometimes have nightmares or dreams about what happened at the scene”*.

5.6 CONTRASTING EMOTIONS

Respondents varied in their emotional reactions to their experiences. The stress of police work according to McCraty et al. (1999) may result in chronic negative emotions such as anger, anxiety or depression which can eventually lead to psychological burnout or emotional exhaustion. From the interviews it was clear that many officers felt anger towards the criminals and what they had done. This anger often led to aggression and/or frustration. One respondent indicated that *“I feel a lot of anger due to the unfairness of certain situations. This often then led to a lot of frustration of not being able to do enough”*.

Recalling his emotions after attending a traumatic scene, another respondent indicated: *“sometimes after a scene I feel very aggressive but it is not permanent. I also feel angry because of that had been done to others, which often leads to feelings of powerlessness”*. Bonifacio (1991) elaborates on these feelings of powerlessness by indicating that police officers often feel overwhelmed by the worst aspects of human nature. In those situations the police officers’ anxiety stems from feeling overwhelmed by their own empathic emotional responses to seeing other human being ill treated. This was made clear when one respondent commented: *“Child abuse cases always have a huge impact on me. After attending to these cases I feel angry and very aggressive towards the perpetrator”*.

Addressing the emotions police officers experience, Greene (2001) found that rage is a common underlying theme in the police emotional response to traumatic incidents. Most officers however, mask this rage well allowing only anger and irritability to emerge. The degree of anger and rage increases in proportion to the magnitude of the officers’ sense of loss of control, fears and their increasing inability to trust. This anger in return tends to create a sense of helplessness. One respondent focussed on this helplessness when he stated: *“I worry about the safety of my own children. I’m afraid that I won’t be able to protect them from all the things I’ve seen. What worries me also is that I’m not doing enough to help everyone who needs it”*.

5.7 PERCEPTION OF LIFE IN GENERAL

Traumatic experiences in their work environment led all fifteen of the respondents to conclude that life was not always fair and that bad things mostly happen to good innocent people. Greene (2001) in her research with police officers argues that repeated exposure to ‘bad scenes’ changes the officer’s view of life forever. Through their experiences with the realities they come into contact with, ten of the respondents argued that they have consciously decided that life is short and they focus on living a full life. Sharing his life story one respondent stated: *“After I was seriously wounded in a shootout with bank robbers I knew that I will never think of life the same way. Life is short and I know that I have to spend it with the people that I love”*. Internalizing his work experiences one respondent argued that: *“As a dog handler I’ve been exposed to more violence. This has made me internalize these experiences and through that I’ve consciously decided to make different choices in my own life”*. Other respondents quoted similar responses which are outlined below:

- *“I used to think life was good and pure but due to my work I’ve realized that life is not fair and the way I used to think about life may not have been accurate”*;
- *“Life is not as fair and great as what I’ve first imagined it to be”*;
- One respondent indicated that the way he thought about life changed in terms of realizing how unfair life can be and therefore decided to live his life to the fullest: *“I now realize how unfair everything in life can be and I don’t want to waist any time”*.

5.8 DISTRUST

A common theme that emerged from the semi-structured interviews was that many of the respondents indicated that due to their work environment and their daily experiences they were reluctant to trust other individuals. Twersky–Glasner (2005) found that police officers were very suspicious people, and that many find it hard to trust and confide in others. Greene (2001) also remarked on the police officer’s inability to trust due to continuous exposure to traumatic events. The respondent described his ability to trust others: *“I used to be very soft and trusting but after everything that I’ve been exposed to at work I don’t trust easily anymore”*. Mostly relating their lack of trust to their work environment another respondent indicated that *“While growing up I used to be trusting, but since becoming a police officer I don’t trust anyone”*.

Dantzker (2005) as Greene and Twersky–Glasner also found that when an individual is introduced into the world of policing a common trait that evolves is that of distrust. A respondent

focussed on his inability to trust others when he commented: *“I don’t trust people anymore. I always wonder what they’re hiding, sometimes I even wonder if I can trust my family”*.

5.9 ASSERTIVENESS

As found in chapter 3 of this study, the literature surrounding personality qualities of police officers allocate the trait of assertiveness to most police officers. Westraat (2003) in his study of dog handlers of the Dog Unit Durban found that the majority of his respondents measure high on assertiveness. All of the respondents involved in the researcher’s study indicated that their job required them to be assertive. Recalling his shy nature one respondent argued, *“I used to shy but with the requirements my job places on me I had to become more assertive”*. Many respondents recalled that they were not naturally assertive and had to learn how to assert themselves in difficult situations. One respondent who scored as a strong introvert on the Keirsey Temperament Sorter indicated, *“My work experiences and the requirements of this job have forced me to become more assertive as usual”*.

6 CONCLUSION

In analyzing the data obtained from the chosen sample many interesting factors were observed. The police officers who worked as Dog Handlers and who participated in this research study appeared to be very specific in their temperament scores. The majority of the Dog Handlers indicated high scores for Extraversion, agreeing with most literature addressing the temperament and personality of police officers. Besides the Extraversion high scores the Dog Handlers also had high scores for the following temperament types: Sensation; Feeling and Judging. It appeared these temperament types also to a degree impacted on their experience of trauma.

Chapter 7 will now focus on the main findings obtained from the analyzed data. Attention will also be given to recommendations as a result of these main findings.

Chapter 7

Main Findings, Conclusions & Recommendations

1 INTRODUCTION

Rothmann and van Rensburg (2002) describe law enforcement as one of the most stressful occupations world-wide. In addition to experiencing job-related stressors such as dealing with the unlawful, often dangerous actions of citizens, law enforcement officers often experience abusive treatment and a general lack of social support. For the authors it is not then surprising, that police officers experience increased rates of illness, posttraumatic stress, burnout, alcohol abuse and suicides and decreased levels of job satisfaction and job performance as compared to norms for people in the general population. The main aim of this research study was to explore the relationship between temperament styles and the effects traumatic events had on male dog handlers working at the SAPS Dog Unit Soweto. Therefore aiming to draw a link between the police officers' temperament style and the way in which they are affected by the traumatic incidents that form part of their daily work requirements.

This chapter highlights the main findings of the research conducted along with possible recommendations. The main aims of the study along with the results obtained from the various research tools are discussed in the first section of this chapter. The remainder of the chapter focuses on summarising of the main findings, conclusions and recommendations.

2 MAIN AIMS AND CONCLUSIONS OF THE STUDY

The main aim of this research study was to explore the relationship between temperament styles and the effects traumatic events had on male dog handlers employed by the SAPS Dog Unit Soweto. Specifically the study wanted to determine whether a link could be established between the temperament styles of dog handlers employed at the SAPS Dog Unit and the way in which trauma affected them. The primary aim was addressed through explaining the results of the secondary objectives.

2.1 TO EXPLORE THE DIFFERENT TEMPERAMENT STYLES OF MALE DOG HANDLERS ATTACHED TO THE DOG UNIT OF THE SAPS, SOWETO

Using the Keirsey Temperament Sorter to determine the temperament styles of the dog handlers allowed the researcher to explore each of the fifteen respondents' temperament styles. Measuring four major temperament categories, the Keirsey Temperament Sorter looked at (1) Extroversion vs. Introversion; (2) Sensation vs. Intuition; (3) Thinking vs. Feelings and (4) Judging vs. Perceiving. Male dog handlers attached to the Dog Unit of the SAPS, Soweto who participated in this study scored high in the Extroversion, Sensation, Feeling and Judging categories. Cotton (2006) notes that police officers are generally extroverts – outwardly oriented, attuned to other people, not terribly internally reflective and more social focussed. This supports the high scores found in the extroversion category of the respondents in this study. To understand the high scores in the sensation category of the dog handlers' one should have a clear picture of what Keirsey and Bates denote by sensation. The sensation preferring individual prefers facts, experiences, being realistic and focusing on the actual. All characteristics are immensely important in the execution of the dog handlers' work requirements. The feeling preference of the respondents indicated a preference for some of the following characteristics: values, intimacy, being more personal, creating harmony and devotion as opposed to the more objective, principles and analysis characteristics of the thinking preference.

Incorporating the four high scoring categories, the Keirsey Temperament Sorter further allowed the user to identify four different main temperament styles. These are the SP-, the SJ-, the NT- and the NF temperament style. None of the male dog handlers who participated in this study had high scores on the NT or NF temperament styles. A minimal number of the respondents scored high on the SP temperament style while the majority of respondents in this study had high scores on the SJ temperament style. The characteristics of the SJ and SP temperament style, as discussed in the previous chapter, have positive attributes that appeared useful for police officers workings as dog handlers. The SJ temperament style's characteristic of being extremely responsible and having the need to be of service to others along with the SP's characteristics of being able to thrive in situations where the outcome is unknown are all characteristics that could be beneficial for police officers.

To further define different temperament styles Keirsey and Bates (1984) divided the four main temperament styles into specific temperament styles. The most common of these styles was the ESTJ style, as 7 of the respondents had high scores in this category. Next to the ESTJ styles the

second highest scores were found in the ESFJ temperament style as 6 respondents had high scores on this temperament style.

2.2 TO DETERMINE DOG HANDLERS' WITHIN THE SAPS DOG UNIT, SOWETO PERCEPTIONS OF THE VARIOUS PHYSICAL, EMOTIONAL AND BEHAVIORAL EFFECTS THAT TRAUMATIC EVENTS HAVE UPON THEM

The researcher made use of the IES-R and interviews in order to determine the dog handlers' perceptions of how various traumatic events effected them. These interviews were analyzed and general themes that emerged were reported.

Literature argues that information on the impact of war-related trauma on military personnel is rich and extensive and emanates from countries throughout the world. In contrast research looking at the approach of emergency services personnel to trauma has in no way been as extensive as that of the military. There has been a traditional notion that a person suited to the job of police officer, paramedic or firefighter should be immune to the effects of trauma (Regeher and Bober, 2005). Yet, no-one is immune to the effect traumatic events have.

Regeher and Bober (2005) specifically concentrating on research conducted with rescue workers, including police officers found that exposure to mutilated bodies, mass destruction and life threatening situations might make rescue workers hidden victims of disaster. Cross and Ashley (2004) note that stress responses and the symptoms resulting from a traumatic incident can be (1) cognitive; (2) physical; (3) behavioural and/or (4) emotional. These physical, emotional, cognitive and behavioural reactions in emergency responders have a profound effect on the ability of emergency service organizations to continue to respond to the needs of the public (Regeher and Bober, 2005). From the information obtained in this research study it was prominent that the respondents had indeed experienced cognitive, physical, behavioural and/or emotional symptoms as a result of traumatic incidents experienced in their work. Some of these symptoms included: emotional detachment, denial and changes in eating and sleeping patterns.

Literature on trauma research indicated that most often a combination of the above mentioned symptoms emerge after exposure to traumatic events. This was ratified by the respondents who participated in this study. Various responses were identified through the interviews conducted with each of the respondents and in chapter 6 the main themes of these findings were reported in detail. Respondents indicated that as a result of workplace trauma they felt they had become more assertive than they used to be. Along with feeling more assertive the respondents indicated a general feeling of distrust towards other people and situations as well as various physical

symptoms which included problems falling asleep or reoccurring thoughts about the traumatic incident.

Van der Kolk, McFarlane and Wisaeth (1996:4) noted that, “Despite the human capacity to survive and adapt, traumatic experiences can alter people’s psychological, biological and social equilibrium to such a degree that the memory of one particular event comes to taint all other experiences, spoiling appreciation of the present”. Therefore dog handlers with an average of 10 years working experience have experienced continuous exposure to traumatic events in their work environment undoubtedly ‘*tainted*’ their views of life. The following six themes that were identified during the interviews with the respondents elaborate upon this ‘*tainted*’ worldview.

A general theme for all fifteen respondents was emotional detachment and denial of thoughts and feelings about the effects of a traumatic event. This was noticeably the only way these individuals were able to deal with what they came across in their daily work settings. Through emotional detachment and denial, thirteen of the fifteen respondents felt that they had not dealt with countless experiences in their work environment that they found to be traumatic. This could have long term detrimental effects for the police officers, as van der Kolk et al. (1996) argue that when the memories of the trauma remain unprocessed and traumatized individuals tend to become like Pavlov’s dogs where subtle reminders become conditioned stimuli for the re-experiencing of frightening feelings and perceptions belonging to the past. The implication of this is that individuals who are constantly reminded of their experiences may become so fixated on these reminders that they may find it difficult to focus on anything else.

Sleeping problems, including falling asleep, staying asleep or having nightmares were identified as common experiences by most (nine out of fifteen) of the respondents. Most of these respondents also indicated that there was a change in their eating patterns in the wake of a traumatic event, where most of them indicated a loss of appetite. Only one respondent described himself as an emotional eater and indicated an increase in appetite after a traumatic event. These findings support existing theory which indicates that sleep problems are evident in response to traumatic events. Montgomery and Foldspong (2001) confirm this when indicating that disturbed sleep is common following traumatic experiences.

The majority (twelve out of fifteen) of respondents felt that they had experienced many contrasting emotions which they attributed to the reality of their work. Feelings such as anger towards criminals and frustration occurred as a result of not being able to do what they described as ‘not being able to do enough to stop these criminals’. All the respondents indicated that these

traumatic experiences also impacted on their perception of life in general, which had changes over time. One way in which all fifteen respondents' perceptions towards life was altered was the way in which they internalized the idea that life was not always fair. They also indicated that life was short and therefore consciously decided to live their lives to the fullest.

A golden thread throughout all fifteen interviews appeared to be the inability of the respondents to articulate the impact that constant exposure to traumatic events had had upon them. This could be linked to the usage of defenses such as emotional detachment and denial as a means of trying to cope with what they had experienced on a daily basis.

The phenomenon of emotional detachment has gained considerable attention in the late 19th century and was conceptualized as a defense against overwhelming emotions (Michelson and Ray, 1996). Michelson et al. (1996) describe how Horowitz denoted that a common reaction to trauma was the massive ideational denial of the event.

2.3 TO COMPARE THE TEMPERAMENT STYLES OF THE MEN WORKING AS DOG HANDLERS WITH THEIR TRAUMA REACTIONS AND ESTABLISH WHETHER ANY PATTERNS EXIST

Using the non-parametric Spearman's Correlation Coefficient the researcher aimed to determine whether any correlations existed between the four Keirsey Temperament Style characteristics as indicated by the high scores of the respondents and the three subscales of the IES-R questionnaire. Again it should be noted that due to the small sample size of this study the results are limited and therefore applicable to this study only.

Only two of the correlations appeared significant: The relationship between Introversion, Extraversion and Intrusion as well as the relationship between Introversion, Extraversion and Hyperarousal.

A reasonably positive relationship between intrusion and introversion were identified. It indicated that as the level of introversion increased so did the level of intrusion experienced by the individual. This was confirmed by Knežević, Opacic, Danko and Pribe's (2005) study where they found that introversion resulted in a higher level of intrusion symptoms of the individual exposed to traumatic events. In contrast however, Aidman and Kollaras-Mitsinikos's (2006) studying the relationship of extraversion, neuroticism and impulsiveness with posttraumatic stress reactions of avoidance and intrusion found that intrusion symptoms were predicted by both extraversion and neuroticism.

As a high score for sensation was obtained by all of the respondents it was interesting to note the weak positive relationship between sensation and intrusion. Although this weak positive relationship was not significant it indicated that the higher the level of sensation the higher the level of intrusion experienced. This was reflected by the high levels of intrusion measured by the IES-R intrusion subscale.

None of the temperament types and avoidance indicated any significant correlation. It was again interesting to note the weak positive relationship between sensation and avoidance. Also reflected by the IES-R avoidance subscale it appeared that the higher the level of sensation the higher the level of avoidance experienced.

3 IMPLICATIONS FOR THEORY

As a police officer, especially in South Africa today, the question is not whether the officer will be exposed to traumatic situations but rather *when* he will be exposed. Acknowledging that trauma exposure will form an integral part of every police officer's daily work environment it is believed that a more proactive approach to trauma should be taken, along with a more individualized approach. Because trauma is a *given* in the environment police officers find themselves in the researcher believes that police officers should be empowered to deal with their unique responses to trauma experienced in their daily work environment. The meaning attached to the suggested '*proactive approach*' is that police officers are empowered to understand trauma experiences along with their unique responses to these experiences. Savage (2007) talks about '*building trauma informed practices*'. In order to understand the trauma response of an individual one should take into account three aspects. The schematic model provided by Regehr and Bober (2005:75) gives a background of the aspects that plays an important role in the individual's response to trauma:

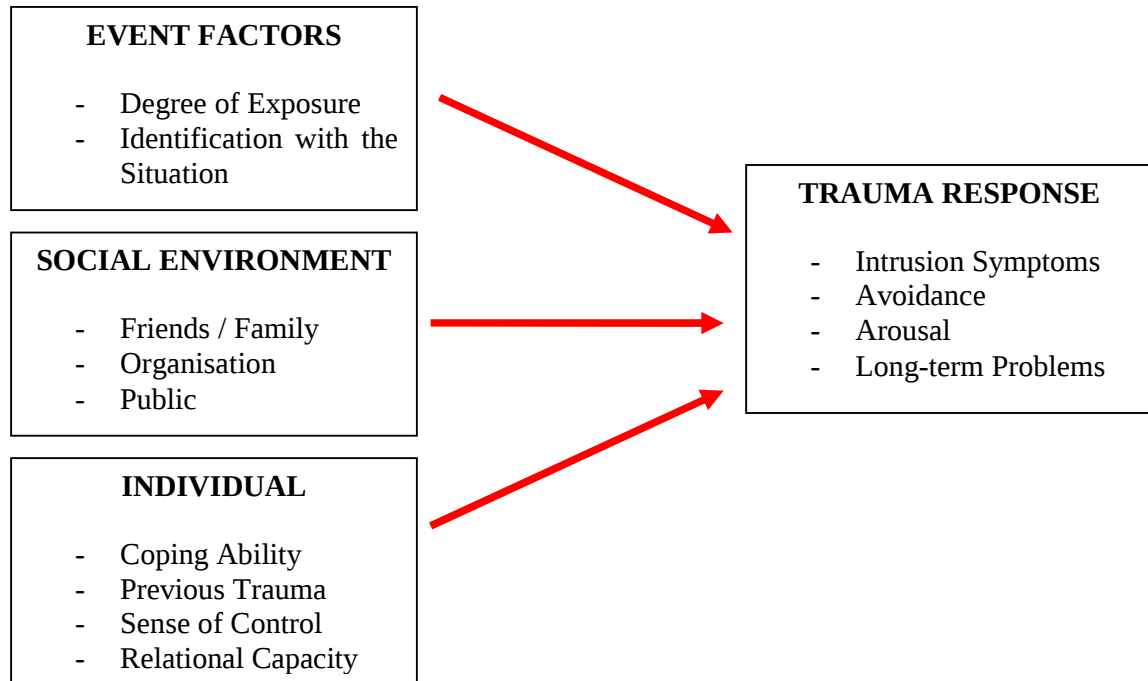


Figure 13: Aspects Important to Individual Trauma Responses

In terms of event factors this study found that police officers experienced high degrees of exposure to traumatic incidents as a result of their work choice. The majority of the respondents indicated that they found it difficult to distance themselves from some of the traumatic events they are exposed to on a regular basis. It appeared that many of them internalized their experiences, especially in child abuse cases where they indicated experiencing fears for their own families' safety.

The second aspect Regehr and Bober (2005) see as important to the individual trauma response is the social environment of the person. All the respondents spoke of their friends and family as important support structures in their lives. It was however, evident that the majority of the respondents did not always share their workplace experiences with these loved ones in an attempt to protect the family from what they are exposed to. One respondent was quoted in saying, *"I don't share any of the scenes I attend with my family. I try to protect them from the reality of my job"*. Forming an integral part of the social environment is the organisation in which the person finds him-/herself according to Regehr and Bober (2005). Within the SAPS a culture of denial and emotional detachment has been deeply embedded, as was found in this study. As a last factor in terms of the social environment the model depicted in figure 13 focusses on the impact of the public. Working with the public on a daily basis this factor is

assumed to impact on the individual. A large number of respondents indicated how traumatic experiences have led them to become what they termed 'distrusting'. During the interviews the respondents indicated that they do not trust anyone, some even indicating that they began to distrust those closest to them.

In terms of the individual aspects it was interesting to note how the police officers' coping abilities seemed to rely on denial as well as on the fact that all of them indicated that they had the ability to emotionally detach from the trauma. Other important factors in terms of individual aspects included the amount of previous trauma and their sense of control. It was found that police officers in this study experienced trauma since they became police officers. They also concluded that in the aftermath of traumatic experiences they often felt they were not able to do enough to prevent 'bad scenes'.

As a result the IES-R determined that the respondents in this study experienced high levels of avoidance symptoms with mild levels of intrusion symptoms. Respondents in this study appeared to have low hyperarousal symptoms in response to traumatic incidents.

Generic trauma debriefing sessions as provided by the SAPS Employee Assistance Services were a very important and necessary component to helping police officers effectively deal with trauma. These debriefings addressed for the most part the event factors in the individual's response to trauma. The social environment and more importantly the individual often went unnoticed. Yet, the ability, as suggested by Cross and Ashley (2004) to cope with stressful traumatic incidents is a personal journey. This is apparent when two individuals exposed to the same stressful traumatic incident would deal with it in distinctly different ways.

Trauma has the potential to impact upon every aspect of the exposed individual's life, and when enduring traumatic situations is part of one's job description it is easy to, like the interviews showed, fall into a pattern of emotional detachment and denial. Michelson and Ray (1996:208) argue that dissociation is strongly associated with traumatic experiences and proposed that "posttraumatic phenomenology frequently involves alterations in the relationship to the self, the world and to memory processes". The responses to trauma that were found in this research study led the researcher to believe that for many of the police officers it was difficult to live a fulfilling life because they were continually trying to 'doge' the effects of their traumatic work environment. As one respondent was said: *"The images you get to see stays apart of you forever and the only way to cope is to consciously decide to not reflect on anything that has happened"*.

The more proactive approach to trauma would assist the police officer in his personal journey with trauma. Such a proactive approach should empower the police officer in terms of: (1) emotional intelligence, including understanding his own temperament style and (2) enhancing trauma knowledge. Regehr and Bober (2005) also argue that each person has strengths and vulnerabilities when it comes to trauma. Understanding one's strengths, vulnerabilities, temperament style and basic knowledge about the theory behind trauma and the skills to address the uniqueness of one's responses to a traumatic incident should empower the police officer to not merely survive day after day but to have the ability to live at their full potential and to function effectively as partners, parents, citizens and employees.

Quoting Aristotle, Goleman (1995:ix) argue that: "Anyone can become angry – that is easy. But to be angry with the right person, to the right degree, at the right time, for the right purpose, and in the right way – this is not easy". A proactive approach to trauma would help police officers understand their thoughts, feelings and behavior in such a way that as Aristotle said anger is then directed at the right person, at the right time, for the right purpose and in the right way. The only way for that to happen is to help lead police officers more effectively through their *trauma journey*.

The goal of the proactive approach should be to help these police officers find a way to live a fulfilling life despite the traumatic experiences in their work environment. Tedeschi and Calhoun (2004) describe how in the 20th century several clinicians and scientists have addressed the way in which critical life crises offered possibilities for positive personal change, which they called 'post-traumatic growth'. For these authors it is important to note that the widespread assumption that trauma would often result in a disorder should not be replaced with the expectations that growth is an inevitable result. Instead, continuing personal distress and growth often coexist.

3.1 RECOMMENDATIONS FOR PRACTICE (FOR SAPS EMPLOYEES AND WELLNESS PRACTITIONERS)

It is recommended that attention should be given to develop a pro-active approach which includes: empowering police officers to become more emotionally intelligent and to have a greater basic knowledge of the effects trauma might have on them, so as to help police officers in their personal journey with trauma. Although formal debriefing had tremendous value within the trauma setting it has not always been enough. As police officers were repeatedly exposed to traumatic circumstances more should have been done to help these individuals. The reality is that many police officers will not be exposed to formal debriefing sessions in the aftermath of a

traumatic incident. It should also be acknowledged that literature about the effectiveness of debriefings indicated that repeated debriefings were not as effective as initially thought and can actually be harmful. By developing a pro-active approach to trauma the police officer should be empowered in accepting dual responsibility for his personal journey through the trauma process.

This pro-active approach should add value to the police officer's life through a process of self-discovery that leads to self-knowledge. As Tedeschi and Calhoun (2004:4) argue, "Posttraumatic growth is not simply a return to baseline – it is an experience of improvement that for some persons is deeply profound".

3.2 RECOMMENDATIONS FOR FURTHER RESEARCH

It is suggested that future research should be aimed at identifying the possible benefits of implementing a proactive approach to trauma into working environments where trauma exposure is a certainty. What would also be important to investigate would be which elements would be most beneficial to incorporate in a proactive trauma program.

Posttraumatic growth does not occur as a direct result of trauma only. It is the individual's struggle with the new reality in the aftermath of trauma that will determine the extent to which posttraumatic growth occurs (Tedeschi and Calhoun; 2004). The aim of future research should be to determine which elements in a proactive trauma program would aid and add value to the individual's struggle following a traumatic incident.

Traumatic experiences not only form part of a police officers life. Today's workplaces are filled with individuals who have been and will be exposed to various kinds of traumatic incidents. Research focusing on implementing a similar proactive approach could aid today's workplaces in determining how to effectively support their employees and thereby assist in creating a productive and well adjusted workforce.

4 CONCLUDING COMMENT

This study confirmed the uniqueness of dog handlers' trauma experiences. Despite the majority of the respondents obtaining high scores in the SJ temperament style, each one of the fifteen respondents uniquely indicated different experiences as a result of their trauma exposure.

The study also confirmed the fact that in the career of police officers there is no doubt that he/she will be exposed to traumatic situations. Van der Kolk et al. (1996:3) describes this in saying that, "Experiencing trauma is an essential part of being human; history is written in blood". For the

police officer trauma not only becomes an essential part of being human but it becomes an essential part of his work life which filters through to every aspect of who he is.

Although the correlations between most of the temperament preferences and the subscales of the IES-R questionnaire were not significant it appeared that, although very weak, certain relationships did exist, especially between the sensation preference and the high levels of intrusion and avoidance symptoms as experienced in the aftermath of trauma exposure.

Denial and repression which resulted in an apparent lack of self-knowledge could be seen as the best coping mechanism that police officers had in dealing with their unique trauma experiences. More attention should be given to address this lack of self-knowledge; by helping police officers become more empowered to deal with their personal journey through the trauma experience. This is a process that the researcher believes will add value to the life of the police officer.

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