PERSONALITY TYPES AND RESILIENCE OF CRIME SCENE INVESTIGATORS IN KWAZULU NATAL, SOUTH AFRICAN POLICE SERVICE: A MIXEDMETHOD APPROACH

BY

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ABSTRACT

The research aim of this study was to investigate "Personality types and Resilience of Crime Scene Investigators in the South African Police Service, Kwazulu-Natal: A Mixed Method Approach.

South African Police Service (SAPS) has increasingly gained media attention, criticised by public for police brutality, poor service delivery, police suicides and poor work performance, reflecting a negative image. However, the work of police officer is considered to be one of the dangerous occupations. In particular, South African police officers face a nearly limitless range of stressors that can vary within one shift. Additionally, organisational stressors, pressure from the government and the public, the internal investigation units and calls for organisational change place immense stress and strain on police officers. Officials enduring high levels of stress continuously can culminate into trauma and burnout, leading to negative work effects: sick leave, reduced work efficiency and low self-esteem. Therefore, the police population has been considered psychologically *at risk,* with higher lifetime prevalence rates of mental health disorders such as PTSD and suicides than the general population. Studies indicate lack of social support is one of the strongest risk factors for PTSD and police suicides.

However, as a polar opposite to those who suffer from burnout, research has also shown that some individuals, despite high job demands and long working hours, seem to find pleasure in working hard and dealing with job pressure. From a positive psychological perspective, such individuals are happy, resilient with good coping skills to deal with stress. Research studies reveal that trauma and stress experienced by police officers is in proportion of their job demands. The majority of police officers do not develop chronic PTSD as shown by the various studies. Regardless of exposure to potentially traumatic events, the majority of emergency services (policeman, paramedics, security, fire fighters, doctors, nurses) do not show signs of psychological distress. In fact, some studies report positive effects of emergency work.

Research has shown that police personnel can be regarded as resilient, with only a small group showing mental health problems as a result of extreme situations. Resilient individuals are regarded as having attributes; such as personality predisposition, self-efficacy, family and social support.

Research studies emphasise on negative police issues as stress, trauma and suicides. Studies pertaining to positive issues of policing are inadequate. Therefore, the researcher identified a gap and absence of positive studies, and therefore this study focus on the positive aspect of police officers and their policing environment. The undertaken research focuses on the study of personality types and resilience of police officers. The Myers Briggs Type Indicator (MBTI) and Sense of Coherence (SOC) scales were administered to determine the personality types and ascertain their level of resilience by using the SOC measure.

The study employed mixed methods approach, which was conducted in two stages: In the first stage MBTI and SOC were administered. Personality types and resilience were ascertained. The second stage engaged semi-structured interviews to find the presence of risk and protective factors, impacting the resilience level of the police officer. Statistical Package for the Social Programme (SPSS) and Thematic analysis was used for data analysis for phase one and two respectively.

The quantitative results showed that in the SAPS the ESTJ personality type dominated followed by ISTJ members who more resilient than rest of the personality types. INFJ's were found to be the least resilient type. The qualitative results validated the quantitative ones. ESTJ personality types are more prevalent in SAPS and were more resilient, with next highest resilient were the ISTJ's. INFJ's were low on resilience Risk and protective factors were identified; resilient police officers with the assistance of protective factors manage themselves well and were back at work. Positive attitude and emotions, family support, social support, job

satisfaction, management support, being hopeful was some of the positive attributes identified aiding resilience.

      The study's quantitative and qualitative findings supported mutually, merging very well thus triangulate the findings, and there were no significant contradictions in the two forms of data. Outcome of the research showed that police officers are resilient. Personality types are the basis of resilience; some types are more resilient and react to trauma well than other personality types. Protective and risk factors contributed to resilience.

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CHAPTER 1

INTRODUCTION

1.1   INTRODUCTION

This chapter focuses on the background, problem statement, and paradigm perspective of research, measuring instruments used, research methodology, data analysis and conceptual definitions. It also entails the research aims and objectives ending with significance of research and conclusion are presented.

1.2   BACKGROUND

Crime in South Africa is endemic and South African Police officers have to deal with high levels of stress continuously that culminates in stress, trauma and burnout (Pienaar & Rothman, 2003). Over the past three decades political and social situations have contributed to the high levels of crime, therefore police officers are constantly exposed to life threatening stressful situations. (Gulle, Theroux & Foster, 1998; Mostert & Joubert, 2005). They are faced with critical incidents which expose them to a specific type of trauma: vicarious trauma and stress (Jenkins & Baird, 2002). Statistics indicate the prevalence of psychological illness and the high suicide rates in the SAPS are indicative of police officers' stress and trauma (Kopel & Friedman, 1999). They sometimes witness the death of others and must draw on particular coping resources in the process (Rode, & Forsyth, 1995). The South African culture has influence on the occurrences of stressors and coping among police officers along with Metro officers (Pienaar & Rothmann,2003; Kgalema, 2002).

Alexander and Anshel (1999, 2000) write that Police work is considered dangerous in comparison to other professions. The nature of policing duties cause officers to encounter a wide array of stressors likely to be experienced in a day's job (Simons, Cochran & Blurt, 1997;

Whitehead, 1987). Additionally, they face internal stressors (compression from government) and external stressors (pressure from community for not delivering), and this lack of support aggravates the already stressful situations that officers deal with (Brown & Campbell, 1994; Kohan & Mazmanian). These situations can end in trauma, stress and burnout (Medina, 2007). In addition, burnout can have negative impacts on performance, leading to impaired service delivery, reduced morale, increased sick leave, and decreased work efficiency (Storm & Rothman, 2003). Police officers experience Post Traumatic Stress Disorder (PTSD) and other related psychological disorders with a higher prevalence than the general population making them vulnerable to mental illnesses (Clohessy & Ethlers, 1999 as cited by Sloan, 2012).

Studies indicate social support is one of the strongest protective factors offsetting PTSD (Brewin, Andrews & Valentine, 2000; Ozer, Best, Lipsey & Weiss, 2003). On the contrary, the majority of police officers who have had multiple exposures to traumatic events did not develop PTSD (Bonanno et al., 2006). Anshel and Patterson (2000, 2003) add police officers experience rare stressful events and therefore adapt varieties of coping strategies and skills. Bell, Kulkarni and Dalton (2003) writes that organisations provide support in terms of education, group support and counselling, especially at SAPS which provides critical incident debriefing to police officers in response to the impact of traumatic cases (Pillay, 2008).

Regardless of exposure most of emergency services as paramedics, policemen, doctors, security officers hardly show symptoms of mental illness, some studies put forward the results showing positive correlation with the emergency work (Moran & Colless, 1995; Embelton & Baird, 2003). Research, on the contrary, has stated that while individuals working in emergency services find their job challenging, they still enjoy it irrespective of the demands and stress it places on them (Schaufeli & Bakker, 2003). Positive psychology emphasises these individuals as happy, resilient with good coping skills to deal with stress (Seligman & Csikszentmihalyi,

2000). Current theories indicate individuals who continuously deny their inner experiences are not well informed about trauma and stressors, compared to those who adjust well to the situation (Campbell-Sills, 2006; Gross & John, 2004). It has also been found police officers develop police personalities within first two years of their service (Evans, Stanley & Burrows, 1993). Individuals who are aware of the innate stressors of policing choose to join the police because they believe that they enjoy or are believe their personalities are more suited to the job (Hart , Wearing & Heady 1995).

Advent of positive psychology has altered the approach, where it is assumed the stress reactions displayed by the emergency services is proportional to the duties they discharged; can act as a catalyst towards and development (NATO Joint Medical Committee, 2008; Paton & Burke, 2007). Research shows that police personnel can be regarded as resilient, and that only a small group shows mental health problems as a result of extreme situations (Galatzer-Levy, 2011). Galatzer-Levy (2011) writes police officers well-being in adversity has prompted them to look into protective factors such as resilience. Resilient individuals experience emotional and psychological distress, yet they conserve their psychological resources, and find the ability to function (NATO Joint Medical Committee, 2008; Paton Burke, 2007). Police personnel consider the organisational work to be more stressful than the operational aspects (Alexander et al., 1993). Gist and Woodall (2000) suggest that officers have knowledge of the police job functions and expectations when are joining the police force. Management support, good working environment, healthy relationships with colleagues have been found to positively affect police members in times of adversity, making them more resilient in a crisis period (Martinussen, Richardsen & Burke, 2007). A small proportion of police officers are affected by traumatic situations, and with the aid of debriefing, counselling, and intervention members recover and report back for duty. The problem statement will be dealt with in the next section.

1.3   PROBLEM STATEMENT

In South Africa crime and violence have dramatically increased since 1990 (Kynoch, 2003). Police officers are faced with critical incidents: crimes that are generally highly organised, including murder, car-jacking, cash-in-transit, shooting, and suicide, exposing them to traumatic experiences that become a part of the life of a police officer (Louw, 2006). Police occupational trauma indicates that "during the span of a career, police officers are generally exposed to traumatic events more often than those in other occupations" (Violanti, 1997).

Police officers around the world, not only in South Africa, adapt different strategies to alleviate the effects of trauma (Violanti, 1997). Police are trained to be resilient, and not all police officers experience trauma and burnout. Lazarus (1990) links this difference in coping processes to personality traits, work environment, and social support structures that assist them in mitigating the effects of the stressors. These researchers highlighted that certain personality traits are prone to stress enabling them to cope effectively while some predispose to lower level of tolerance, which could add value in predicting the resilient individuals (Martin, 2006). Some individuals possess resilient personality predisposition, but other people have to labour towards it (Griffith, 2007; Campbell-Sills et al., 2006). Those with resilience adapt to stressful events in healthy and flexible ways (Luthar, Cicchetti & Becker, 2000), and some have to learn to cope.

Cattell defined personality as "that which predicts behaviour, given the situation" (Cattell, 1946, p. 566). Sadock and Sadock (2003) describe personality "as a global descriptive label for a person's observable behaviour and people's subjectively reportable inner experience". Personality theorists often differ in their definition and one definition alone is unable to describe an individual's personality filled with experiences of pleasure and pain, adaptation to the changing environment and maintaining a balance to deal with life routine.

Within the context of this research, personality is seen as relatively stable, with a continuous interaction with the environment to make the necessary adaptations in their lives to accept changes and challenges of life and the ability to make informed choices.

The term resilience is defined as adaptation to his or her environmental risk despite developmental risk, stressors and adversities (Masten, 1994). It is derived from a combination of innate biologically mediated traits (Curtis & Cicchetti, 2003), systematic risk and protective factors operating within the social networks within which the individual operates (Hughes et al., 2006; Brown, 2008; Nicolas et al., 2008).

The researcher defines resilience as:

"A dynamic process of an organism, relatively stable, adapting to adversity, maintaining stability, mobilising protective resources against risk factors in order to combat and cope with the crisis."

Resilience has been repeatedly researched over the last decades, addresses the perspectives quoted in the definition. Resilience illustrates the ability to "recover from negative emotional experiences and by flexible adaptation to the changing demands of stressful experiences" (Tugade & Fredrickson, 2004). Resilience alternatively is portrayed as "protective factors" that alters negative effects into positive effects of adversity (Luthar et al., 2000).

Most studies on police officers are surrounded with negative issues such as PTSD, stress, and dependency, and they ignoring stress resistant and resilient factors (Berg, Hascth & Ekenberg, 2005). South African police related studies were only focussed in North-Western Province due to local stress and the related outcomes in that area (Pienaar, Rothmann & Jorgensen, 2007; Storm & Rothmann, 2003). Studies of resilience have been omitted or under-

emphasised, most particularly the concepts of compensatory factors (promotive) and protective factors (resources) (Luthar, Cicchetti & Becker, 2000; Masten, 2001, 2012; Rutter, 2000). Consequently, there is a gap or a growing need to study police resilience in conjunction with personality types and backgrounds, their commitment to work despite negative publicity and public pessimism, and being productive in the face of adversity. Coping with the risk factors uses inner resources which depend on the personality and resilience of an individual in handling stressful work situations (Kim, Shin & Umbreit, 2000). Personality mainly contributes to individual differences, that aids in either coping with stressors or potentially develop (Paris, 2000).

Research has shown that police personnel can be regarded as resilient individuals, and such individuals have inherent personality traits that facilitate resilience (McCrae & Costa, 1986). Carver and Scheier (1992) linked optimism with health following studies that indicated a relationship between optimism and coping strategies. Only a small group showed mental ill health as a result of extreme situations (Galatzer-Levy, 2011). A motivating style of leadership and organisational social support positively correlate with professional resilience (Brunetti, 2006). Accordingly, certain aspects of police culture can guard or impair a police officer's reaction to stress (Allen, 1986; Blau, 1994; Miller, 1995, 1998, 1999b, 2003b). Various researchers (Maslach, 1986; Siebert, 2005; Hjemdal et al., 2006) state "that the internal qualities of individuals determine how people handle external sources of stress".

and organisational social support positively correlate with professional resilience (Brunetti, 2006). Accordingly, certain aspects of police culture can guard or impair a police officer's reaction to stress. Hjemdal et al. (2006) state that the internal qualities of individuals determine how people handle external sources of stress.

Little research has been conducted on the personality types as well as their levels of resilience in police officers, where one can utilise their coping mechanisms and apply their coping skills to train and enhance the non-resilient police members. Therefore, the aim of this study is to study resilience of police officers in conjunction with their personality types, identify protective resources specific to the police environment in the light of positive psychology, and use the resources in building resilience while dealing with risk factors with the police members who are coping poorly with the adversities. A workbook is developed on resilience to create awareness and build resilience through training and workshops.

1.4 RESEARCH AIMS AND OBJECTIVES

The aim of the undertaken study is to provide a mixed method explanation of crime scene investigators' resilience in relation to their personality types. The following research objectives have been developed to guide the study.

1.4.1 GENERAL OBJECTIVE

1. To determine whether there is a relationship between Personality Types and Resilience.

2. To determine whether Resilient individuals have Protective Resources or Factors to manage Trauma and maintain equilibrium to return to base line.

3. To determine the Risk Factors (Non-Protective Factors leading to negative outcomes) in Non-Resilient Police members.

1.4.2 SPECIFIC OBJECTIVES

The specific research objectives of this study are divided into two phases:

- Phase 1 objectives are addressed through the quantitative research method.
- Phase 2 specific objectives address the qualitative component of the study.

Phase 1

1. To determine whether a relationship between personality types and resilience exists.

2. To determine whether resilient individuals have protective resources or factors to manage trauma and maintain equilibrium to return to base line.

3. To determine the risk factors (non-protective factors leading to negative outcomes) in non- resilient police members

Phase 2

1. Find out the underlying protective factors.

2. The role of supportive factors in resilience.

1.5 RESEARCH QUESTIONS

To address the above-mentioned objectives, the study will answer the following research questions:

1. To determine the relationship between personality types and resilience.

2. To determine the protective factors or resources of a policeman that aids in their resilience building.

3. To determine the risk factors that contribute to a policeman's poor coping skills.

1.6 PARADIGM PERSPECTIVE OF THE RESEARCH

A paradigm is a theoretical framework (Mackenzie & Knipe 2006). Bogdan and Biklen (1998, p. 22) define a paradigm as assembly of assumptions, concepts and logical thoughts that generated into a theory or model, that which anchors further assimilation of thoughts and research. Dill and Romiszowski (1997) states that it is an individual's way of thinking, their way of extracting thoughts and streamlining them into knowledge that works in the world.

Guba and Lincoln (1994, p.110) say that crucial theory is more implementative and subjectivist, where researcher and the subject under investigation is directly influenced by the researcher as they actively interact with each other. Willmott (1977) writes the aim of positivist and post-positivist investigation is explaining, predicting and controlling, but critical theory is analyses and evaluates the subject of investigation. Phenomenology adapts direct investigation entailing experiences, descriptions and casual explanations (Van Manan, 1990). Phenomenology adapts the following as the data collection tools:

1. Interviews – structured or semi structured

2. Diaries and notes

3. Non-verbal expressions as drawings, body language etc.

4. Observation, video recording if permitted.

Positivism studies states that investigation depends on quantity of the data researched and analysed statistically.

In positivistic studies the researcher has no influence over the statistical outcome as the researcher is detached from the study, it depends on facts being deductive in nature has no place for human interests or experiences within the study (Crowther & Lancaster, 2008), contrarily phenomenology is inductive heavily depending on the meaning with human interests (Collins, 2011). Crowther (2011) cites the advantages and disadvantages of positivism as "positivism relies on experience as a valid source of knowledge, believing that cause influences actions, adapted very well in the business world; it lacks reasoning and time that are not positing on occurrences and lastly positivism relies in describing the data than understanding the information based on experience.

The hallmark of the humanistic perspective emphasises the only way to understand another human being is by understanding his or her direct experience of reality (Schriver, 1995). Because the theory underlying both Sense of Coherence (SOC) and personality type has the individual as its focus, the humanistic and phenomenological paradigm is appropriate. The self-report Myers Briggs Type Indicator (MBTI), basing on Jung's personality type, was developed by Katharine Briggs and Isabel Briggs Myers to assess normal differences in personality (Kennedy & Kennedy, 2004). Jung was of the opinion that all individuals use all four dimensions of preferences but prioritise one dominant preference. (Opt & Loffredo, 2003). Although Jung is considered as a psychoanalyst, his theory provides a vision of healthy growth

(Orpen, 1998). Development of type is thus possible. Similarly, SOC is a self-report measuring with three different dimensions in resilience. The constructs in question being researched classify them under the humanistic framework.

The current research study falls within the social-scientific paradigm, explored from a positivistic, humanistic and phenomenological perspective. This philosophy emphasise the interaction between an individual and his environment (Guba, 1990). The research method chosen for this study compatible with the positivistic and phenomenological paradigm and its theoretical conjecture with humanism.

1.7   DISCIPLINE

This research falls within the boundaries of social sciences (behavioural sciences). The central concept of this research is Industrial Psychology, where studies focus on human behaviour in an organisational context (Meyers, 2007). According to Kreitner and Kinicki (2007), the main view of this field is to relate psychological theories and practices, integrating both to enhance efficiency and effectiveness in an organisation, which alternatively boost the psychological wellness of employees. The focus of the literature review is on personality types, resilience, protective factors and the significance and application of positive psychology, while the empirical study studies psychometrics, statistical analysis and the interpretation of feedback.

A scientific investigation that focus on one aspect or dimension than the whole is sub-discipline (Shaughnessy, Zechmeister & Zechmeister, 2003). In the case of this study, the sub-discipline applicable is *Positive Organisational Behaviour* (POB). POB is defined as "the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed and effectively managed for performance improvement in today's workplace" (Luthans, 2002). POB concentrates on the psychological capacities that

can be adapted, changed and developed. (Avolio & Luthans, 2006; Luthans, 2002; Luthans & Youssef, 2007, Luthans, Youssef & Avolio, 2007).

In this research, personality and resilience will be investigated through psychological assessment (personality questionnaire) and protective factors through semi-structured interviews.

1.8 PSYCHOLOGICAL ASSESSMENT

Psychological assessment is a process of assessing an individual or group that measures present capabilities and behaviour and predicts future behaviour; tests are administered only by a registered psychologist (Framingham, 2013). These assessments are used for diverse purposes such as career management, recruitment and development. (Schreuder & Coetzee, 2010). Assessment tools are developed and standardised to measure an individual's skills, capability or personality, however, these measures also indicate individual differences, which can be taken in relation to a norm group to indicate their position in the population (Framingham, 1991). They provide significant and relevant information about an individual's performance on the aspect assessed by the tests (Schreuder & Coetzee, 2010).

1.9   INTERVIEWS

This study relies (in part) on semi-structured interviews: semi-structured interviews are flexible and take shape as the participants relate their stories. (Lewis, 2004). Short lists of open-ended questions (interview schedule) are formulated, which contain the core dimensions and topics that are covered in the face to face interviews. Cohen (2006) states "the aim is usually to ensure flexibility in how and in what sequence questions are asked, and in whether and how particular areas might be followed up and developed with different participants". Usually interviews are guided by the respondents' understanding and the researcher's interests (Bernard, 1988). This facilitates an open channel between the interviewer and the interviewee (Lewis, Bryman & Liaco, 2004).

1.10   THEORETICAL MODELS

The literature review on personality, personality type groupings and resilience is presented from a humanistic perspective, and has assumed a "type" view of personality, as reflected in Jung's theory of type (Feshbach, Weiner & Bohart, 1996). Protective factors were explored. Both the literature review and the empirical study are conducted within the positive psychological approach. Positive psychology and its advantage to the organisation and positive organisational behaviour were explored.

1.11   META-THEORETICAL CONCEPTS /ASSUMPTIONS

Metatheories are "theories about the description, investigation, analysis or criticism of the theories in a domain. They are mostly internal to a domain, and may also be termed paradigms, traditions or schools" (Hjørland, 2005). A meta-theoretical approach to building coherent theories of designing and associated processes must be able to address: Human subjective processes, human cognition (conscious and unconscious), human internal and

external physical processes, issues relating to human values, the structure and dynamics of theory construction, object descriptions, behaviours and relationships (Love, 2000). Meta-theoretical analysis clarifies by focusing on the structure, dynamics, validity, coherence and appropriateness of the interrelated abstract entities that make up theory. Researchers plan their investigation on certain perspectives, either employing single or multiple methods. (Hjørland, 2005). Employing both interpretive and positivistic methods, empowers the researcher with great opportunities of asserting the information in descriptive as well as rich in-depth content endowed by the participants (Deetz, 1996).

Walsham (1993) asserts that the intention of the interpretive approach in science is to provide an understanding of the context and the process where information science impacts and is influenced by the context. This assertion justifies the researcher's choice of positivistic and interpretivism as the philosophical rationale for this study.

1.12   LITERATURE REVIEW

The literature review is focused on the police resilience, personality types and protective factors. Literature elaborates on crisis and coping of police members that depends on their inherent personality traits which are nurtured positively or negatively by the protective factors or support structure one has. The basic assumption behind this approach is centred on the idea that there are individual differences owing to personality. These personality types are ascertained by administering MBTI and Resilience with Sense of Coherence. The impact of personality types and resilience in the organisation is emphasised. Literature review is also focused on positive psychology and positive organisational behaviour.

1.13   EMPIRICAL STUDY

The empirical study is based on the positivistic and phenomenological paradigms. According to the principles of positivism; it depends on quantifiable observations that lead themselves to statistical analysis. Collins (2010) writes, "it has been noted that as a philosophy, positivism is in accordance with the empiricist view that knowledge stems from human experience. It has an atomistic, ontological view of the world as comprising discrete, observable elements and events that interact in an observable, determined and regular manner".

Crowther and Lancaster (2008) inform, "in positivism studies the researcher is independent from the study and there are no provisions for human interests within the study". Phenomenology uses inductive approach as against positivist which employs deductive method; facts versus meaning respectively. Cohen & Manion, 1987).

A paradigm concentrates in the explanation of human behaviour than predicting (Alvesson & Sköldberg, 2000; Cohen & Manion, 1987). According to Alvesson and Sköldberg (2000), "the phenomenological paradigm is in direct contrast to the positivistic paradigm, as this approach does not consider human behaviour to be objective experiences which can be quantified and generalised, but rather states that the focus should be on an individual's perceived subjective experiences". Every occurrence is different and diverse, and therefore treated accordingly (Cohen &Manion, 1987). The person and his way of perceiving the environment is meaningful (Alvesson & Sköldberg, 2000).

1.14   THEORETICAL BELIEFS

Moutan and Marais (1992) convey "theoretical beliefs can be described as the set of beliefs that produce measurable end results regarding any form of social phenomenon being studied, manifesting theoretical beliefs manifest in a set of philosophical traditions and

methodological models underlying the research". Accordingly, the researcher has divided this section into: (a) conceptual definitions; and (b) models and theories which should serve as the foundation for the research.

1.15   CONCEPTUAL DEFINITIONS

The following conceptual definitions are relevant to this research:

Personality: Cattell (1946) defined personality as predictable behaviour in context to the situation. Morris and Maisto (2002) state that personality is the unique pattern of thoughts, feelings and behaviour that seems to be relatively stable.

Personality types: Bemstein (2008) defines personality types as being distinguished from personality traits, where traits form smaller groups of behavioural tendencies, whereas types are described as qualitative differences between people, whereas traits might be construed as quantitative differences.

Resilience: Is defined as "a pattern over time, characterised by good eventual adaptation despite developmental risk, acute stressors, or chronic adversities" (Masten, 1994).

SAPS: South African Police Service.

Police Official: Can be described as a uniformed member of the South African Police Service, who has completed his or her training at Police Training College. He/she is a permanent member of SAPS employed by the South African Government to protect the citizens of South Africa.

POB: Is defined by Luthans as "the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed and

effectively managed for performance improvement in today's workplace" (Luthans, 2002, p. 59).

Positive Psychology: Seligman (2011) defines "Positive psychology is about scientifically informed perspectives on what makes life worth living. It focuses on aspects of the human condition that lead to happiness, fulfilment and flourishing".

PsyCap: Luthans and Youssef (2004, 2007, p.65) defined "PsyCap as an individual's positive psychological state of development that is characterised by positive constructs: self-efficacy, optimism, hope and resilience".

Protective Factors: Is any factor that reduces the impact of risk behaviour, helps individuals not to engage in potentially harmful behaviour, and/or promotes an alternative pathway.

MBTI: An assessment related to Jung's theory is the Myers Briggs Personality Indicator.

SOC: An assessment measuring resilience developed by Antonovsky, Sense of Coherence.

1.16 THEORETICAL FRAMEWORK

Richard Swanson (2007) states that a theoretical framework provides a structure that supports the theory, allowing one to comprehend its assumptions and limitations which in turn assists one to come to meaningful conclusions about that theory. George (1964) explains, "A theory provides an explanatory framework for some observation and from the assumptions of the explanation follows a number of possible hypotheses that can be tested in order to provide support for, or challenge, the theory" Jonathan (2010) writes, "A theory can be normative (or

prescriptive), meaning a postulation about what ought to be. It provides "goals, norms and standards". Thomas (2007) writes, "A theory can be a body of knowledge which may or may not be associated with particular explanatory models. To theorise is to develop this body of knowledge".

1.17   TYPE THEORIES

Personality type refers to sorting people into different group or categories, one group is not considered superior over other. (Albert et al., 2009). According to type theories, there are two types of people, as per trait theories, for example instead of two types of people it could be introversion and extroversion as a part of a continuous dimension. The idea of psychological types originated in the theoretical work of Carl Jung in his book "Psychological Types" (Sharp, 1987). The Theory of Psychological Types is the underpinning theory of this research. Jung believed that progress meant to move towards positive direction and not just to adapt and his idea of self-realisation is close to self-actualisation (Boeree, 2006). The researcher has adapted this as the primary theoretical frame of reference.

1.18   RESILIENCE THEORIES

Resilience is ability to deal with the adversities, adapt to the situation, cope and manage well. (Lazarus et al.,1993). Various research findings indicate resilient individuals are hopeful, energetic, self-confident and with high positive attitudes (Block & Kremen, 1996). Kumpfer (1999) convey, "highly resilient people are positive, elicit positive emotions and have optimistic thinking. It emerges as an important element of psychological resilience".

Among various studies, Antonovosky's Sense of Coherence (SOC) model is one of the most influential to explore the impact of trauma and protective factors that may diminish or attenuate the impact of trauma on an individual (Almedon, 2005). Antonovosky developed

salutogenic theory where emphasis is placed on health and well-being instead of risk factors (Lindstorm & Eriksson, 2009). This research explores resilience in the light of positive psychology, therefore this theory has been adapted as the second theoretical frame of reference in this research. Almedon (2005) emphasise "this model addresses the positive personality or adaptive aspects of personality as opposed to maladaptive". It is reliable and can be applied to all cultures across the globe (Almedon, 2005; Bowman, 1996). The scale indicates and measures good coping skills in adversity. (Sammallahti et al., 1996).

1.19 RESEARCH METHODOLOGY

Myers (2009) states, "Research methodology is a strategy of enquiry which moves from the underlying assumptions to research design and data collection, analysing and generalising from the results available from the represented sample group. Bryman and Bell (2007) note, "although there are other distinctions in the research modes, the most common classification of research methods is into qualitative and quantitative: at one level, qualitative and quantitative refer to distinctions about the nature of knowledge - how one understands the world and the ultimate purpose of the research, on another level of discourse, the terms refer to research methods, that is, the way in which data is collected and analysed, and the type of generalisations and representations derived from the data". This study uses mixed methods as the most appropriate means of data collection.

Johnson and Onwuegbuzie (2004) define mixed method research as "the class of research where the researcher mixes quantitative and qualitative research techniques or approaches into a single study, provides a complete picture by noting trends and generalisations as well as in-depth knowledge of participants".

Bryman and Bell (2007) state that researchers using mixed methods approach the view that the distinctive epistemological and ontological assumptions of quantitative and qualitative

research are able to be fused as they are compatible. The majority of researchers are adopting this approach (Lipscombe, 2008; Bryman, 2008). Mixed approaches enable researchers to triangulate the results of one part of the study with another (Bryman, 2008, p. 611). Many authors advocate for pragmatism as a worldview for mixed methods, which advances multiple pluralistic approaches to knowing "what works", thus, making a major tenet that quantitative and qualitative methods are compatible (Cherryholmes, 1992).

In social sciences, quantitative research is computed through various statistical inquiries or techniques with the aim of utilising statistical models and theories to investigate or testing the hypothesis pertaining to the phenomenon (Lisa, 2008). The primary liaison between scientific observation and statistical output is central to any kind of quantitative method (Lisa, 2008), expressing raw data in numerical form such as statistics, percentages, central tendencies, regression etc.

Qualitative research, unlike quantitative, observes, records and gets in-depth data which is further coded by identifying different themes to discover the underlying issues, patterns and relationships between the patterns, it does not involve mathematical models either in classifying the phenomenon or in analysing the data (Massachusetts Institute of Technology, 2010). The two methods of investigation are not mutually exclusive despite being differentiated (Kuhn, 1961). Kuhn (1961) concludes that, "large amounts of qualitative work have usually been prerequisite to fruitful quantification in the physical sciences, qualitative research is often used to gain a general sense of phenomena and to form theories that can be tested using further quantitative research". Brysman and Burgess (1999) argue that now most researchers prefer to use mixed methods, integrate both the methods for a single research study, taking into consideration the methodological foundation, thus taking benefits of both methods that could

support findings forming and making the project more meaningful. The statistical interpretation and qualitative rich data strongly supports the scientific study (p. 45).

Qualitative research is natural in nature, aims to study everyday real life events of individuals or groups in their in the natural settings, specifically advantageous to the educational background entailing analysing and interpreting as the events unfolds as the participants bring meaning and richness to the study (Denzin & Lincoln, 2003). According to Domegan and Fleming (2007), "Qualitative research aims to explore and to discover issues about the problem on hand, because very little is known about the problem. There is usually uncertainty about dimensions and characteristics of the problem, it uses 'soft' data and gets 'rich' data'" (p. 24). According to Myers (2009), "qualitative research is designed to help researchers understand people and the social and cultural contexts within which they live".

Philip (1998) puts forth "Such studies allow the complexities and differences of worlds-under-study to be explored and represented". Further, "qualitative research involves an interpretive, naturalistic approach to its subject matter; it attempts to make sense of, or to interpret, phenomena in terms of the meaning people bring to them" (Denzin & Lincoln, 2003). According to Domegan and Fleming (2007), "Qualitative research aims to explore and to discover issues about the problem on hand, because very little is known about the problem (Philip, 1998, p. 267). There is usually uncertainty about dimensions and characteristics of the problem. Qualitative research uses 'soft' data and gets 'rich' data". According to Myers (2009) "qualitative research is designed to help researchers understand people, and the social and cultural contexts within which they live". This research used mixed methods as this method often triangulates quantitative and qualitative approaches to data presentation and evaluation (Denzin, 1978).

1.20   RESEARCH DESIGN

According to Mouton (1996), research design is an outline of the research study and the way it is conducted, unfolding all the aspects of methodology as the sample, size, measuring instruments in an attempt to investigate and answer the research questions (p175), the author further says "research design is similar to an architectural outline, can be which can be seen as actualisation of logic in a set of procedures that optimises the validity of data for a given research problem". According to Mouton (1996, p. 175), "the research design serves to "plan, structure and execute" the research to maximise the "validity of the findings". Yin (2003) writes "it gives directions from the underlying philosophical assumptions to research design and data collection", further adding "colloquially a research design is an action plan for getting from here to there, where 'here' may be defined as the initial set of questions to be answered and 'there' is some set of (conclusions) answers" (p. 19).

An exploratory descriptive design incorporating a combination of mixed methods was used to study the aims of research. The research was conducted in two stages.

Phase 1 - The quantitative method was used. MBTI and SOC scale to measure their resilience. The aim of this phase was to determine the relationship between personality types and resilience. Quantitative method provides large amounts of data for effective statistical analysis with good external validity, and qualitative provides in-depth knowledge and strengthens internal validity through triangulation.

Phase 2 - The qualitative method is done using semi-structured interviews. The aim of the second phase was to ascertain the protective factors or coping resources. Interviews were conducted with the police members from the sample who were highly resilient, low and medium, in order to study the protective resources they adapt or strive for in the face of adversity. A resilience building work programme was constructed on the

basis of resilient police members with effective protective factors or coping resources within the police environment, which could help more despondent members.

1.21   POPULATION AND SAMPLE

The study population was crime scene investigators of the SAPS in KwaZulu-Natal. The study population consists of 600 crime scene investigators.

Phase 1 - Only crime scene investigators were chosen of all other components such as Detectives, Community Service Centre Officers, Crime Analysts, Local Crime Record Centre Officers, etc. at the SAPS. Survey population was drawn using random and non-probability sampling. The survey sample for this phase was chosen on the criteria of five years or more in the employment of the SAPS. Therefore samples of approximately 600 members were considered adequate on the basis of the following rationale:

Per Cronbach (1972), "larger samples more accurately represent the characteristics of the populations from which they are derived". There are several issues important in determining sample size (Bright, 1991, pp.46-47), such as representativeness, population size, nature of the study type and type of data processing. Simon and Goes (2012), state a sample size is a challenge, it has to be chosen with precision, considering that it should be big enough to represent the population where extrapolates are drawn by the researcher. Hair (2006) contributes writing, "Samples small or large have a negative impact on the statistical tests because either the sample not big enough to make generalisations or too big to reach any conclusions". Tabachnick and Fidell (2007) established that for factor and regression analysis a sample size of 300 is adequate using the equation $N >= 50 + 8*M$, where M reflects the number of independent variables. Hair (2006) suggested that a sample size of is not adequate 100 for factor analysis and as a general rule, the observations should be five times the number of

variables. Therefore, in this study the number of items, both the questionnaires combined, is 122 times five, which is 610, where 600 is considered an adequate sample.

There is a composition of all race groups predominantly being African males. Since all SAPS members undergo an intake psychometric selection, their literacy level was adequate to follow the instructions and to complete questionnaires and to answer the interviews in English.

This research was done in a police environment with the crime scene specialists. Psychometric testing is done ethically adhering to the ethics of HPCSA. A written consent was obtained by the members participating in the research process. Confidentiality was emphasised and maintained throughout the research process. MBTI and SOC scales were administered together. MBTI instruments can be administered either individually or in a group. Members were given a choice of withdrawing from participation if they were not comfortable. The instruments were scored and individual reports were provided to them to know their personality profiles. They had a right to decline or disagree with the report if they felt it was not their ideal personality report. They were allowed to re-write the questionnaires if they needed to ascertain their MBTI codes and their level of resilience.

Phase 2 - Semi-structured interviews were used with the members. Confidentiality was emphasised, they had the autonomy to participate or withdraw from the process. Interviews were recorded only if the members permitted to the recordings. Consequently, recording of notes was done by the researcher during and after the interviews. The criteria used to choose interviewees depended on the score of their resilience scale (high, moderate and low resilience). In qualitative studies the researcher must follow the rule of saturation. The sample must be big enough to assert to unfold the important information and perceptions of the participants, but not too large, as the output data becomes repetitive and further no value is added to the study (Glaser & Strauss, 1967). "When the collection of new data does not shed any further light on

the issue under investigation, it reached saturation level" (Bernard & Harvey, 2000). Mason (2010, as cited in Creswell, 1998) 20 to 30, whereas Morse indicated (1994) 30 to 50 interviews, where grounded theory of methodology is utilised.

1.21   POPULATION AND SAMPLE

The study sample was crime scene investigators of the SAPS in KwaZulu-Natal. The target for the study sample was intended to consist of 600 crime scene investigators. However, the number of participants varied on the availability of the members on the shift. Therefore 623 participants volunteered in the research project, which is slightly higher than the targeted sample of 600 participants.

1.22   RESEARCH INSTRUMENTS:

Psychological instruments are psychological tests that measures a specific variable or aspect of behaviour. Tests are standardised with established reliability and validity (Mellenbergh, 1989); tests are usually questionnaires designed and developed to measure a specific construct. In this study the researcher is using Myers Briggs (MBTI) and Sense of Coherence (SOC) to measure Personality Types and Resilience respectively.

1.22.1 MYERS-BRIGGS TYPE INDICATOR (MBTI)

Phase 1: The researcher decided to use MBTI form M for its valuable contribution to the field of research. The copy of the instrument is not attached as it is the Copyright of JvR Psychometrics (Pty) Ltd. The Myers-Briggs Type Indicator (MBTI) assessment, "is a psychometric questionnaire designed to measure psychological preferences in how people perceive the world and make decisions" (Myers & Myers, 1980, 1995; Park, 2012). MBTI Step I Form M is a questionnaire that includes 93 forced-choice questions, participants are forced to choose one of the two answers. Choices are opposite poles but reflect opposite preferences of

the same dimension. Preferences are a combination of word pairs and short statements. Participants are given the autonomy to hop the questions if they are uncomfortable responding (Myers, 1980, 1985).

FIGURE 1: FOUR FUNCTIONS OF MBTI
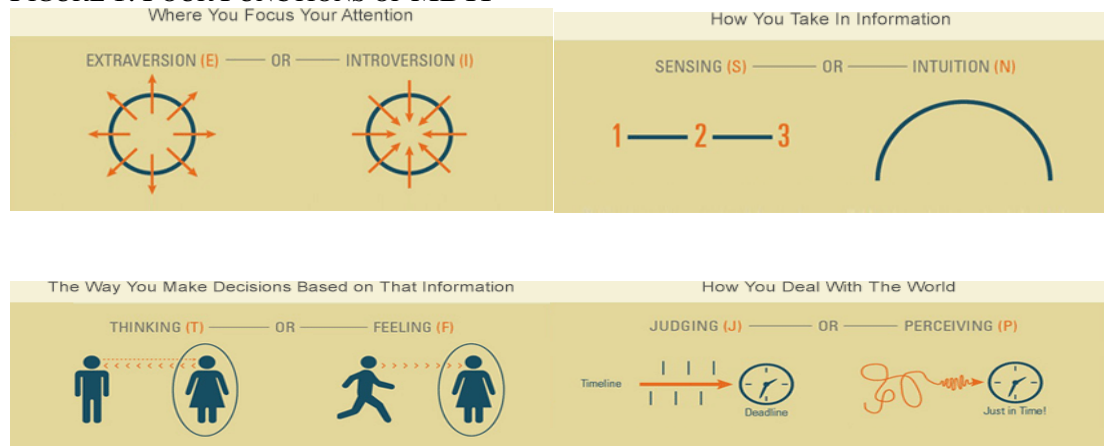
The above has been adapted from https//www.cpp.com/products/mbti/index.aspx

1.22.2 QUANTITATIVE DATA ANALYSIS (PHASE 1)

The Statistical Package for the Social Science (SPSS) programme was used (Nie, Hull & 1968). A statistician was employed to assist with the analysis once the data had been collected. In addition, descriptive and inferential statistics was used in order to gain an understanding of the obtained data. The descriptive statistics used in this study included standard deviation, minimum, maximum range, mean and standard deviation. Pearson product momentum correlations were used to specify the relationship among the variables in the study. Further item bias is used to determine whether instruments are reliable against all populations. Corder and Foreman (2014) define a chi square statistic as, a measurement of how expectations are compared to results; while calculating a chi square, the data must be large sample, random, raw, mutually exclusive, and must be drawn from independent variables.

1.23.3 RESILIENCE MEASUREMENT SCALES

There are a number of scales that measure resilience (Hjemdal et al., 2006); the Brief Resilient Coping Scale (BRCS) is a four-item scale that measures tendencies to cope with stress in a highly adaptable manner.

1.23.4 SENSE OF COHERENCE (SOC)

The researcher used SOC scale to measure resilience. The copy of the instrument is attached in Appendix 4. SOC is a seven point Likert scale, where 1 and 7 are extreme measures, while number 4 means both statements are equally applicable to the participant. SOC is a questionnaire consisting of 29 statements that measures psychological and social factors that could provide understanding to different reactions to the same situation of life stressors. Antonovsky's research led him to coin the term and develop the measure of Sense of Coherence (SOC) that describes a personality placement or adjustment which relates to individual variations in vulnerability in times of adversity (Antonovsky, 1979). Antonovsky (1979) defined SOC as: "a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that a) the stimuli deriving from one's internal and external environments in the course of living are structured, predictable and explicable; b) the resources are available to one to meet the demands posed by these stimuli; and c) these demands are challenging, worthy of investment and engagement." (as cited in Kayal, 2004)

According to Antonovsky (1987), "SOC not only influences well-being positively, but it also affects how people experience and understand their work environment". The construct SOC measures three dimensions of coherence; comprehensibility, manageability and meaningfulness (Antonovsky, 1987). Comprehensibility describes the way an individual understands his surrounding through stimulating his cognitive senses to be structured clear and consistent (cited as in Kayal, 2004). Antonovsky (1987) stated that "perceiving events as

comprehensible does not mean that they are necessarily benign, or that they are completely predictable. It means that one can make logic and sense out of stressors. Events such as death and war can therefore occur, but a person can make sense of these" (Antonovsky, 1987). Likewise, Ryland and Greenfield (1991) are of the opinion that if an individual looks at the situation as comprehensible, then they are socially and psychologically aware of their surroundings.

1.23.5 QUALITATIVE DATA ANALYSIS (PHASE 2)

In this phase the data was collected through semi-structured interviews, and notes from focus groups were analysed thematically. Themes and patterns relating to the variables of personality types and resilience were identified and coded in the interview transcripts. A copy of semi-structured interview questions is attached.

1.23.6 INTERVIEWS

As per Shneiderman and Plaisant (2005), "interviews are methods of gathering information through oral quiz using a set of pre-planned core questions, interviews can be very productive since the interviewer can pursue specific issues of concern that may lead to focused and constructive suggestions". The main advantages of an interview method of data collection are (Genise, 2002; Shneiderman & Plaisant, 2005) that: the sample is size as opposed to quantitative, researcher has direct contact with the participants which leads to constructive interviews and an in-depth and rich data can be obtained.

In this research study, semi-structured interviews were used. This method of interview has included questions which are open ended; partly using both structured and semi structured interviews. This undertaken study has the benefits of both methods of interview. A pre-planned short questionnaire was set as guidance for the semi-structured interviews and it served

consistency with all the participants. As the interview progressed, the participant was provided the prospect on expressing their events in detail depending on the informed choice of the interviewee. This study interviewed every participant using a semi-structured interview approach to evaluate the informative proposal of the model.

For the qualitative study, the thematic analysis method was used to transcribe the data collected from the focus group discussions. "Thematic analysis is used in qualitative research and focuses on examining themes within data" (Daly, Kellehear & Gliksman, 1997). This method emphasises rich description of the data set, which goes beyond the boundary of summating words, sentences, phrases or words in a text, but identifies imbedded and categorical ideas within the data (Guest, 2012). "Coding is the primary process for developing themes within the raw data by recognising important moments in the data and encoding it prior to interpretation" (Boyatzis, 1998). The analysis and interpretation of these codes can include uncovering main themes, sub themes and comparing the frequencies and relationships between the themes. (Guest, 2012). Most researchers consider thematic analysis to be a very useful method in capturing every detail of life experiences providing meaning to the data. (Daly, Kellehear & Gliksman, 1997).

Braun, Virginia and Clarke (2006) transcribe "thematic analysis is performed through the process of coding in six phases to create established, meaningful patterns. These phases are: familiarisation with data, generating initial codes, searching for themes among codes, reviewing themes, defining and naming themes and producing the final report".

The six steps are elaborated below:

Step 1: Re-read and familiarise with what data entails.

Step 2: Generate the initial codes by documenting, through data reduction by labelling and categorising.

Step 3: Combine phrases and texts into codes and themes reflecting the qualitative data. The researcher should also fill in the necessary gaps during the analysis process.

Step 4: Review themes, the identified themes should support the data and the theoretical perspectives. Answers to the research questions need to be abundantly supported by the data.

Step 5: Define and name themes, this involves an on-going analysis to refine the specifics of each theme and the overall story the analysis tells.

Step 6: Produce the report, describe the process of choosing the way in which the results would be reported. This presents another opportunity for final analysis of selected extracts, research questions and literature.

1.22.7 TRIANGULATION

Blaikie (2000) postulates "in social research, the term triangulation is used in a less literal sense - it involves the use of multiple methods and measures of an empirical phenomenon". Denzin (1978) stated that triangulation between methods reduces the bias that is present in using only one method, so the result will be a convergence upon the truth about some social phenomenon. "Triangulation arose from an ethical need to confirm the validity of the processes and, in case studies; it can be achieved by using multiple sources of data" (Yin, 2003). It is an approach that uses various data sources with multiple informants utilising methods as participant observation, focus groups and body language, multiple perspectives to gain insight and intensity of the phenomenon. Triangulation validates research findings by comparing both the methods if it corroborates (Creswell, 2003; Patton, 2002).

1.23 INTERPRETATION

Reeves and Hedberg (2003, p. 32) note that the, "interpretivist paradigm stresses the need to put analysis in context, as it is concerned with understanding the world as it is from subjective experiences of individuals". They use meaning and understanding as opposed to positivistic methodologies, by such as interviewing or participant observation, relying on the direct or face to face relationship with the respondents. Interpretive research is flexible as it shapes depending on the situation as it emerges and forms the interview; heavily determined by experiences, reasons and meanings (Kaplan & Maxwell, 1994).

1.24 FINDINGS

Conformability of the findings - conformability is the degree to which the research findings are validated others. It is synonymous to objectivity, involving the researcher's awareness of the situation and the accountability for individual subjectivity (Seale, 1999). The author argues that, "auditing could also be used to establish conformability in which the researcher makes the provision of a methodological self-critical account of how the research was done" (p. 45). Researchers are advised to save and archive all the obtained data in well organised manner to retrieve data should there be a challenge in the findings of the research. (Seale, 1999).

1.25 SIGNIFICANCE OF THE RESEARCH

Police work is demanding and often life threatening. SAPS have to deal with one of the highest crime levels globally. Specifically, crime scene investigators are exposed to graphic scenes, abused individuals, violent perpetrators, organisational stress, cases not standing in court for lack of evidence, and losing a colleague, to mention a few stressors. Statistics regarding continuous exposure to violence leads to early retirement, medical boarding, suicides

and stress-related disorders. The exposure to stressful conditions could lead to ill health and unwell-being of police officers. Despite repeated trauma, many officers do not seek mental health treatment for the fear of stigmatisation. Research has also shown that police personnel can be regarded as resilient and not all are affected by the exposure to trauma. Applicants joining the police force have full knowledge of the job description and are prepared for the risk.

The organisation supports its members by referring them to the *Employee Health and Wellness* professionals. There are pro-active and reactive programmes in place to assist them. Traumatised members are encouraged to attend trauma debriefing sessions, critical incident stress debriefing, and workshops to sensitise the members and create awareness. The researcher has facilitated trauma and well-being workshops, pro-active programmes where members voluntarily approached the researcher for further knowledge in dealing with trauma and organisational stressors. It was observed in group debriefing sessions that not all participants react in a similar way as they perceive the stressors differently. It was also noticed in the follow-up sessions these traumatised members bounced back to work within a few days of debriefing. The resilient members responded that they have a supportive family and some got involved in religious activities to cope with the trauma. It is noticed a programme would be well received by officers if presented in a manner sensitive to the stressors inherent in police work. If resilience training is routinely taught to the trainees/ cadets, they will consider it to be a natural component of the regular training process and accept it as a part of being a police officer. The trauma literature and model mainly depends on international models which may not be applicable globally. South African police officers' circumstances and environment is quite different in comparison with other countries.

Therefore, the research is concerned with developing a proactive work programme for building resilience, which would be a part of police training, to sensitise and empower the

members in the SAPS through station lectures, workshops and marketing. This programme is more practice-based than theory-based, which is inherent and suitable to the environment of the SAPS, where members can identify, realise it is real, accept and maintain equilibrium, to reintegrate back to work with support. This would bring in a significant difference in the police force. Police members would realise the stress and trauma as natural to their jobs they are performing, learn to be resilient, seek help if necessary and continue their work. This exercise will stop members from booking off sick, reduce ill health and medical boarding, drop absenteeism, and lead to high productivity, a cordial relationship with the public, a good personal life and overall physical, mental and emotional well-being. The organisation benefits in terms of excellent service delivery and managing loss management effectively. There will be a significant drop in recruiting the posts and avoiding on-duty training. Despite the focus being primarily police officers, it is generally applicable to all emergency services such as Paramedics, Nurses, Doctors, Security Officers, Metro Police, Fire Fighters, and other departments that fall under emergency services.

1.26   ETHICAL CONSIDERATIONS

Smith (2010) writes "APA's Ethics Code mandates that psychologists who conduct research should inform participants about the research, purpose, goal and informed consent".

According to Maxwell and Satake (1997), "an informed consent document needs to contain the following information". According to Maxwell and Satake (1997, p. 216), and Stein and Cutler (1997, p. 211):

1. **A Heading** is imperative with the name and address of the department and institution, including the researcher's name and contact details.

2. **Title** of the study.

3. **Purpose** of the study should be explained with provisional duration to complete research.

4. **Procedures**: "Explanation of the procedures to be followed and their purposes, nature of activities such as clinical tests and filling in of questionnaires, time required, schedule of participation, duration of study, etc."(Maxwell & Satake, 1997)

5. **Risks** and discomforts, e.g. police member being emotional or traumatised post interviews.

6. **Benefits**: issues regarding benefits needs to be addressed.

7. **Participants' Rights**: Participation is voluntary; they are provided the choice of not participating in the research project.

8. **Confidentiality**: "The assurance that all information is treated as confidential; that anonymity is assured; that the data would be destroyed should the subject withdraw. All persons having access to the research data must also be identified. Limits of confidentiality, such as data coding, disposal, sharing and archiving, and when confidentiality must be broken needs informing"(Maxwell & Satake, 1997, p 216).

9. **Authorisation**: The researcher should access the permission of parent or guardian in case of a minor subject and clarify any confusion that arises.

According to Leedy (1997), "Every researcher should fulfil the commitments made to those who assist in the research endeavour". Researcher should write in consent form the aims, purposes and benefits of the research. No participant should be coerced or lured with the prospects of benefits. All concerns need to be addressed. Participants should clearly know why they are participating in the research project.

Smith (2010) asserts that the researcher should be fully aware of the ethics of scientific research, specifically if an experiment treatment is involved. Participants must be well

informed about the aims of the experiment and any possible effects and side effects. In case of adversity the kind of assistance that is available and the one not available should be advised. Monetary and compensatory matters need to be addressed and cleared if any involved. "The effective administration should entail a procedure which enables the researcher to consider all necessary ethical issues when formulating a plan" (Mollet, 2007).

Silverman (2000), notes that in a qualitative study, the researcher has to interacts closely with the participants thus entering their personal world and equip with the knowledge of their of values, weaknesses, disabilities and the like, while collecting data. Silverman (2000, p. 201) reminds researchers that several ethical issues would be raised since the researcher steps in the personal boundary of the participants. Ethical concerns and confusions need to be cleared before and after the data collecting process. Creswell (2003) states that the researcher has an obligation to respect the rights, needs, values and desires of the informants. Confidentiality and fair treatment of the research participants was upheld very highly during this entire research project. The non-compliance of ethical consideration could lead to consequences of the exploitation of the research participants, should researchers violate any ethical rules set out by legislation and councils such as the American Psychology Association (APA) and Health Professions Council of South Africa (HPCSA). Taking into account what is said above, an application to the University of KwaZulu-Natal's ethics committee was submitted and the committee approved the research project.

The researcher practised the above-mentioned ethics. In order to establish trust, confidentiality was emphasised and the entire project was discussed; participants were informed that was involvement is voluntary and that they had the liberty to step down from the research project if they were uncomfortable prior to the administration of the questionnaires. The interested participants were allowed to ask questions in order to put them at ease and clear

their confusion. Their concerns and objections were addressed. Steps were taken to ensure that the sensitive participants were provided assistance in terms of support and counselling. The members wanted a feedback session to know their types in detail, and some requested a one-on-one session. Professional ethics were upheld commencing from when the consent form was handed out, to the feedback, providing reports and throughout the research.

1.27   STRUCTURE OF THESIS

This research is divided into eight chapters discussed briefly below:

Chapter One: This chapter provided introduction and background, problem statement, objectives and Metatheory discussed in detail. It has presented a case for the need to investigate the relationship between types and resilience of crime scene investigators within the SAPS environment. This chapter included has explained the importance of the study and outlined the theoretical framework adopted in this thesis concluding with significance of research.

Chapter Two: This chapter outlines a comprehensive literature review with regards to the police stress and personality types. Theories of personality are discussed. Literature review on the measure MBTI is elaborated, ending with the relationship between personality and resilience.

Chapter Three: This chapter further delineated an ample literature development on resilience along with resilience theories and positive psychology. Literature on resilience measure Sense of Coherence (SOC) is discussed.

Chapter Four: In this chapter, descriptions of the research methods that were followed in the collection of the data are provided. This includes the research design, research population, sampling, data collection procedure and phases, research instruments and data analysis techniques applied. Issues pertaining to reliability and validity are also addressed.

Chapter Five: This chapter provides the presentation and discussion of the results from the quantitative data **(Phase1).** Statistical results are outlined and briefly explained, followed by a comprehensive discussion that addresses the research objectives related to the aims of this phase.

Chapter Six: This chapter provides both the presentation and discussion of the results from the qualitative study **(Phase 2).** Themes that emerged from the data are also discussed and unpacked providing a link to the results and what has been contained in literature.

Chapter Seven: This chapter discusses the integration of results of mixed studies, to check if the findings are validated and to determine the triangulation has been achieved in the undertaken study.

Chapter Eight: This chapter highlights the discussion of results, integration of results, limitations of the study, contribution of the study to the scientific field and suggest future studies to concentrate basing on the findings of this research.

1.28   CHAPTER SUMMARY

In this chapter, the problem statement, literature review and the aim of the current research was presented. Literature review was explored to find the areas addressed and find the gap that needed attention in exploring further. General and specific research questions were formulated and converted into objectives for the study where after the main paradigm perspectives of this study were investigated including the discipline and the meta-theoretical assumptions. The research design explained the research schema in detail the measures used by the researcher, methods employed to collect data and lastly the statistical and qualitative techniques applied to answer the mentioned research questions. Ethical considerations were emphasised. An outline of the chapter overview was also given.

CHAPTER 2

PERSONALITY

2.1   INTRODUCTION

The objective of this chapter is to define and explore personality theories. After outlining the theories, Jung's personality type theory will be emphasised and its theoretical background will be explained. This chapter further concentrates on personality type development, measurement and its impact on organisation research.

Edward (1998) writes, "In everyday situations individuals respond in different ways, these ways are stable and enduring in a person in the way one thinks, feels and acts week after week and year after year; these characteristics are called personality". This social awareness and personality variations in interacting with the environment, links to individual differences (Bandura, 1986; Cantor & Zirkel, 1990; Mischel, 1973). Every individual is unique and each personality has their own way of understanding the world. Personality can be compared to a person's thumbprint: each is unique and each personality is constituted with those aspects that differentiate them from others (Nicolas, 2003).

The word "Personality" originated from Latin "Persona," which means mask, commonly used in the theatre to represent or typify a specific character (Engler, 2008). Personality predicts behaviour based on a pattern of thoughts, feelings, self-awareness, reactions to stress and values exhibited over a period of time (Saunders, 1994). The role of personality in predicting human behaviour has been intensely researched, where studies support the predictive ability of human nature (Schutte et al., 1998). The study of personality has elicited various theories, research and studies through decades which has led to the formation of various theories on personality advocated by a number of researchers (Allport,

1960; Cattell & Kline, 1977; Eysenck & Eysenck, 1985; Costa & McGrae, 2003). More recently, personality is often referred to as Personology, a branch of Psychology that focuses on the individual personality characteristics and the differences that exist between people (Moore & Viljoen, 1997). According to Nicholas (2003), no two people are identical and are not exposed to the same environmental or personal issues because it is formed by their own adjustment to their surroundings (Shultz & Schultz, 1998). The authors advance the statement that "Personality is a compound of mental characteristics that make them unique from other people; which embodies all thoughts and emotions that directs an individual to behave in a particular way". The authors further write that some individuals experience and react to stressors and traumas culminating into disorders whereas others emerge psychologically healthy. Martin (2006) goes on to say, "Some people are born with a personality that predisposes them to higher or lower levels of tolerance".

Furham (1992) posits that personality is an important aspect of human behaviour with individual differences and similarities; personality varies in terms of intellect, physical and emotional, thus making personality a summation of an individual's fundamental nature. According to Pervin et al. (2005) the field of personality addresses three issues, human similarities, individual differences and individual uniqueness or exclusiveness Cattell (1946) defined personality as, "That which predicts behaviour, given the situation".

Maddi (1976) defines personality, "As a stable set of characteristics and tendencies that determine those commonalities and differences in the psychological behaviour (thoughts, feelings and actions) of people that have continuity in time and that may not be easily understood as the sole result of the social and biological pressures of the moment".

The study of personality is based on the essential insight that people could be different due to individual differences, yet are similar in some ways (Chaplin, 1997). There have been

many different definitions of personality proposed. However, many contemporary psychologists agree on the following definition:

"Personality is that pattern of characteristic thoughts, feelings and behaviours that distinguishes one person from another and that persists over time and situations". (Chaplin, 1997)

Within this research, personality is defined as "relatively stable, partly formed by environmental and biological influences; an embodiment of feelings emotions and actions and thus spearheading towards individual difference and uniqueness of an individual which has predictive ability of human behaviour".

Mohita (2015) stated, "various definitions have paved way to three main approaches to the study of personality: The Psychological, The Sociological and The Biological Approaches. However, as per the research the biological definition of personality which comprehends only the bio-physical characteristics of the individual organism is inadequate. The psychological approach considers personality as characterised and determined by the constitution of an individual's style peculiar to the individual that is determined by the mental tendencies, emotions and characteristic organisation which is multifaceted by mental trends, emotions and sentiments". The study of personality has prompted abundant research and has generated theories and models, and has rich theoretical traditions; theories including the trait and type perspective, psychodynamic, humanistic, biological, behaviourist, social perspectives (Winnie & Gittinger, 1973). Personality is hard to classify into a particular theory, consequently researchers choose eclectic approaches in studying personality (Mohita, 2015).

2.2   DETERMINANTS OF PERSONALITY

Personality in the field of organisational behaviour is the cumulation of a person's feelings, thinking, behaviours, and responses to different situations and people. Every individual is unique due to individual differences; various aspects add to different personality known as 'Determinants of Personality' or the 'Factors of Personality' (Meer, 2013). While the argument of *heredity verses environment* or *nature versus nurture* still continues; numerous research and studies contributed to the field of personality have found that both heredity and environment seem to play a vital role as the determinants of personality, besides several factors influencing an individual's personality (Meer, 2013).

2.2.1   HEREDITY FACTORS OF PERSONALITY

Heredity is pre-determined at the time of conception or birth, these factors affect the overall personality of an individual including physical, mental, emotional, inherited temperament endowed by genes and genetic diseases (Meer, 2013). "Research has shown that heredity factors are vital specifically for basic traits as emotional tone" (O'Neil, 2006). Hereditary factors are considered as the origin of individual differences (Plomin at al., 1990).

2.2.2   ENVIRONMENTAL FACTORS OF PERSONALITY

Senthil Kumar (2015) highlights that, "sociologists emphasize that the personality of the individual develops in a social environment, which shapes his interests, attitudes and moral ideas enabling him to develop social self"; another term for personality. The values, moral boundaries, adhering to societal norms; all are contributed by the environment in which the individual is nurtured has profound effect on the person (Meer, 2013).

2.2.3   PHYSICAL FACTORS OF PERSONALITY

The influence physical appearance and physique (such as height, weight, colour, sex and attractiveness) on personality is profound, as an individual with impressive looks is attracted to others, is popular, and can achieve moderate success only on the strength of theire looks. Inversely, any deficiency in physical appearance or physique need to be compensated by other achievements made in the individual's life. Physical personalities change in times as does the other aspect of personality (Meer, 2013).

2.2.4   SITUATIONAL FACTORS OF PERSONALITY

Situational Factors are the external factors occurring elsewhere from the environment and others around you. Examples of situational factors are your environment, work, community, peers and school, and the people around the individual. (http://alleydog.com/glossary/definition)

Situational factors do not only alter an individual's behaviour, but necessarily shape the person's personality and behaviour; an individual adapts to different roles to fit the situational demands (Meer, 2013). According to Meer (2013), "Situational factors impact a personality in a significant way, they often bring out the traits of a person that are not commonly seen". Endler (1977) affirm the 'Interactionist' perspective differs markedly from the person principles perspective because "Interactions of 'Person' variability and 'Situation' variability are examined as combined influences on behaviour".

The determinants of personality have initiated diverse approaches concentrating on different aspects of theory. The prediction of human behaviour and the control over that behaviour is connected to an individual's history and culture. The Humanist and Existentialist understanding of personality tends to believe that human beings are too complex, while

paradoxically, behaviourists and the Freudian school prefer discussing behaviour rather than controlling it (Boeree, 2006). A few theories relevant to the study are discussed in the following section.

2.3   THEORIES OF PERSONALITY

Schultz and Schultz (2000) say theories are sets of principles used to explain a particular class of phenomena, behaviours, and experiences relating to personality. They further stated that personality theories must be testable, capable of stimulating research on their various propositions, and able to help understand and predict behaviour. Boeree (2006) states, "Theories may be applied to help people change their behaviours, feelings and emotions from harmful to helpful, from undesirable to desirable".

Research in the field of personality psychology stimulated the development of diversity of theories proposing different sets of postulations, hypothesis and concepts regarding individual differences (Pervin, 1989). The theories discussed below are the psychoanalytical theory, traits theory, humanistic theory and behaviourism. Focus is detailed on Jung's Theory of Typology as it is the grounding paradigm for this research topic.

2.3.1   PSYCHOANALYTICAL THEORY

Hunt (2006) notes, "The psychodynamic branch of personality theory includes theorists such as Sigmund Freud, Erik Erikson and Alfred Adler; Object Relations Theory also belongs to this group of personality theories, yet Freud is considered the father of psychoanalysis". Hjelle & Ziegler (1992) assert, "The earliest approach to the formal study of personality was psychoanalysis, the creation of Sigmund Freud. Personality theory has been influenced more by Sigmund Freud than any other individual". Freud is the most researched psychologist as per a survey conducted six decades after his death (Mayer & Carlsmith, 1997). Psychoanalysis, as

Freud conceived it, emphasised unconscious forces, biologically-based drives of sex and aggression, and unavoidable conflicts in early childhood. These were considered as the rulers and shapers of our personality (Schultz & Schultz, 2000). His views had an impact not only on psychology but also on the general culture. A psychoanalyst's perspective is based on Freud's clinical studies and treatments, with a deterministic approach to explain human behaviour by emphasising the role of childhood in shaping the adult personality, and a focus on unconscious factors of conflict, reconciliation among motives, drives, needs and conflicts (Grossi, 2001; Pervin & John, 2002).

Freud, in his theory of psychoanalysis, separates the mind into two different compartments, the conscious and the unconscious. The conscious mind deals with the awareness issues and the unconscious handles all that falls out of the realm of conscious mind, which are mostly hidden - desires, wishes, urges and hope (Hunt & West, 2006). The Conscious mind of the psyche, which is active on a daily basis, is just the tip of iceberg (Cherry, 2012).

Cherry (2012) postulates, "Freud divides human personality into three significant components: the id, ego and super-ego". The id is inclined in pleasure or immediate gratification of desires, and is oblivious to the surroundings; while the ego acts as partner of id to fulfil its wishes in a realistic manner suiting the surroundings (Kahn, 2002). The super-ego acts as a guardian to id and ego, coercing the desires are met realistically according to the rules, regulations, morals and norms of the society (Carver & Scheier, 2004). According to Freud, the super-ego, the last personality structure to develop, has two aspects: one is the "conscience", which discharges the duties of internal guardian or internal policing with warning and punishment; good behaviour is rewarded for the ego being ideal or a role (Boeree, 1939).

Hergenhahn (1994) records that, "Freud believed every child goes through a sequence of developmental stages and the child's experiences during these stages determine adult personality characteristics". Freud highlighted and proposed the sex drive as the main motivating factor from infancy to adulthood that determined all personality aspects an individual (Boeree, 1939). He proposed five psychosexual stages of personality development, believing adult personality depends on early childhood experiences heavily determined by the age of five (Carver & Scheier, 2004).

2.3.2   THE PSYCHOSEXUAL STAGES OF DEVELOPMENT

Cherry (2012) says Freudian theory suggests that as children develop they go through consecutive stages of psycho sexual developmental. The sexual energy or the pleasure attaining libido focuses on different parts of the body at each stage. At each stage, the libido's pleasure-seeking energy is focused on a different part of the body. The five stages of psychosexual development are:

1. **The Oral Stage:** In this stage the child's interaction occurs through the mouth by sucking reflex as a sexual energy output (Scroggs, 1985). Eating and tasting is instant gratification giving pleasure to the infant through tasting and sucking, in specific if the infant is dependent on care takers (Cherry, 2012).

2. **The Anal Stage:** McLeod (2008) expresses, "The libido now applies mind on the anus and the child derives great pleasure from defecating, making the child aware that they are a person in their own right and that their wishes can bring them into conflict with the demands of the outside world". Heffner (2014) expresses fixation can culminate into obsession in this stage, if the child has to master the urges of libido through stimulation; on the other continuum, the process of this control can lead to accomplishment and freedom.

3. Phallic Stages: At this stage, Oedipus complex sets in as children begin to identify opposite sex rivalry, which leads them to view their parents as rivals for their affections. They also discover physical gender differences between males and females, which they discover as erotic zones (Fiest, 1994).Heffner (2014). Castration Anxiety is experienced by boys fearing punishment from their father for their feelings towards their mother. Contrarily young girls have penis envy called Electra complex similar to boys (Hergenhaha, 1994).

4. The Latent Stage: Cherry (2012) infers that this is "A stable period, where sexual interest is present. Sexual energy is directed into other areas such as intellectual pursuits and social interactions". Breuer (1955) say, "This stage is important in the development of social and communication skills and self-confidence. The stage begins around the time that children enter into school and become more concerned with peer relationships, hobbies and other interests".

5. The Genital Stage: This is the final stage of development, where libidinal energies are concentrated on the genitals and individuals develop strong sexual desires to the opposite sex; this starts at puberty and is on-going in an individual's life (Hergenhahn, 1994). An individual develops a healthy and balanced personality if s/he has handled and completed all the previous stages successfully, and has attained gratification through all the stages (Cherry, 2012). However, if the developmental issues are unresolved the individual gets fixated on that particular point of the stage, and can be over-dependent and develop obsessions related to that stage (Boeree, 2006).

2.3.3   DEFENCE MECHANISMS

Freud (1894) noted a number of ego defence mechanisms which he describes to "operate at an unconscious level and help ward off unpleasant feelings as anxiety or make good

things feel better for the individual". Defence mechanisms are there to protect the individual from stressors or anxieties; a balance is maintained between the three compartments id, ego and super-ego to provide the individual a healthy state of mind (Charles, 1995). Defence mechanisms stop hazardous unconscious thoughts from surfacing into the Consciousness Mind. Repression, Reaction Formation, Sublimation. Rationalisation, Projection and Displacement are some of the more common defence mechanisms (McLeod, 2008). The most basic defence mechanism is repression: the ego prevents the unwanted feelings by supressing the instincts into the unconscious (Feist, 1994). Freud emphasises repression, which builds the entire the structure of psycho-analysis (Freud, 1914), which makes repression as a central core that relates all element with it (Freud, 1925).

2.3.4   DREAMS

Charles (1995) writes, "Freud believed that the function of dreams is to preserve sleep by representing as fulfilled wishes that which would otherwise awaken the dreamer". Mannoni (1971) writes, "Freud believes dreams are wish fulfillers, unfinished business of routine life of conscious world; dreams are primary processes transformed by secondary principles governed and guided by the process of unconscious mind harbouring repressed sexual gratifications or deficiencies of childhood". Freud describes that "in order to preserve sleep the dreamwork disguises the repressed or 'latent' content of the dream in interplay of words and images which are described in terms of Condensation, Displacement and Distortion" (Schur, 1966), which produces the "Manifest Content" of the dream as recounted in the dream narrative. Freud believed dreams revealed and give an insight into the pathological condition, and thereby analysing dreams could mitigate negative pathological effects (Gay, 2006).

2.3.5   ADVANTAGES OF PSYCHOANALYSIS

The theory emphasises the importance of childhood experiences.

- "It initiated and addressed the importance of the unconscious, sexual and aggressive drives that make up the majority of all human being's personalities" (Giamo, Schmitt & Outten, 2012).

- The approach along with explaining individual differences also explains defence mechanisms (Gaffney, Tim & Perryman, 2012).

2.3.6 LIMITATIONS OF PSYCHOANALYSIS

Omar and Ahmed (2012) "Sigmund Freud failed to include evidence of the impact of the environment on the individual throughout his theory".

- Pathology is the focal point, which fails to address healthy issues for the normal population (Omar & Ahmed, 2012).

- Culture has influence on personality, which was not taken in cognisance (Hoggard et al., 2012).

Lacking empirical evidence, the main drawback of the theory is that it is based on subjective analysis of human behaviour; with subjective vocabulary used by Freud that are difficult to test scientifically (McLeod, 2007). The author elaborates, "Nevertheless, most of the evidence for psychodynamic theories is taken from Freud's case studies and the main problem is that the case studies are based on studying one person in detail, and with reference to Freud, the individuals in question are most often middle aged women, which makes generalisations to the wider population difficult" (McLeod, 2007).

2.3.7 TRAIT THEORIES

In psychology, **Trait Theory** (also called **Dispositional Theory**) is an approach to the study of human personality. Trait theorists interest lies around patterns of thought, behaviour

and emotions; trait theories are primarily interested in the measurement of traits (Kassin, 2003).

Traits are relatively stable over time, and differ across individuals and influencing behaviour (Kassim, 2003). *Traits* are in contrast to *states,* which are more transitory dispositions (Kassin, 2003). Traits are relatively specific behavioural or dynamic attributes of a particular personality (Hill, 1970).

Schultz (2000) writes, "Gordon Allport was one of the most stimulating and provocative psychologists to study personality, making it an academically respectable topic, who disputed Freud's psychoanalysis on several notions as unconscious forces dominating the normal personality, importance of past determining the present and data collection from pathological subjects". "Allport described and classified 50 different definitions of personality, he concluded that personality is the dynamic organisation within the individual of those psychophysical systems that determine his characteristic behaviour and thought" (p.28).

Allport's theory represents a blend of Humanistic and Personalistic approaches to the study of human behaviour. Allport (1968) says, "It is humanistic in its attempts to recognise all aspects of the human being, including the Potential or Growth, Transcendence and Self-Realisation, it is Personalistic in nature; that its objective is to understand and predict the development of the real individual person". An individual's behaviour is drawn from the arrangement of personal traits, which became the central theme and the orientation to his theory (Allport, 1968). The theory postulates that the traits are genetic and relatively stable, and are driven by temperamental (Caspi, Kagan, McCrae & Watson, in Lopes et al., 2003).

Allport asserts that no two people are completely alike, each one is distinct from all others, and his explanation is found in his concept of "Trait" (Hjelle & Ziegler, 1981). He emphasised conscious rather than unconscious; normal rather than abnormal (Schultz, 2000). Allport considered personality traits to be predispositions to respond, in the same or a similar

manner, to different kinds of stimuli (Allport, 1937, in Schultz & Schultz, 2000). Theorists generally assume traits that are relatively stable over time, is dissimilar with individuals contributing to individual differences, which define people between one extreme to other on a continuum (Fiest, Fiest & Gregory, 2009); "Allport divided these terms into three types of traits: Cardinal, Central and Secondary".

Cardinal trait "This refers to a trait that dominates the individual's life, personality and behaviours, which is uncommon because people usually have more than one trait that shapes their lives" (Allport, 1968).

Central trait - Are common traits owned by every individual in one level or other (Schultz, 2000).

Secondary trait -These are distinct characteristics of an individual (Allport, 1968).

Allport also coined the words genotype and phenotype (Allport, 1968). Genotypes are more abstract in nature, and determine one's behaviour in society, whereas Phenotypes are observable entities that display how an individual interacts to his environment. For example, genotypes can be values, likes or dislikes. Engler (2008) reflects, "A phenotype for someone with a personality disorder is a pattern of disturbed or inappropriate relationships with others" (Engler, 2008). Allport (1968) believed if one has a well-developed personality traits and a rich set of characteristics, they attain psychological maturity, and lists seven characteristics:

1. Specific, understanding of self and thereafter (Allport, 1968) enduring extension of self.

2. Conducive interactional processes (Engler, 2008).

3. Emotional security and self-acceptance. (Allport, 1968),

4. Habits of realistic perception (Shultz, 2000).

5. Problem-centeredness, development of problem solving skills (Allport, 1968).

6. Self-objectification - insight into one's behaviour (Schultz, 2000).

7. Unique philosophy of life. (Allport, 1968).

In contrast to Allport's study of traits, a different perspective on trait personality was provided by statistical technique known as factor analysis; these theorists believe that one can quantitatively measure the degree to which various traits reside in different people (Hjelle & Ziegler, 1981). One such trait theory was developed by Raymond Catell (1965). Cattell considers traits to be building blocks of personality, and differentiated between surface and source traits. These form the core of the theory, with surface traits said to be groups of observations that are correlated, whereas source traits are the causes of behaviour (as cited in Baptista, 2009). Raymond Cattell's research propagated a two-tiered personality structure with sixteen "Primary Factors" and five "Secondary Factors" (Couchon, 1983). Cattell (1965) contends that a "theory of personality functioning and growth must be firmly grounded in systematic research methods and measurements". Lamb (1997) inscribes "Factor Model aims to construct a common taxonomy of traits using a lexical approach to narrow natural language to standard applicable personality adjectives, and his contributions to factor analysis is valuable and his theory had not been replicated".

Eysenck (1947), an extremely prolific author, agrees with Cattell that the goal of psychology is to predict behaviour, and he also shares his commitment to factor analysis as the way to piece together the personality puzzle. His approach is more theoretical than Cattell's and believed that only three super traits (extraversion, neuroticism and psychoticism) are needed to account for most human behaviour, compared to Cattell's 16 primary factors (Hjelle

& Ziegler, 1992). Eysenck places more importance on heredity, and argues that traits and types are determined by heredity although the exact influence of genetics on behaviour is uncertain (Loehlin et al., 1988).

A model the "Big Five Factors" was developed through the theory proposed by Cattell, popularly known as "Big Five," and was proposed by Lewis Goldberg (Ellis et al., 2009).

Goldberg (1993, 1998**)** wrote, **"Openness to Experience** – The tendency to be Imaginative, Independent and Confirming; **Conscientiousness** – The tendency to be Organised, Careful and Disciplined; **Extraversion** – The tendency to be Sociable, Fun-Loving and Affectionate; **Agreeableness** – The tendency to be Soft-Hearted, Trusting and Helpful; **Neuroticism** – The tendency to be Anxious, Insecure and Self-Pitying (Lewis Goldberg, 1993, 1998)

2.3.8   CRITICISMS

Mischel (1968) notes that trait models have been criticised as being purely descriptive and offering little explanation of the underlying cause: personality often changes according to situations, irrespective of previous experiences with adequate consistency. Trait measures are not accurate in their prediction of actual behaviour as personality varies from one context to another, thus forcing current researchers and psychologists to integrate both personality traits and environment in their study of personality (Jang, et al., 2006). Traits can potentially predict behaviour with precision if situations are specified; as not all individuals share similar traits and situations that impacts an individual's behaviour (Mischel, 1968).

Scarr et al. (1981) writes that, "The importance that genetics influence personality characteristics can change across a period of a few years". The genetic influences on vulnerability on twins were studied and it was concluded that there were no significant

differences on either heredity or environment variances between the monozygotic and dizygotic co-twins (Pogue-Geile, Michael & Richard, 1985).

About 50% of the variance in personality traits can be explained by heredity and the remaining variance is too large to be explained by measurement error (Roberts, Wood & Smith, 2005). Jang and Pervin (2006, 1994) quote, "the importance of the environment especially the environments shared by friends and not shared by siblings on personality development should be emphasised".

2.3.9   THE BEHAVIOURAL APPROACH

As per Black (1995), "Behaviourism as a learning theory can be traced back to Aristotle, whose essay "Memory", which focussed on associations being made between events such as lightning and thunder, prompted various philosophers to follow Aristotle's thoughts". Watson is the theorist credited with coining the term "Behaviourism" (Watson, 1913).

Gazzanigo (2010) mentioned, "From early psychology in the 19th century, the behaviourist school of thought ran concurrently and shared commonalities with the psychoanalytic and Gestalt movements in psychology into the 20th century; but also differed from the mental philosophy of the Gestalt psychologists in critical ways". The anchors of behaviourism were Ivan Pavlov, who investigated classical conditioning highlighting stimulus procedures to elicit reflexes and respondent behaviours; Thorndike and Watson who focused their investigation into the observable; with Skinner taking the theory to pinnacle through operant conditioning (Fraley, 2001). The applied behaviour investigation is an application of behaviourism, utilised for numerous conditions, including organisational behaviour management, fostering diet and fitness, and to the treatment of mental disorders (Madden & Gregory, 2013). In addition, despite paradoxical perspectives within the behaviourism and

cognitive schools, they have together contributed to therapeutic and clinical behaviour applications (Crone-Todd, 2015).

Skinner considered free will an illusion and human action the result of consequences of the same action. If the consequences are bad, there is a high chance that the action will not be repeated; however, if the consequences are good it is more probable that the action will be repeated (Schacter, Daniel & Daniel, 2011). Skinner called this the Principle of Reinforcement (Schacter & Daniel, 2011).

Skinner (1938) called, "the use of positive reinforcement behaviour to strengthen Operant Conditioning", and he considered reaction time to be the most effective measure of response strength. Skinner (1938) produced most prominent experimental work using tools as conditioning and Skinner (Schacter, Gilbert & Wegner, 2011).

Skinner (1938) founded experimental research psychology, he named this development as the experimental analysis of behaviour. Skinner through his experimental work became one of the most influential psychologists of 20th century, alongside Watson and Pavlov (Reagen et al., 2002). Although his ideas about human behaviour have been applied to people, the research for his behaviour approach used rats and pigeons, believing that fundamental processes are similar (Schultz, 2000). Mental association with environment was called "Radical Behaviourism" to brand his philosophy of behaviourism (Skinner, 1938). Spillane (2002) states, "The behaviourist perspective, associated with B. F. Skinner, holds that the mind at work cannot be observed, tested or understood; thus, behaviourists are concerned with actions (behaviour) as the sites of knowing, teaching and learning." Skinner employs the expression "Radical Behaviourism" to describe his brand of behaviourism or his philosophy of behaviourism (Skinner, 1974).

Skinner made two huge contributions to behaviourism, the first being operant and its use and the other temporary regulation of behaviour in animals within theoretical framework (Lejeune, Richelle & Wearden, 2006). The operant behaviour attributed to experimental analysis of behaviour than an abstract behaviour analysis (Skinner, 1953).

Skinner described an innumerable ways of practices for solving problems of individual, in social, cultural importance, economics, environmental sustainability and personal lifestyles and the mainly in education (Morris et al., 2005). Besides, the solution was found in the application of behaviour analysis to promote individual, human well-being, community health and improve human conditions (Morris et al., 2005). Applied behaviour analysis is a measure of the success of Skinner's (1948) operant behaviour. As he later exhorted, "Regard no practice as immutable. Change and be ready to change again" (Skinner, 1979, p. 346).

Skinner proposed that a complete account of behaviour requires three levels of understanding: the first being the natural selection of animal, secondly the range of behaviour gamut of the animal, and the cultural practices to which the organism belongs; interaction with their environment is the combined outcome product of all three levels of selection history (Fantino, 2000).

Behaviourism generated behaviour therapy (Rimm & Masters 1974; Erwin 1978). Lovaas and Newsom (1978) stated "Behaviour therapy developed behaviour management techniques for autistic children" (Lovaas & Newsom, 1976) and "Token economies for the management of chronic schizophrenics" (Stahl & Leitenberg, 1976). It fuelled discussions of how best or successfully this understanding experimental study can be applied to human behaviour in learning associative inbuilt behaviour (Schwartz & Lacey, 1982).

Hempel (1966) expressed that, "It is a mistake to imagine that human behaviour can be understood exclusively in non-mental, behaviouristic terms". Mesler (2004) convey Contemporary psychology concur Hempel's conviction that the behaviour without cognition is blind. Psychological theorising without reference to internal cognitive processing is explanatorily impaired and remains a heated subject of debate (Melser, 2004; Levy, 2007, p. 29–64).

2.3.10 CRITICISMS OF BEHAVIOURALISM

Gallistel (1957) notes, "Behaviourism stumbled upon various critical difficulties with some of its commitments; one challenge is the confusion about the effects of reinforcement on behaviour and another being, not offering behavioural paraphrases but opted to mental phrases itself"

Kane (1996) states, "Critics have raised several objections to the Skinnerian social picture, his identification of learning incentives hoping to reduce systematic injustices in social systems, human happiness, lacks suggestions or alternative ways of life that are consistent with behaviourist principles". Roediger and Goff (1998) wrote, "No attention is given to crucial general problem of inter-personal conflict resolution and to the role of institutional arrangements in resolving conflicts and limited focus on the role of brain mechanism in controlling behaviour".

2.3.11 HUMANISTIC APPROACHES

Humanistic psychology with its roots running through Socrates, rose to popularity as a response to the constraints of Psychoanalysis and Behaviourism. It emphasises the individual's innate drive towards self-actualisation, which is a process engaging in self-realisation and communicating their potentials and creativity (Benjafield & John, 2010). Under the leadership

of Maslow the term Humanistic Psychology was coined by a group of personologists as an alternative approach to fill the gaps postulated by behaviourism and psychoanalysis (Hjelle & Ziegler, 1992). Maslow preferred to call it as a movement but not as a theory and hence named "The Third Force Psychology" (Hjelle & Ziegler, 1992). The pioneers of the *third force* were Carl Rogers, Gordon Allport, Erich Fromm, Vicktor Frankl and Rollo May, who were influential in promoting humanistic psychology (Hjelle & Ziegler, 1992). Maslow (1968, 1987 in Schultz, 2000) believed that people are motivated to seek personal goals that make their lives rewarding and meaningful, emphasising motivation as the main core of his theory.

Humanistic psychology aids in realising and believing all individuals are naturally good people (CRC health group web, 2015). It adopts a multifaceted approach to human existence and concentrates on life events, paying special attention to observable facts such as creativity, free will and positive human capabilities. The theory encourages perceiving oneself as a "Whole Person" rather than joined parts, and inspires self-exploration rather than the study of behaviour in other people (Greening, 2006). Butental (1964) conveys "Humanistic psychology acknowledges spiritual aspiration as an integral part of the human psyche". Greening (2006) adapted Butental's (1964), article *The Humanistic Psychology Perspective* and summarised five core principles of humanistic psychology. The five basic principles of humanistic psychology are as below:

"Human beings, as human, supersede the sum of their parts. They cannot be reduced to components. Human beings have their existence in a uniquely human context, as well as in a cosmic ecology. Human beings are aware and are aware of being aware - i.e. they are conscious. Human consciousness always includes an awareness of oneself in the context of other people. "Human beings have the ability to make choices and therefore have responsibility. Human

beings are intentional, aim at goals, are aware that they cause future events, and seek meaning, value and creativity". (Greening, 2006)

Clay (2002) notes, "The aim of humanistic therapy is usually to help the client develop a stronger and healthier sense of self, also called self-actualisation" (Clay, 2002). The focal point of Humanistic therapy is insight, and it encourages clients that they have potential for self-fulfilment (Myers, 2014).

Maslow (1968, 1970b) proposed a pyramidal theory of hierarchy with five inherent needs that stimulates and directs human behaviour- needs being physiological, safety, belongingness, self-esteem and self-actualisation. In the pyramidal structure needs are arranged starting from basic needs and reaching the pinnacle called 'Self-actualisation" (Maslow, 1968). Maslow highlighted that it was underlying human motivation that inspired individuals to reach the point of pinnacle; the higher the point an individual reaches, he achieves more individuality, humanness and psychological health the person will establish (Hjelle & Ziegler, 1992; Schultz, 2000). "The growth of self-actualisation" (Maslow, 1962) refers to the "Need for personal growth and discovery that is present throughout a person's life" and, "A person is always 'Becoming' and never remains static in these terms". In self-actualisation a person comes to find a meaning to life that is important to them Maslow (1970b). As each person is different, the motivation drive for self-actualisation leads people in different directions (Kenrick et al., 2010). Maslow (1962) believed self-actualisation is a measurable concept through the experiences of an individual that occur when a person has an euphoric experiences with joy and happiness, and has achieved the state of actualisation; which is a continued process throughout life than a perfect state (Hoffman, 1988).

Self-actualisation refers to an individual striving desire for self-fulfilment, to achieve his goal or to actualise his potential. It is individualistic and therefore one person finds his desire and actualisation as an athlete, other as a mother or a scientist (Maslow, 1943).

Peak experiences are beyond the routine of needs fulfilment, as per Maslow are perceived as moments of extraordinary experience, that are insightful moments of love, understanding, happiness or ecstasy, during which a person feels more whole, alive, self-sufficient and yet a part of the world, more aware of truth, justice, harmony, goodness, and so on (Maslow, 1943, p. 382–383). Schacter (2009) expresses, "peak experiences or states of flow are the reflections of the realisation of one's human potential and represent the height of personality development" (Schacter, 2009).

According to McLeod (2014), "the most significant limitation of Maslow's theory concerns his methodology which formulated the characteristics of self-actualised individuals from undertaking a qualitative method called 18 biographical analysis as the source for his list as opposed to general population". Maslow's biographical analysis concentrated on a biased sample of self-actualised white individuals, which is difficult for scientific testing (McLeod, 2014).

McLeod writes (2014) that, "Another criticism concerns Maslow's assumption that the lower needs must be satisfied before a person can achieve their potential and self-actualise, which is not always the case, and therefore Maslow's hierarchy of needs in some aspects has been falsified". A study conducted by Tay and Diener (2011) has tested Maslow's theory, the outcome of the research support the fact that universal human needs appear to exist irrespective of cultural differences, the deficiency found was the order of needs placement in the pyramidal structure was incorrect.

2.3.12 TYPE THEORIES

In this research, personality is studied from a type perspective. Therefore, more emphasis is placed on Jung's theory about personality types, innate differences, inability to understand mutually, and how every individual prefers to react to a given situation. This has provided the motivation to adapt this theory to aid in understanding the police's resilience in relation to their personality.

The theory of typology proposed by Jung conducted extensive research into the identification of personality types and differences (as cited in Baptista, 2009), which involve conceptualisation and description at a broader level in terms of more pervasive dimensions of the personality structure (Kennedy & Kennedy, 2004). Jung sought to clarify how people with inherent differences are unable to understand each other. The concept of typology implies that individuals can be typed into a limited number of broad, general classes based on organising core features of personality (Hill, 1970). "Type theories divided people into clear groups on the basis of combination of preferred behaviour and focuses on the similarities between people" (DiCaprio, 1983). According to DiCaprio (1983), Jung defined personality types "as patterns in the way people prefer to perceive the world and make judgements, by choosing perception or judgement as a dominant mode to guide their lives and the other as an auxiliary process". Baptista (2009) articulates, "by combining a person's dominant attitude and function, their basic personality type can be determined".

Jung, a former associate of Freud, developed a theory of personality that dramatically differed from orthodox psychoanalysis, explaining human nature quite unlike any theorists which he called "Analytical Psychology" (Schultz & Schultz, 2000). "The overall goal of Analytic Psychology or Psychotherapy is seen as bringing about a wholeness of the personality through individuation, the process of becoming and being one's unique self" (Sedgwick, 2001, p.10). Jung disagreed with Freud on three issues; first is role of sex, second is the direction of

forces that influence personality and the third disagreement revolves around unconsciousness (Schultz & Schultz, 2000). "To gain an understanding of Jungian Psychology, it is necessary to contextualise its development by taking a look at Jung's history" (DiCaprio, 1983). "Jung was born in 1875 in the German speaking part of Switzerland into a family strongly represented by theologians and physicians, and his early life was influential in forming his perceptions of the psyche and the human condition" (Sedgwick, 2001). "His fascination with esotericism continued throughout his life and is evident in his research into symbolism, myth, alchemy and religion; although interesting, it is unfortunate that these topics are often erroneously seen as reflecting Analytical Psychology as a whole, while the practical strengths of his approach are ignored" (Sedgwick, 2001, in Cian Kerrisk, 2011).

Jungian analysis is more spiritually inclined, and posits on the allegory and the presence of a "collective unconscious", believed to be present within all individuals, making them human (Jung, 1959).

Walker (1995) communicates that an, "important concept in Jung's psychotherapy is the 'self', which encompasses the sum total of one's conscious and unconscious processes and is the organising and energising centre of personality, on which rests the 'ego' or one's sense of purpose and identity". Kerrisk (2011) writes, "one of the primary instincts of the self, according to Jung, is "individuation", which is this inherent drive towards wholeness and synthesis". Walker (1995) informs "Carl Jung's principal therapeutic focus was on reuniting conflicting aspects of the self into a fusion, to impede this process and bring about an integrated balanced whole, which includes both conscious and unconscious aspects of one's being".

2.4   THE STRUCTURE OF PERSONALITY

Feist and Feist (2002) adds, "theory on personality is extremely complex". Jung defined personality as: "As the supreme realisation of the innate idiosyncrasy of a living being. It is an

act of courage flung in the face of life, the absolute affirmation of all that constitutes the individual, the most successful adaptation to the universal conditions of existence, coupled with the greatest possible freedom of self-determination" (C.G. Jung, 1875-1961).

Jung (1931, 1969), gathered information from various disciplines such as psychiatry, theology, physics, biology, chemistry, history to understand the psychological functioning of individuals. According to Möller (1995), "this resulted in an esoteric product with basic assumptions and principles of Jung's theory". Jung (1931, 1969) theorised that the "Psyche is composed of three separate but interacting structures; The Ego, Personal Unconscious and The Collective Unconscious". "The ego is the centre of conscious and it represents that component of all those thoughts, feelings, memories and perceptions which constitutes our awareness of ourselves and is responsible for carrying out the normal activities of waking life" (Schultz & Schultz; Hjelle & Ziegler, 1992).

FIGURE 2: JUNG'S MODEL OF PSYCHE, ADAPTED FROM JUNG'S ANALYTICAL THEORY (1931).

Figure 5: Jung's Model of the Psyche.

Jung (1959) wrote, "the unique aspects of an individual study constitute the focus of Sigmund Freud and Alfred Adler". "Collective consciousness offered only generalisations, simplistic ideas and the fashionable ideologies of the age. Progoff (1959) indicated, "Jung contrasted the collective unconscious to the personal unconscious. This tension between

collective unconscious and collective consciousness corresponds roughly to the 'everlasting cosmic tug of war between good and evil' and has worsened in the time of the mass man". Jung (1913) went beyond Freud by emphasising that the personal unconscious contains complexes or clusters of emotionally charged ideas, feelings and memories acquired from a person's developmental past. Jung believed that such complexes organised around common themes may become strong enough in a person's behaviour, once the complex is formed it stops control of the person's behaviour and determines how he or she perceives the world (Hjelle & Ziegler, 1992). Jung (1969) proposed the existence of a deeper structure within the psyche called collective unconscious, which is a store house of latent memory traces of pre-human ancestors, are unconscious and genetic and are similar for all mankind. "The contents of the collective unconscious do not lie dormant but are active and influence a person's thoughts and emotions" (Feist & Feist, 2002).

Campbell (1971) writes that Jung said, "Human nature is rather essentially positive or good, but there is always a dark side hidden that needs to become conscious and that necessiates a struggle, therefore to enlighten or make conscious the unconscious operations of one's psyche throughout the life span of development. Emotions, for Jung, are the chief source of consciousness, including values and feelings that linked psychological events and life" (Fadiman & Frager, 2002).

The concept of the archetypes is very original and different of the Jungian concepts (Jung, 1934, 1936), which Jungians understand as given in human experience; the archetypes were, for Jung, "typical modes of expression arising from this collective layer". The archetypes are similar to all individuals, whose personal experiences of the events are arranged, they are not any images or ideas (Geist, 2013). According to Jung, the collective unconscious is the source to archetypes, accessible through their history, which were latent lying under the

unconscious layer; later became a typical way of expressing through collective (Jung, 1936). As a result of Jung's early word association research, he writes he came "to recognise the existence of clusters of ideas, thoughts, memories and perceptions, organised around a central affective and archetypal core. He termed these clusters "feeling-toned complexes" (Jung, 1934). Jung (1936) saw complexes as "the living units of the psyche, as distinctive part personalities each carrying a splinter consciousness of its own, a degree of intentionality and the capability of pursuing a goal". "They are like real personalities in that they contain images, feelings and qualities, and if they engulf the ego, they determine behaviour as well" (Sandner & Beebe, 1995, in Geist, 2013).

Jung and Jungian followers and theorists have named and described many archetypal images (Haule, 2011; Knox, 2003). Hjelle and Daniel (1992) say there are limitless archetypes in the collective unconscious; however those that are given prominence include the persona, the anima, animus, shadow and the self.

> **The Self**: Boeree (2006) states that the most crucial and hub of everything is the **self**, which unites all the entities of personality and hence represents a circle; the self is assisted by the Mandalas and cross to get the concentration back to the pivotal centre , which Jung felt this achievement happens in death. Jung (1959) writes that the "Self is the central, organising archetype, the archetype of awareness which is one of the most intriguing and spiritually laden archetypes". As noted in Bankart (1997), many faith systems and philosophies believe that there is a divine or enlightened potentiality within all humans which are ways of imagining the self. Further, Jung (1936) believed that, "this self is within us, when fully realised, helps us connect with the spiritual around us - the larger spiritual truths, if I didn't know that God exists, I would surely have to invent him" (quoted in Bankart, 1997, p. 164).

The Persona: Is the archetype where a person is met by a situation - healthy minded individuals adapt to the situations in their demanding social surroundings and interact with diverse situations involved with temptations and provocations (Colombus, 2011). "Our persona is the mask we wear, or the set of behaviours we engage in to accomplish what is expected in a given relationship, our professional persona is different from a persona at a party or a persona with family" (Jung, 1950). When a persona is not well balanced there is hardly any compatibility between behaviours and personality in different settings (Hjelle & Daniel, 1992). From the outside, this be perceived as spurious and inconsistent but from within, the person might battle to understand herself; on the contrary if the persona is solid or tight Jung (1951), one cannot seem to stop being a certain way, even when the situation demands a very different set of behaviours. "In dreams, we get hints about struggles with persona when symbols like houses or other shelters or coverings are featured" (Sandner & Beebe, 1995). In his usual simple prose, Jung (1950) wrote, "The persona is that which in reality one is not, but which oneself as well as others think one is" (Haule, 2011; Knox, 2003).

Shadow: John and Sommers-Flanagan (2012) write that the existence of shadow is either not known or repressed; it contains aspects that an individual may not own up, is also compensatory in nature or in a direct, reciprocal relationship with the persona. Jung (1950) postulates most people who consciously believe they are relatively nice and caring, have shadows that are reciprocal, they could be not all that nice. However, Jung (1950) also hypothesised that "if our personas were mean, unworthy, inadequate types, then our shadow might contain kind, upright, caring aspects". Jung believed that people project their shadows and archetypes onto other people and then overreact to those projection as if it were highly allergic to erroneous (Kaufmann, 1989).

Anima and Animus: As in John and Sommers-Flanagan (2012), the Chinese concepts of Yin and Yang were complementary to archetypes of anima and animus, the feminine and the masculine principles present in all humans (Kast & Whitcombe, 2006). According to Daniels (2011), "anima and animus are personifications of the feminine nature of a man's unconscious and the masculine nature of a woman's". Jung (Jung 1954b) said, "Every man carries within him the eternal image of woman, not the image of this or that particular woman, but a definitive feminine image which is fundamentally unconscious. . . Since this image is unconscious, it is always unconsciously projected upon the person of the beloved, and is one of the chief reasons for passionate attraction or aversion, similarly, a male imprint exists in women". John and Sommers-Flanagan (2012) said "Jungians believe that all humans innately adapt twin personalities, for most people one side comes to dominate over the other, thus causing the other to be sublimated or unconscious". When properly functioning, a male's anima is healthy and well connected with all entities of personality enables him to be caring and being spontaneous, while a female's animus influence her emotionally, enables her to be strong, directive, active, disciplined and aggressive (Russell-Chapin & Moser, 2000 cited as in John & Sommers-Flanagan, 2012). In men's dreams, the anima manifests as a female. In women's dreams, the animus archetype manifests as a male (John & Sommers-Flanagan, 2012). "Anima and animus manifest themselves most typically in personified form as figures in dreams and fantasies (dream girl, dream lover) or in the irrationalities of a man's feeling and a woman's thinking" (Kast & Whitcombe, 2006). Anima and Animus are the most influential archetypes regulating behaviour (Daniels, 2011).

2.4.1 JUNGIAN ANALYSIS / PSYCHOTHERAPY

Geist (2013) informs, "Jungian psychotherapy, as it is currently practiced, covers a wide range of issues, varying from a primary stress with the assistance on the analysis of the archetypal material of dreams and fantasies concentrate on the unfolding the early developmental issues, including a strongly clinical emphasis which combines these two elements". A number of authors have attempted to classify Jungians by school (Samuels, 1985), which seems only partially successful in capturing the great diversity found among Jungians, precisely because the theory is experience driven. Joseph Henderson (2003) notes that: "We individual practitioners have had to reformulate our therapeutic experiences when they differ from those of the master. This is to be expected since individuation . . . implies that no psychotherapist can be called Jungian without first becoming as differentiated an individual as he or she can be in response to his or her own personal analysis".

According to Geist (2013), "Jungian analysis, which takes place in a dialectical relationship between analyst and analysed, and has for its goal the analysand's move toward psychological wholeness". Kaufmann (1989), is of the opinion that this transformation of the personality needs to acknowledge the unconscious and its dynamic relation to consciousness as these surface during the course of analysis. "Transformation also depends upon the significant modification of the unconscious structures that shape and control ego-consciousness at the beginning of analysis, a change that takes place through the constellation of archetypal structures and dynamics in the interactive field between analyst and analysand" (Stein, 1995, cited as in Geist, 2013). Whitmont (1969) states, "Eventually the unconscious will begin to provide not only descriptions of the existing impasse but also positive suggestions for possibilities of development which could reconcile the opposing positions, showing us what avenues of development are available to us, what paths are required of us or closed to us, according to the inherent plan of the Self".

2.4.2 THEORY OF THE HEALTHY PERSONALITY (THE PSYCHOLOGICAL TYPES)

"We are naturally disposed to understand everything in the sense of our own type," Jung.

Carl Jung (1923) is given the primary credit by psychological type and temperament theorists for developing the theory of psychological types. Psychological type is a theory of personality developed by Jung that explains the innate differences in the behaviours, choices and forms of expression in healthy people. Jung (1923) espoused a particular theory of human behaviour and emphasised that "besides the many individual differences in human psychology there are also typical differences" (p. 3). Unlike many of his contemporaries, Jung analysed psychological disorders and mental illness, but also attempted to unearth the foundation for healthy psychological order in the human mind or psyche (Myers, 1993). Jung postulated that human behaviour is observable through their innate preferences and their interactions with their environment as their behaviour depends on their psychological frameworks and orientation (Dranitsaris, 2013). "He believed that all people have the capacity to observe and organise, but there are natural differences in ways people prefer to utilise these capacities" (Kirby, 1997). Myers (1993) writes that, "according to Jung there are two opposite ways to perceive: sensing and intuition, where sensing takes the information, uses all senses through focussing on realities, and intuition focuses on new possibilities giving a bigger picture. Jung's theory holds that there are two opposite ways to judge: thinking and feeling, where thinking prefers to choose from logical consequences and feeling considers what is important to them or other people in decision making" (Myers, 1993). Kirby (1997) states these processes are used in the external and internal world, processing of information are referred as orientation and direction of energy called extraversion and introversion. Jungian psychological type theory with practical applications was widely studied by Myers Briggs, who further developed a measuring

tool named "Myers Briggs Type Indicator" (Isabel, 1987), a non-clinical personality tool only applicable to the normal population. Figure 3."The four functions are somewhat like four compass; they are just as arbitrary as indispensable. Nothing prevents our shifting the cardinal point as many degrees we like in one direction or the other, or giving them different names... but one thing I confess is I would not for anything dispense with this compass on my psychological voyage of discovery" (Jung's Psychological Types, 1931/1969).
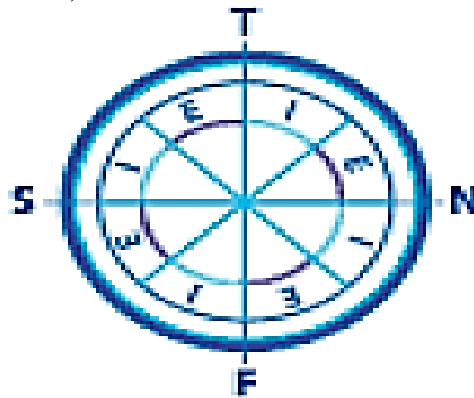
Higgs (2001) states that Jung developed the type theory on the basis of three dimensions exploring individual cognitive style (Higgs, 2001). These concerned:

• "The way individuals approach life" (Jung, 1931)

• "The way in which individuals become aware of the world" (Jung, 1934)

• "The way in which individuals reach conclusions about the world" (Jung 1931, 1934).

As per Higgs (2001), Jung (1990) identified numerous psychological types or preferences which developed out of a combination of two basic attitudes, namely Introversion (I) and Extroversion (E), and four separate functions, namely Thinking (T), Feeling (F), Sensing (S) and Intuiting (I). The underlying belief is that assumptions are that past experience determine expectations and may influence future behaviour and personality (Higgs, 2001), where personality is an open channel which is capable of receiving all inputs, thus engaging people in constant development.

2.4.3 TYPES
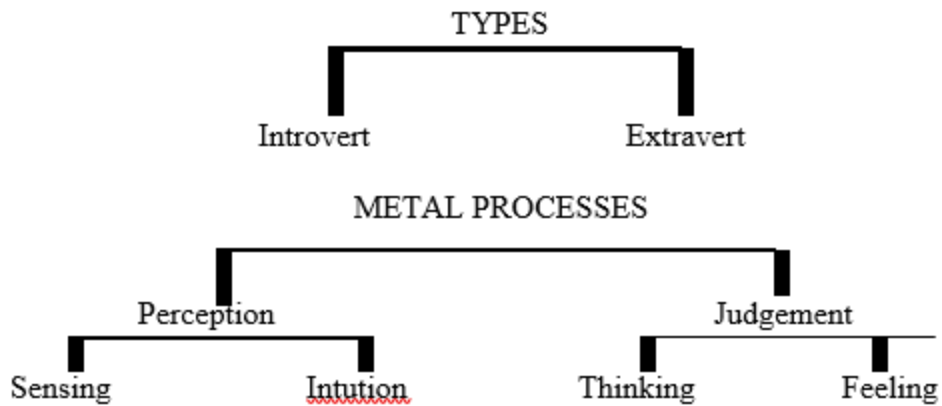
According to Pienaar (2004), Jung's typology system concentrates on how individuals get information, sources of the energy, how they view world and how they conclude on what they have observed. Van Rooyen (1999) notes, "based on several years of keen observation, Jung postulated two contrary ways of perceiving, sensation (or sensing) versus intuition, and two opposite ways of judging, thinking versus feeling, besides to these extreme opposite ends of mental functions; Jung elaborated on two opposite attitudes or orientations of energy, extroversion against introversion, called as dichotomies".

The extrovert is the outward personality; they find the object captivating, consider it of the utmost importance and have an "open, sociable, and active" relationship with the world (Spoto, 1995). Characteristically the extrovert is confident, available and outgoing, they are at every party, converses with everyone in the room, always says yes to an invitation, be it a social event, a casual outing with a close friend, or a request for help (Markland, 2010). According to Spoto (1995), the extrovert with their outwardly turned libido draws their energy from the object, so to them being social, active and involved is invigorating, revitalizing and refreshing. Conversely, if too much time passes without significant social interaction, the extrovert can feel restricted and may become anxious, irritable and snappy.

The introvert is the exact opposite in their relation with the object. To the introvert, "the object is seen as draining energy away from the more subjective world" (Spoto, 1995, in Markland, 2010). The introvert is subsequently more independent and idea-oriented then their extrovert counterpart, who is only occasionally at parties, and, if there at all, is either a wallflower or converses with only a few other guests. They are often seen alone pondering to themselves, and appear unapproachable or detached. They normally have only a few close friends, as opposed to the extrovert's hordes of friends and acquaintances. If an invitation is presented it is uncertain if an introvert will accept, therefore they are often seen as flaky or unreliable. Given the introvert's relation to the object, they need downtime in order to restore their energy. Much like an extrovert without enough social interaction, too much social interaction can leave an introvert feeling worn out, irritable, territorial and snappy (Spoto, 1995, p. 30).

2.4.4   ATTITUDES

Jung's typology starts with the differentiation between introversion and extroversion; Introverts are people who prefer their internal world, or who draw the energy from the inner world of thoughts, feelings, fantasies, dreams, and so on, while extroverts prefer to draw their energy from the external world or from environment, people and activities (Boeree, 2006). This relates to an individual's focus of attention and flow of psychic energy (Higgs, 2001). Kennedy and Kennedy (2004) state that extroversion prefers to draw the energy from external world, on the opposite introversion related and gets inspiration from inside world. Boercee (2006) notes, "the terms have attached to ideas like shyness and sociability, partially because introverts tend to be shy and extroverts tend to be sociable an outgoing, but Jung intended for them to refer more to whether you ("ego") more often faced toward the persona and outer reality, or toward the collective unconscious and its archetypes. In that sense, the introvert is somewhat more

mature than the extrovert. Our culture, of course, values the extrovert much more. And Jung warned that we all tend to value our own type most."

Markland (2010) stated that Jung did not develop the functions until about 10 years after the attitudes when he realised that introverts and extroverts were still extremely different on an individual level; he thus added four basic functions: sensation, intuition, thinking and feeling. He explained, "There are no introverts or extroverts pure and simple, but only introverted and extroverted function-types, such as thinking types, sensing types, etc. There are thus at least eight clearly distinguishable types" (Jung, 1928). These types are extroverted thinking, introverted feeling, extroverted sensing, extroverted intuiting, extroverted feeling, introverted sensing, introverted intuiting, and introverted thinking, and are characterised by the person's attitude type and their dominant function. Whatever a person's dominant function is their strength, and that function's antithesis is their weakness. However, everyone possesses characteristics of all the types.

2.4.5 THE FUNCTIONS

Jung (1938) suggested that, "whether we are introverts or extroverts, we need to deal with the world, inner and outer, and each of us has our preferred ways of dealing with it, ways we are comfortable with and good at" and proposed there are four basic ways, or functions:

SENSING: Sensing means the person gets all the information outside from the world around him; this person has good listening skills, observant to events occurring in the environment and his function involves perception instead of interpreting and judging (Jung, 1931).

THINKING: Thinking means analysing information by arranging ideas logically and rationally, which comprises of decision making than merely absorbing raw information (Jung, 1939).

INTUITING: This is a kind of perception which lies outside the boundaries of conscious experiences which entails integrating with huge amounts of information which is not visualised or heard (Boeree, 2006).

FEELING: Feeling, like thinking, is a matter of analysing process inclined heavily towards emotional reaction – all individuals have these functions with varying quantities (Jung, 1939).

Jung (1938) said "Every individual has a dominant function preferred by the person, accompanied with secondary function which assists the primary attitude when needed; a **tertiary** function which is only slightly less developed but not terribly conscious, and an **inferior** function which is poorly developed and so unconscious that we might deny its existence in ourselves. Most of us develop only one or two of the functions, but our goal should be to develop all four". Once again, Jung sees the transcendence of opposites as the ideal (Boeree, 2006)

TABLE 1: THE FOUR ATTITUDES AND THE FOUR MENTAL FUNCTIONS (QUENK, 1996)

The Four Attitudes

Extroversion	Introversion
Energy is focussed externally, is produced through interaction with the outer people and objects. Focus is on the variety of experiences in the world.	Energy id drawn is focussed internally, which relies on internal ideas and experiences produced with inner ideas, experiences and personal reflections.
Judging	**Perceiving**
This Attitude involves systematically arranging e outer world is planning and predicting and coming to conclusions. Concentration is on solving the problem and looking for closure.	Spontaneous attitude is versatile with adaptability open for New information. Gather information and perceive in order to make an practical and informed decision

The Four Mental Functions

Sensing	Intuition
All senses are active, information is accumulated through real events, facts and details that happens in present.	Information is acquired through integrating huge amount of information as patterns and predicting or global wholes. Possibilities in the future.
Thinking	**Feeling**
Intuition serves information to make conclusions are based on logical analysis with objectivity.	Inclined towards emotions, empathy and harmony. Conclusions are based on personal values about sensing or intuitive information

"Jung refined his theory and introduced another function termed 'Auxiliary'; he asserted that this function normally and consciously acts from a balanced position of its own" (Spoto, 1989). By adapting the auxiliary functions individuals can use both directions (Myers,

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1980). Myers (1980), "With the third function, in place of Jung's eight preferences, it gave a combination of 16 personality types".

2.5   MYERS-BRIGGS TYPE INDICATOR (MBTI) INSTRUMENT

McCaulley (1990) writes "Isabel Briggs Myers and her mother Katharine Cook Briggs developed the MBTI after the publication of the book by Jung, *Psychological Types*, in 1921. An impetus for Isabel Myers's interest in personality types and developing the MBTI was World War II" (McCaulley, 1990). Hartzler (1992) describes developing the measure involved long process with technical difficulties. MBTI was created as forced choice as it needed people to indicate their preferences (Pienaar, 2004).

Wheeler (2004) writes that "MBTI is a psychometric measurement, and classifies individuals based upon their individual preferences". According to Myers (1998), MBTI gives 16 distinct preference types involving four attitudes and functions as dichotomous orientations: Extraversion – Introversion, Judging – Perceiving, Sensing – Intuition and Feeling – Thinking. McCaulley (1990) infers The Myers-Briggs Type Indicator, owes the bulk of its credit to the analytical psychologist Carl Jung. Dunning (2010) writes Jung published his book Psychological Types, the concepts similar to MBTI but had arranged differently; he had sorted people as either a "Perceiver" or a "Judger", further Perceivers divided into the groups of sensation and intuition; while judgers into thinking and feeling, fitting individual in one of the four categories. Katherine Cook Briggs and Isabel Briggs Myers worked together to create MBTI assessment in order to be able to identify Jungian personality types with a vision to "enable individuals to grow through an understanding and appreciation of individual differences in healthy personality and enhance harmony and development among diverse groups" (Myers, 1998). According to Myers (1998), their focus was primarily on the "Constructive use of differences." A particular contribution made to the theory of Jung by the

mother and daughter team was the addition of the Judging-Perceiving dimension, in which Jung indicated observing some disparities between individuals relating to this preferred attitude (Lawrence, 1996). The mother and daughter team called MBTI assessment an "Indicator" rather than a test, as it sorts rather than labels them. MBTI development has resulted in new developments with different versions that can be grouped into three steps. These are:

Step 1- Form F, Form G, Form M and MBTI for children.

Step 2- Form K, Form Q.

Step 3 – Form J.

The MBTI is a non-clinical scale and therefore is used on normal populations and emphasises the value of naturally occurring differences (Pearman, Roger & Albritton, 1997). Robert Kaplan and Dennis Saccuzzo (2009) stated that, "The underlying assumption of the MBTI is that we all have specific preferences in the way we construe our experiences, and these preferences underlie our interests, needs, values, and motivation."

"Jung's typological model regards psychological type as similar to left or right handedness: individuals are either born with, or develop, certain preferred ways of perceiving and deciding" (Myers & Briggs, 1995/80). The MBTI sorts some individual psychological differences into four opposite pairs, giving 16 different types; none of the type is superior to the other (Carroll & Todd, 2004), is similar where a left hander finds hard to write with other, people find hard engaging their opposite preference, even after developing the auxiliary side with practice (Pienaar, 2004). A person habitually uses each of the four functions in one of these two attitudes, compelling that person to be either introvert or extrovert (Pienaar, 2004).

Myers and Briggs (1980) said, "The essence of Jung's comprehensive theory, as interpreted by the MBTI assessment, is the belief that preferred behaviour relates to two sets

of attitudes (E – I and J – P), four basic functions (S – N; T – F), when a person answers the MBTI assessment, votes are cast for extroversion (E) or introversion (I), sensing (S) or intuition (N), thinking (T) or feeling (F) and judgement (J) or perception (P)".

JvR Training Manual (2007) elaborates on the functions **"Extroversion** - Introversion (Focus for energy). **Sensing** - Intuition (What a person pays attention to). **Thinking** - Feeling (How a person decides). **Judgement** - Perception (The lifestyle a person adopts).

Myers (1997) writes that, "the 16 types of personality codes are written by an abbreviation of four letters - the first letters of each code indicate their four type preferences, excluding in the case of intuition, which N as the initials for "Intuition". For instance, ESTJ is elaborated as below:

"**ESTJ**: Extroversion (E), Sensing (S), Thinking (T), Judgment (J)". Myers (1997).

"**INFP**: Introversion (I), Intuition (N), Feeling (F), Perception (P)" Myers (1997).

The attitude (E-I or J-P) are always placed at the beginning and at the end of a four-letter profile, this method of abbreviation is applied to all 16 types. The theory infers that each code of the sixteen types has a correlated set of preferred functions which is predominantly used by the individual (Terrance, O' Brien, Bernold & Akroyd, 1998).

2.5.1   INTERPRETING MBTI SYMBOLS

Myers (1997) explains Extroversion-Introversion (EI): This index ascertains whether an individual tends to be an extrovert or an introvert; Extrovert's source of energy is oriented to their external environment, by contrast, introverts draws their source of energy from within themselves and attend more to internal reality and attends more on concepts and ideas.

Introverts primary source comes from inwards, so their secondary function will be J or P. (Terrance, O'Brien & Akroyd, 1995).

The following interpretation is from the adaptation of Myers "Introduction to type" Manual (1980).

TABLE 2: EXTRAVERT AND INTROVERT DICHOTOMY. WHERE ONE GETS ENERGY FROM.

Extroversion	Introversion
Their characteristics are as below: • Prefer external environment. • Prefer to interact with people • Communicate, express and work out ideas. • Optimise through brain storming. • Have diverse and varied interests. • Sociable and expressive. • Readily take imitative in work and relationships.	Their characteristics are as below: • Prefer their inner self. • Prefer writing over communicating • Work best through reflecting ideas. • They like mental rehearsal • Focus in depth on their interests. • Private and contained. • Take charge of the situation when necessary

Sensing-Intuition (SN): (Terrance, O'Brien & Akroyd, 1995) convey, "The SN index directly measures an individual's preference in the area of cognitive perception. A person who relies more on sensing tends to rely on one or more of the five senses to interpret facts or events.

Someone who relies more on intuition to assign meaning uses a more abstract, intuitive process, relying more on internal sources of information to interpret reality".

S-N Dichotomy - How do you prefer to take information? Myers "Introduction to type" Manual (1980).

TABLE 3: SENSING AND INTUITION DICHOTOMY. PREFERENCE OF TAKING INFORMATION

Sensing	Intuition
Their characteristics are:	Their characteristics are:
• Oriented to present realities.	• Oriented to future possibilities.
• They look for solid facts.	• Are Imaginative and look at bigger picture
• Concentrate on what is real and actual.	• Attend to patterns and meanings in data.
• Observe and remember specifics.	• Remember specifics when they relate to a pattern.
• Build carefully and thoroughly toward conclusions.	• Depend on hunches to reach conclusion
• Understand ideas and theories through their experiences	• Needs clarity on ideas before they practice.
• Apply their experience.	• Trust inspiration.

Thinking-Feeling (TF): This index focuses on the judging aspect of an individual, relying on thinking processes to make decisions on the basis of objective, logical reasoning (T), or one may depend more on emotions or feeling (F) to make decisions more subjectively on the basis of value systems (Terrance, O'Brien & Akroyd, 1995).

T-F Dichotomy - How do you make decisions? Myers "Introduction to type" Manual (1980).

TABLE 4: THINKING AND FEELING DICHOTOMY. DECISION MAKING FUNCTIONS.

Thinking	Feeling
Their characteristics are:	Their characteristics are:
• Analysing.	• Empathising
• Use logic and reason.	• Rely on personal values.
• Solve problems with logic.	• Analyse impacts of decisions on people.
• Strive for an objective standard of truth.	• Strive for harmony and positive interactions.
• Reasonable.	• Are accommodating.
• Are "tough-minded."	• Fair –humanity plays vital role.
• Fair - want everyone treated equally.	

Judgment-Perception (JP): This index emphasises the interaction of a person to their external world using judgement or perception when dealing with their environment. (Terrance, O'Brien & Akroyd, 1995).

J-D Dichotomy - How do you deal with the outer world? "Introduction to type" Manual (1980).

TABLE 5: JUDGEMENT AND PERCEPTION DICHOTOMY. DEALING WITH THE OUTER WORLD.

Judging	Perception
Their characteristics are • Prefer planned and orderly life • Feel comfortable when decisions • are done. • Task oriented. • Likes a routine life • Goal oriented.	Their characteristics are • Plans minimum but stays casual. • Keep an open mind. • Flexible and spontaneous. • Adapt to the world than change it. • Work in bursts of energy

TABLE 6: SIXTEEN PERSONALITY TYPES OF MBTI MEASUREMENT

ISTJ	ISFJ	INFJ	INTJ
ISTP	ISFP	INFP	INTP
ESTP	ESFP	ENFP	ENTP
ESFJ	ESTJ	ENFJ	ENTJ

2.5.2   DESCRIPTION OF 16 TYPE CODES

Myers (1998) describe the 16 types in their manual "A guide to the development and use of the MBTI." Descriptions are as below:

ISTJ: Practical, realistic, is logical and makes decisions based on their experience. They take pleasure in making everything orderly and organised. They are intensely

committed to people and their organisation and take their work seriously (Martin, 2015).

ISFJ: Responsible, committed and are steady in their obligations. They strike balance between home and work harmoniously. They take note of people important to them.

INFJ: Connect ideas and Seek meaning and the relationships by attending through their inner world.

INTJ: Work relentlessly by trusting their innate insights and make their visions real. (Martin, 2015). Committed to their job, have high standards of competence and performance.

ISTP: Analyse how things in the real world work, know the dynamics so that they can use it effectively. They are tolerant and quiet observers who can act quickly to find workable solutions. They are interested in independent and dependent clause effect and use logical principles.

ISFP: They are friendly, sensitive, loyal and committed to their values. They avoid conflicts and disagreements. They display their affectionate attitude in very realistic ways (Martin, 2015).

INFP: Have affectionate attitude towards people, are idealistic about people. They are good orators, hence good in communication and they are inclined to think of ideas to help people fulfil their potential. They are adaptable, flexible and accepting unless a value is threatened.

INTP: Look for developing a logical explanation for everything. They are interested in ideas rather than social interaction. They want to make sense of the world. They are

logical but not realistic, analytical and disconnected in their approach to the world. They often appear very flexible and adaptable in their lifestyles.

ESTP: They are practical and tolerant, take a pragmatic method in getting immediate results. They are in pursuit of new challenges. They are analytical in their approach to life; they are energetic and adaptable realists.

ESFP: They are enthusiastic and imaginative. Establish connection between events and information quickly. They need positive reaction and assurance from others and are generous in giving their appreciation to others.

ENTP: They are quick, spontaneous, alert and outspoken. Energised with resources in resolving challenges and problems. Adept in generating options and strategically analysing them. Like new possibilities and experiences and are a good reader of people.

ESTJ: They are realistic, practical, have last moment bursts of energy to complete tasks. They like routine and they have a set of logical standards.

ESFJ: Warm hearted and compassionate and cooperative, has a strong desire to bring harmony into their relationships. They naturally move into action to help others.

ENFJ: They are highly sensitive other people's emotions, needs and motivations of others. They make great humanitarians and they are aware of their capabilities, are loyal, responsible, sociable and provide inspiring leadership.

ENTJ: They analyse and bring logic and order to external events in their lives. They are natural leaders and their plan of action depends on theoretical models (Martin, 2015).

2.5.3   APPLICATIONS IN ORGANISATIONS

Bess, Harvey and Swartz (2003) assert that, "MBTI is extremely popular, as evidenced by the volume of research studies that have been devoted to it as well as the diversity of applied organisational functions to which it has been applied, which range from relatively uncontroversial uses such as career counselling, self-development, and team building through highly litigious tasks such as employee selection and placement". Application of MBTI has been asserted by scientific studies in various fields and organisations (Briggs& Myers, 1976; Brown & Harvey, 1999; Hall & MacKinnon, 1969; Harvey, 1996; Hartzler & Hartzler, 1982; Myers & McCaulley, 1985; Sample & Hoffman, 1986).

The MBTI has been used before to find out the correlation of type with occupational choice, team performance investigate, effectiveness, coaching (Bradley & Hebert, 1997; Jarlstorm, 2000; McPhail, 2002).

Barbuto et al. (2008) indicates that the "research applications of the MBTI instrument to include counselling (Dilley, 1987), personality disorders (Wilson & Ryan, 2000), career counselling (Apostal & Marks, 1990), learning or education (Drummond & Stoddard, 1992), empathetic response (Jenkins, Stephens, Chew & Downs, 1992), creativity (Tegano, 1990), memory (Schultz, 2001), decision making (Davis, Grove & Knowles, 1990), construct validity of the scales (Barbuto, 1998; Lorr, 1991), and convergent validity of the scales with other personality constructs (MacDonald, Anderson, Tsagarakis & Holland, 1994)". "Studies on motivation suggested that Extraversion–Introversion is significantly related to both intrinsic process and goal internalisation" (Barbuto, Fritz, Lim & Xu, 2008).

2.5.4   CRITICISMS

Thompson (2013) states people find their insights useful. Like all popular tools it has its critics, but it is well-established that the Myers-Briggs instrument meets all requirements for psychological tests.

MBTI measure has been criticised, stating that: "There was no support for the view that the MBTI measures truly dichotomous preferences or qualitatively distinct types, instead, the instrument measures four relatively independent dimensions" (McCrae & Costa, 1989). "This claim and other claims regarding the MBTI assessment, such as a lack of independent evidence, and no evidence that MBTI measures truly dichotomous preferences or qualitatively distinct types, among other criticisms, were published in 1989" (McCrae & Costa, 1989).

Kummerow (1988) states the type is their natural preference often called "true type" or "best fit" may not be their innate type. If type development depends on innate personality endowment then people trust their dominant function as opposed to their auxiliary function, (Kummerow, 1988, in Pienaar, 2004). Bayne (1995, p. 76) says, "criticism against the MBTI is that type 'puts people in boxes', labels and stereotypes, fails to do justice to the complexity and richness of human personality and diminishes our vision of who we are" (Pienaar, 2004).

Thompson (2013) writes, "measure into the category of description, it only tells the person's personality which gives self-awareness, it may be able to predict the successful jobs one has to pursue, but can make an informed choice basing on their in-depth on themselves. Knowing their preferences can be beneficial in recognising their style. Such insight, for example, may be extremely beneficial when it comes to communicating, presenting ideas, recognising where they are more suitable and also aids in people with diverse people to work together.

2.6   SUMMARY

This chapter discussed the definition and meaning of personality. Different theories are discussed, but emphasis is placed on Jung's theory as it is the grounding theory of this research. Development of typology is written in detail. The contributions of Myers-Briggs to typology and the development of MBTI and its application are also outlined. A clear distinction and explanation of the 16 types of personality is concluded.

CHAPTER 3

RESILIENCE

3.1   INTRODUCTION

This chapter concentrates on Positive Psychology and Resilience as a construct thereof. Positive Organisational Behaviour (POB) is an off shoot of Positive Psychology, which is explained along with PsyCap. Extensive research and emphasis is placed on Resilience, Theories on Resilience and its measure, Sense of Coherence (SOC).

3.2   POSITIVE PSYCHOLOGY

Seligman, Csikszentmihalyi and William (2005) emphasise, "Positive Psychology is the branch of Psychology that uses scientific understanding and effective intervention to aid in the achievement of a satisfactory life rather than treating mental illness". Seligman (2000) said, "The focus of Positive Psychology is on personal growth rather than on pathology, as is common among other frameworks within the field of Psychology. It aspires to understand, know and promote the situations that permit people and communities to develop (Sheldon et al., 2000). Positive Psychology attends to individuals' happiness, joy, mental and physical well-being, and personal strengths, which, in turn, leads to positive groups, organisations - influencing positive behaviour at all levels (Sheldon, 2000). Positive Psychology, according to Peterson (2008), "Is the scientific study of what makes life most worth living."

Nowhere does Positive Psychology imply that the rest of Psychology needs to be discarded or that the problems people experience should be ignored. The term *Positive Psychology* originated with Maslow's Theory of Hierarchy, which was adapted by Seligman (American Psychological Association, 1998), and began as a new branch in Psychology. Positive Psychology was indicated by Maslow, since then Psychologists agree that positive

mental health had been ignored as focus was mainly on mental illness (Secker, 1998), (Secker & Hales, 2010). It is found that Prevention researchers believe that positive strengths buffer mental sickness, therefore courage, being optimistic, aim futuristic goals, honesty, self-confidence are identified as mitigators of stress and trauma (Seligman & Csikszentmihalyi, 2000). Seligman (2002) claimed, "For the last half century Psychology has been consumed with a single topic only – mental illness, and expanding on Maslow's comments, urged Psychologists to continue the earlier missions of Psychology of nurturing talent and improving normal life".

Seligman and Csikszentmihalyi (2000) define Positive Psychology as, "The scientific study of positive human functioning and flourishing on multiple levels that include the biological, personal, relational, institutional, cultural, and global dimensions of life." Lopez (2002) illustrates mental health is an amalgamation of the four constructs of Positive Psychology, such as: Flourishing, Struggling, Floundering and Languishing, however, interaction between high emotional, psychological and social well-being elicits low mental ailments.

"Positive Psychology is the study of the conditions and processes that contribute to the flourishing or optimal functioning of people, groups and institutions" (Gable, Haidt & Jonathan, 2015). Davis (2010) says there are many definitions put forward, but they all point towards roughly the same theme and focus:

- A science of well-being (Gable, 2015)

- A science of well-being and optimal functioning (Gable, 2015)

- A scientific study of positive characteristics that aids in human thriving (Gable et al., 2015)

- Positive Psychology is the study of positive aspects of individuals, their development and optimising as individuals, as groups and contributing to the organisations. (Gable, 2015).

- The study of positive aspects and its impact on a meaningful life (Gable et al., 2015).

- The researcher defines "Positive Psychology as the study of positive human functions, well-being encompassing happiness, being resilient, being optimistic, strengths, personal growth and optimal functioning as an individual and in groups, and positive outcomes while interacting with his / her environment"

Positive emotions, positive personality traits and contribution to positive organisation are the prime focus of Positive Psychology (Seligman, 1998). Positive people are happy with their achievements of the past, enjoy the present and being optimistic about their future motions are concerned with being content with one's past, being happy in the present and having hope for the future; Positive Psychology represents a commitment to the sources of Psychological wellness, such as positive emotions, positive experiences, positive environments and human strengths and virtues (Lyubomirsky, 2007). Seligman (2000) elaborate that the field of Positive Psychology deals - at the individualistic level their treasured experiences eliciting happiness (past), everything is good in the present and focus and work for the future goals hope and optimism (for the future) and flow and happiness (in the present). "At the individual level, it is about positive individual traits for love and Vocation, Courage, Interpersonal Skills, Aesthetic Sensibility, Perseverance, Forgiveness, Originality, Future Mindedness, Spirituality, High Talent and Wisdom. At the group level, it is about the Civic Virtues and the Institutions that move individuals toward better citizenship, being Responsible, having Nurturance, Altruism, Civility, Moderation, Resilience and Work Ethics" (Csikszentmihalyi, 2000)

Peterson (2008) asserts through his decades of experience about the psychological good life, that:

- Most people are happy.

- Most people are resilient, feeling autonomous and connected to others.

- Happiness is the cause of good things, which leads to a desirable outcome.

- Happiness and positive personality traits mitigate the damaging effects. Happiness influences work if the individual is content at all levels.

As mentioned, the Positive Psychology movement has gained massive momentum over past years; significant amounts of research include subjective well-being, hope, optimism, Resilience, PTSD and positive affect (Snyder & Lopez, 2007). Many studies have been developed seeking to understand the functioning of individuals with superior abilities (Preto, 2012). Ericsson and Renzulli (2010) focussed on superior performance. Ardelt and Moon (2003) emphasised determination, commitment and personality characteristics to achieve an established goal. The research has spread across the disciplines of Education, Public Health, Political Science, Leadership, Management and the Organisational Sciences (Donaldson & Ia Ko, 2010), which linked research to Positive Organisations.

Positive Organisation Behaviour (POB) is the new off shoot of Positive Psychology applied to institutions and organisations.

3.3 POSITIVE ORGANISATIONAL BEHAVIOUR

Luthans (2007), pioneered POB; the positive approach in identifying and applying POB in the development of organisations with its concern on positive traits than weaknesses of individuals. Currently Psychologist are emphasising their research on Positive Psychology, and

its application in Organisational Behaviour (Nelson & Cooper, 2007). "POB is the application of Positive Psychology which facilitates of optimal functioning of personnel (Linely & Joseph, 2004). Application of POB is broader and beyond organisational life (Linely, Harrington & Garcea, 2010). POB is understood as, "The study and application of positively oriented human resource strength and psychological capacities that can be measured, developed and effectively managed for performance improvement in today's workplace" (Luthans, 2002b, p. 59). Research has proven that POB strongly influences individuals, their association with groups and group related behaviour at work place (Lyubomirsky, 2013; Mendes & Stander, 2011; Seligman, 2011).

Capacities are open to development and should be something that one can measure, develop and use to improve performance (Luthans, 2002, Nelson & Cooper, 2007). Luthans et al. (2007) express POB capacities include Hope, Optimism, Resiliency and Self-efficacy, that contributes to positive organisational outcomes. According to Luthans and Youssef (2002a, 2002b), POB must meet the following criteria:

1. The capacity should have theoretical foundation and the constructs must be measurable.

2. It must adapt "State-like" than "Trait like" to illustrate the influence.

3.3.1 SIGNIFICANCE OF POB

According to Timothy (2009), "Firstly instead of focusing on people's weaknesses, POB encourages managers and leaders to build on people's strengths, rather than just focusing on fixing weaknesses."

Secondly, the key POB implies that performance can be enhanced by concentrating on their capacities of hope, Resilience, being optimistic and self-efficacy, which is more valuable than changing personality traits that are innate (Lyubomirsky, 2013).

Thirdly, POB besides enhancing performance and management effectiveness, the impacts are visible in positive behaviours such as altruism, conscientiousness, civic virtue, and sportsmanship and courtesy (Timothy, 2013).

"This new and dynamic situation calls for positive organisational approaches and concepts (Luthans, 2002b) in terms of developing and improving mental health and well-being in organisations" (Luthans, 2002a; Van Zyl & Rothmann, 2012; Van Zyl & Stander, 2013; Youssef & Luthans, 2007). Grant and Campbell (2007) infer, "Effective coping, high levels of a sense of coherence and well-being impact positively on job performance and life satisfaction as well as negatively when they are not fulfilled". Research on health as coping and maintaining mental health is thus a fundamental focus in POB research (Donaldson & KO, 2010).

There is abundant research since 2002 surrounding the issues with positive findings in diversity and POB, differentiating between positive findings in diversity and positive approaches to studying diversity (Ramarajan & Thomas, 2010). "However, most of the research over the past five decades highlights the fact that: 'Researchers may not believe that positivity and diversity can be studied together'" (Ramarajan & Thomas, 2010, p. 22). This is due to gender and race inequalities existing in the work place (Chugh & Brief, 2008; Lyubomirsky, 2013). Numerous studies targeting race and cultural diversity applying POB have yielded positive results (Thomas & Gabarro, 1999). These issues are hardly studied as concepts of POB (Macik-Frey, Quick, Quick & Nelson, 2009) and a deficiency has been identified (Sandelands, 2002; Seligman, 2011), specifically in the South African context (Mayer, 2011). "Nevertheless the implications of the POB approach are particularly significant in the South African organisational environment, where the emphasis is increasingly on the development of equality, cross-cultural relationships, skills and competencies" (Duplesis & Barkuizen, 2011). A study conducted to ascertain whether Human Resources (HR)

practitioners and managers in South Africa adopt the main concepts of POB, as represented in the Psychological Capital (PsyCap). The outcome of the study supported that the HR practitioners do adapt the PsyCap concept and demonstrated a high level of Hopeful-Confidence, Resilience and Optimism (Mayer, 2011).

3.3.2   EXAMPLES OF PRACTICING POBS IN WORKPLACE

Timothy (2009) writes POB is actually practiced in the workplace as follows:

- Empowering and inspiring employees to voice their opinions on the organisation's issues.

- Adopting positive attitude and optimism during times of crisis in the organisation.

- Optimism as a concept was used by American Express Financial Advisors, which provided important enhancement of productive outcomes (Luthans, 2002).

- Recruitment should analyse more on strengths than deficiencies, which produces productive members in turn leads to a productive organisation. (Timothy, 2009).

The above criteria and focus separate POB from other positive approaches as Positive Organisational Scholarship (POS) (Luthans & Youssef, 2007). Thus, POB is mainly concerned with the Temporary or State-like characteristics that influence employees' performance, whereas Trait-like concerns are handled by POS (Luthans & Avolio, 2009) Positive states of mind or personality traits and processes that preclude the harmful outcomes should legitimately be a part of POB research (Nelson &Cooper, 2007). Carvajal et al. (2010) state, "There is abundant approach on one hand involving an organisation and its people looking for mutual gains, and a deficit approach on the other hand that focuses on organisational problems to solve, sometimes considering employees' well-being and sometimes not; for organisations to remain

productive and successful, they should focus organisations output and simultaneously work towards the enhancement of the well-being of employees. Luthans (2002a) writes in the introduction of POB, that the value of traditional positive constructs such as positive reinforcement, positive effect, emotion and humour have been recognised, but he emphasises that there is deficiency in research such as the constructs of hope, resiliency and optimism that are not adequately addressed.

POB capacities are successful and are supported theoretically and scientifically (Avolio & Luthans; Avey, et al., 2006), studies have indicated positive concepts as motivating factors on job satisfaction, performance and the desired effects. "Resilience recognises the need to take both proactive and reactive measures in the face of adversity" (Youssef & Luthans, 2007). Bananno (2004) recognises, "The capacity of Resilience promotes the recognition of such impact of adversity, consenting the affected individual to have the time, energy and resource investment to progress and return to equilibrium; Resilience proactively permits the stumbling block as opportunities for development beyond that equilibrium point". This leads to performance increase and well-being (Fredrickson & Joiner, 2002), that has a direct positive influence on performance and unravel some of the damaging impact of negativity. Psychological Capital (PsyCap) as a main concept can be utilised to manage performance enhancement in place of POB; yet uses the fundamental aspects of Positive Psychology and POB. (Luthans et al., 2004, 2007; Luthans & Youssef, 2004). Luthans and Avolio (2007) suggested that, "There is a common conceptual thread running through the constructs of efficacy, resiliency, hope and optimism interacted and merged into the factor of PsyCap that goes beyond human capital".

3.4   PSYCAP

Shearon (2007) writes that the research of Positive Psychology and the successful application to organisations inspired more studies; the stream of studies of research entailed a frequent construct called "Psychological Capital" - (PsyCap), a compound construct combined with the concepts of self-efficacy, hope, optimism and resiliency (Youssef & Luthans, 2010). Their framework suggests that "The application of Positive Psychology to organisational success and leadership requires support and development of multiple interrelating and mutually supportive constructs that have theoretical and empirical research behind them, which have proved their positive impact on job performance and job satisfaction and also a reliable measurement tools can be developed" (Larson & Luthans, 2006). Those constructs are hope, self-efficacy, optimism and Resilience related psychological well-being, positive attitudes and positive emotions (Avey & Wernsing, 2008)

PsyCap is sub branch of POB and Youssef (2007) defines POB as "An individual's positive psychological state of development characterised by having: (1) Confidence or efficacy – to take on and put in the necessary effort to succeed at challenging tasks; (2) Optimism – making a positive attribution about succeeding now and in the future; (3) Hope – persevering towards goals and when necessary, redirecting paths to goals in order to succeed; (4) Resilience – when beset by problems and adversity, sustaining and arriving back to baseline and even beyond to attain success". Judge, Van Viamen and DePater (2004) express that "PsyCap has satisfied the POB criteria for being state-like, based on theory and research, and measurement has been considered a distinct high order construct". PsyCap is relatively more stable over time on test-retest reliabilities (Luthans, 2006; Avolio et al., 2007). Scientific studies on PsyCap have provided positive outcomes on job progress (Donaldson, 2010). PsyCap also supported job satisfaction and organisational commitment (Larson & Luthans,

2006), decelerating absenteeism records (Avey, 2008; Patera & West, 2006) and leading to less stress symptoms (Luthans & Jensen, 2009). "These findings suggest that PsyCap contributes to positive organisational change by promoting attitudes and behaviour while countering dysfunctional attitudes and behaviours" (Donaldson, 2010). Luthans, Avey and Patera (2008) wrote that "PsyCap can be developed through short training sessions, is open to development and may lead to positive employee attitudes and behaviours, which in turn contributes to positive organisational outcomes". Research has evidenced the link between PsyCap, positive emotions and performance (Avey & Wernsing, 2008). According to West, Patera and Carsten (2009), optimism is a good team player for newly formed teams predicting good results, whereas Resilience and efficacy are better predictors when the team has bonded and have been through several interactions. Although several positive psycho-ogical capacities are discussed in studies, since this research focuses on "Resilience," only Resilience is discussed of the four constructs mentioned under PsyCap.

3.4.1   MANAGING PSYCAP RESILIENCY

Inferring from clinical and Positive Psychology, PsyCap resiliency is defined as, 'The psychological capacity to face, deal and manage life stressors and bounce back with increased skills and responsibilities (Luthans, 2002a; Luthans et al., 2006; Youssef & Luthans, 2005). Resilient individuals are realistic with strong values, believe that life is beautiful and meaningful, can be improvised with previous experiences (Coutu, 2002). Resilient organisat-ions have also been defined along the dimensions of effective systematic structures, relation-ships, top down communication, being realistic and positive attitude shift (Hind et al., 1996). Klarreich (1998) views resiliency at the organisational level "As the structural and processual dynamics that equip an organisation with the capacities necessary to absorb strain, retain coherence and maintain balance thus enabling the enduring engagement of risk".

The three aspects of Psycap resiliency are: asset focussed, risk, and process focussed approaches (Masten, 2001). Research supports the above-mentioned strategies are relevant and applicable to the workplace (Masten, 2001; Masten & Reed, 2002). In terms of stability and change, organisations are encouraged in amassing resources or assets: these assets include at two levels, one at organisational level with overall structure, finance and technology and another level includes psychological capital (Luthans & Youssef, 2004; Luthans et al., 2006c; Youssef & Luthans, 2005). According to Masten (2001), "Risk-focused strategies of resiliency are primarily about proactively reducing exposure to risk through various protective mechanisms". Interactional and adaptational approach mechanisms are used by merging assets and risk factors to buffer setbacks (Egeland, Carlson & Scroufe, 1993). The above strategies produce dynamic interaction between resources and risks, that aids in effectively managing crisis and setbacks and resulting in reintegrating back to work with growth and development and new realm of learning (Luthans et al., 2006, Reivich & Shatte, 2002; Ryff & Singer, 2003; Sutcliffe & Vogus, 2003; Youssef & Luthans, 2005). Resilience identifies the necessity of recognising, acknowledging, adapting and improvising in adverse situations (Youssef & Luthans, 2007). Coutu (2002) notes that, "The capacity of Resilience uniquely searches for and finds meaning despite circumstances that do not lend themselves to planning, preparation, rationalisation or logical interpretation". The focus of this research is Resilience in conjunction with personality; hence Resilience will be discussed in detail. Prior to examining Resilience, the researcher has touched on the relation between personality and Resilience.

3.5   RESILIENCE

Since the study encompasses "Personality and Resilience," the researcher deemed it essential to discuss the relationship between personality and Resilience briefly, before embarking on the concept of Resilience.

3.5.1   PERSONALITY AND RESILIENCE

Individuals' behaviour is diverse in similar situations, and they appraise conditions differently based on their expectations, values, previous experiences and temperament (DeNeve & Copper, 1998). Personality types and their relation to adverse situations and unpleasant events are the focal topics of many inquiries. Individual differences make one different or similar owing to personality (Ahangar, 2010). "It is not easy to describe or to explain how individuals develop particular ways of interacting with the world as it is an issue of individual differences" (Huffman et al., 1991).

Most resiliency researchers (Garmezy, 1985; Rutter, Maughan, Mortimore, Ouston & Smith, 1979) concur that personality constitution and temperamental disposition are major factors in Resilience. Positive personality and positive temperament are massive contributors to Resilience and developing Resilience (Garmezy, 1985 & Rutter, 1979), along with other factors such as family support and available resources. Block and Block (1980) state that most children are resilient and adapt to their environment swiftly; therefore, Resilience in children is a positive temperament. Personality impacts both analysing the stressful conditions and coping resources, which regulates and moderates physiological reactions that buffer the potential stressful conditions (Smith & MacKenzie, 2006). Individuals with poor physiological responses show increased heart rate and blood pressure as opposed to those who agree or are prepare themselves for the worst (Smith et al., 2004).

The relationship between Resilience and personality dimensions with regards to coping was explored in a sample of college students and the results supported the hypothesis, (Sills et al., 2004); the studies linked that Resilience and neuroticism were negatively related, while Resilience was positively related with extraversion. Research also supports the notion that extraversion and conscientiousness are positive personality traits associated with mental health (Lockenhoff et al., 2009). Numerous studies and their positive findings have made Resilience a subject of study, which is resistant to serious mental illness (Ingram & Price, 2001). Studies have indicated that cognitive hardiness and coping styles in adversity and stress have a direct impact on psychological and somatic stress disorders (Margaret et al., 2001). People with healthy and positive cognitive styles adapt well and are less stressed, and this makes their outcomes more conducive, on the contrary individuals with negative cognitive style predict negative effects (Scott et al., 2007).

Studies conducted on the Police population are inadequate, in a study conducted by Haisch and Meyers (2004) reported the Police officers with less risk to PTSD showed Resilience, hardiness and positive coping resources as opposed to Police officers with the higher risk of PTSD who were less accommodating and more neurotic. Skinner and Zimmer-Gembeck (2007) explain from a biological perspective that "Personality is likely to influence one's coping mechanisms as personality is rooted in approach / avoidant temperament". McCubbin (2001) explains that, "Resilience can act as both a process and an outcome". The literature suggests, and taking the above studies into consideration, the basic idea that people with more stress resilient personalities suffer substantially less health degradation in response to the same exposure as others (Schaubroek et al., 2011).

3.5.2   UNDERSTANDING RESILIENCE

Holling (1973) coined the term "Resilience" in his ecological research. Positive Psychology and Resilience were introduced by Maslow, but it is only in the last few years that researchers are paying attention, due to its role and impact on psychiatry, organisations, ecology and risk management (Renschler et al., 2010; Rose 2009). Current studies focus on determinants of Resilience, analysis of the equipping of effective and ineffective adapting patterns and also encompassing factors promoting Resilience and the risk factors that hinders the Resilience (Masten & Osofsky, 2010). Resilience has explored in several studies, which noted nine individual phenomena that can be associated with Resilience, that is, being seen as more affectionate in infancy and beyond, a higher level of intelligence with a gap of minimum two years between siblings, develop skills for interacting and have the ability to engage and disengage from home and other environments successfully, with high internal locus of control and healthy adaptation during adolescence (Masten & Garmezy, 1994)

Previous studies mainly focused on children who have grown to be resilient adults despite being survivors of the Holocaust (Epstein, 1979; Moskovitz, 1985; Masten, 2001), and who have thrived managed well developed well in spite of being surrounded environ-mental stressors (Harbison, 1983). "Resilience (Carpenter et al., 2001) is best described by three crucial characteristics: (1) The quantity of interruption can potentially be absorbed by individual with unaltered state of mind, (2) The extent to which the organism is capable of handling the stressors, and (3) The capacity to search and access coping resources, learn, build Resilience and bounce back to baseline. "Resilience is considered to be a dynamic 'Process' that manifests itself in response to life circumstances and individual personality profiles, and is a marker of well-being and a psychologically mature personality" (Richardson, 2002; Tempski, Martins & Paro, 2006; Cloninger & Zohar, 2011; Drybye & Shanafelt, 2012). Masten

and Garmezy (1990) said, "The term Resilience has been used to label three different types of phenomena: (a) Individuals who have experienced traumatic events but have been able to recover well, (b) People who belong to high-risk groups, but who have more favourable outcomes than expected, and (c) People who show positive adaptation despite life stressors".

Holling (1973) defined Resilience as, "A measure of the persistence of systems and of their ability to absorb change and disturbance and still maintain the same relationships between populations or state variables".

Masten (2011) defined Resilience as, "A class of phenomenon characterised by good outcomes in spite of serious threats to adaptation or development."

Resilience is also defined as: "The Ability of an Entity - Asset, Organisation, Community, Region - to Anticipate, Resist, Absorb, Respond To, Adapt To and Recover from a Disturbance" (Carlson et al., 2012). According to Carlson, anticipation of potential risk, resistance, mentally preparing for the absorption occur prior to the adverse situations and reaction. Adaptation coping and recovery follows post adverse situations. The Resilience of the object of analysis determines both the amount by which the activity/well-being declines and the amount of time required to return to the pre-event equilibrium. The above is depicted in the following figure.

The researcher defines Resilience as, "Overcoming the adversity of disaster or challenging or threatening situations, thereby adapting positive adaptation to both internal and external environment using all the resources available for a better outcome in order to maintain the equilibrium." The researcher concurs with Carlson's definition of Resilience.

FIGURE 5: COMPONENTS OF RESILIENCE AND THE TIMING OF AN ADVERSE EVENT FIGURE IS ADAPTED FROM RESILIENCE: THEORY AND APPLICATION (CARLSON ET AL., 2012).
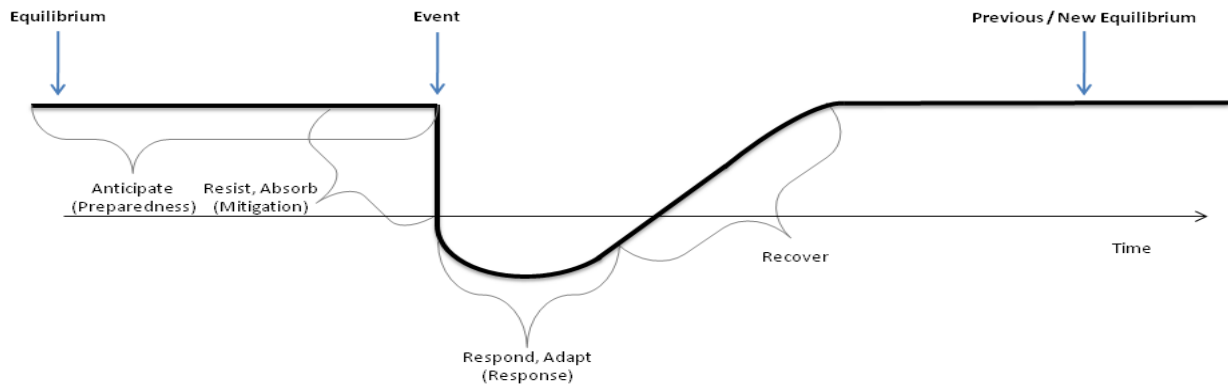
Maginess (2007) states, "The history of Resilience is such that it has been blessed with dedicated and professional researchers who have tried to determine the individual differences that make one person more resilient to life's challenges than the next." It is believed that a set of personality characteristics tend to favour resilient individuals who recover from adversities and cope with the hurdles in life (McAllister & McKinnon, 2009; Herrman et al., 2011). Research using the NEO Five Factor Inventory (Costa & McCrae, 1992) has indicated that Resilience is related with coping, and the psychological resources used to cope with previous trauma and the health-protecting personality traits in adults assist in managing a current trauma (Campbell-Sills, Cohan & Stein, 2005; Simeon et al., 2007), specifically where individuals are exposed to trauma connected with temperament trait of low harm (Gil & Caspi, 2006) and the character trait of high self-directedness (North, Abbacchi & Cloninger, 2012; North & Cloninger, 2012).

Kumpfer (1991) proposes that, "Resilience falls into the six predictor areas, namely: 1) The acute stressor or challenge, 2) The external environmental context, 3) Person-environment interactional processes, 4) Internal self-characteristics or resiliency factors, 5) Resiliency processes, and 6) The positive outcome":

Acute Stressor or Challenge: Kumpfer (1991) broaches the idea that the resiliency process starts with a beginning event and an ending with either a favourable or unfavourable outcome. A favourable result has protective or promoting factors contributing to Resilience. The prompting event is always a trigger because Resilience is displayed when an individual experiences disruptions or stressors. These challenges assist an individual to learn and develop from his / her previous life experiences. Experiences make stimuli an anticipated stressor, and thus the person is better prepared to meet the challenge (Kumpfer, 1991).

Environmental Context: Kumpfer (1984) conveys that environmental context plays a pivotal role impacting the risk and the process of Resilience. Family, peer groups and socialisation become factors in determining one's Resilience. Social and environmental support act as a mechanism to block the stressors. In young adolescents, the resilient youth attend to smallest support for their growth and be highly resilient even in areas prone for psychological pollution (Garmezy, 1993).

Person-Environment Interactional Processes: According to Masten (1994), inadequate research has been done on the person-environment interaction factors (Masten, 1994). "Considerable person-person or person-environment research is potentially relevant, but it must be gathered from applicable research within Psychology, Anthropology, Sociology and other related fields" (Kumpfer, 1991). Kumpfer and Bluth (1994) put forward some interactional processes that assist adolescents change a risk environment into a promoting situation, which include: "1) Selective perception, 2) Cognitive reframing, 3) Planning and dreaming, 4) Identification and attachment with pro-social people, and 5) Active coping".

Internal Self Characteristics: Humpfer (1991) found spiritual, cognitive, social/behavioural, emotional and physical well-being as internal self-factors that help individuals to know oneself and buffer stressors.

Active Environmental Modifications: Humpfer (1991) calls for researchers to address those factors that facilitate Resilience. These are protective factors one has to recognise, mobilise, and arrange, and that build resilient factors. Researchers concur that it is a complex task to identify the promoting factors in transacting individuals with their environment (Rutter, 1987; Werner, 1993).

The Positive Outcome: Humpher (1991) writes, "Facing hardships, finding support mechanisms, understanding self-factors to Resilience, identifying and adapting promoting factors and positive emotional skills assist in becoming resilient individual". Kumpfer (1991) has listed in a flow chart the Internal Self Resilience Characteristics.

FIGURE 6: FLOW CHART THE INTERNAL SELF RESILIENCE CHARACTERISTICS. ENVIRONMENTAL PROTECTIVE FACTORS (ADAPTED FROM "RESILIENCE FRAMEWORK", KUMPFER, 1991).
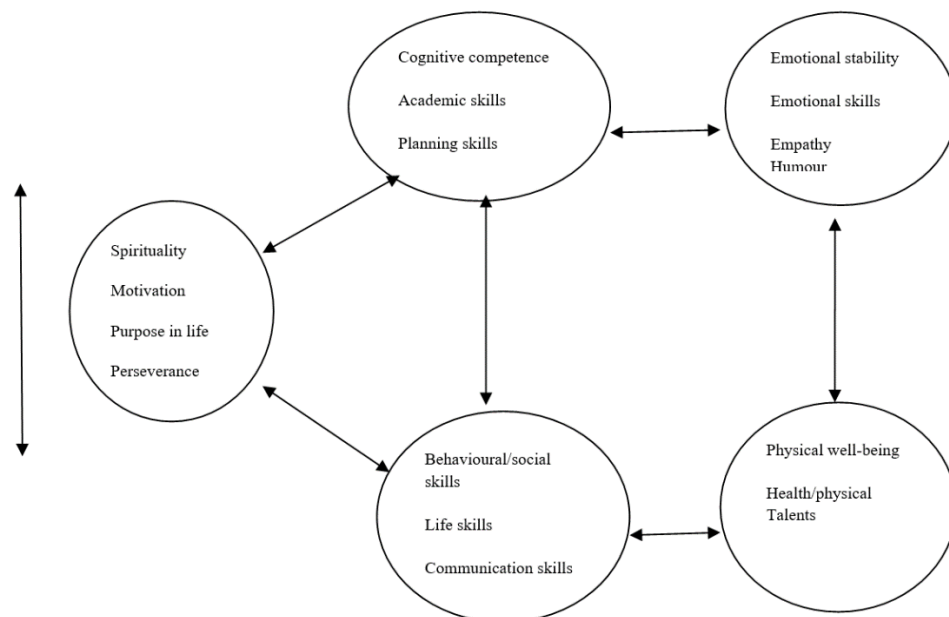
ENVIRONMENT RISK FACTORS

- Anti-social values

- ATOD Abusing Parents

- Poverty

- Family Dysfunction

- Family Conflict

- Pro-social family values

- Poverty

- Family dysfunction

- Family conflict

- Low family stress

- Good parent/child relationship

- Good parenting skills (Supervision and discipline)

- Parent/child attachment

- Positive role models

- Strong extended family

- High expectations

- Family teaching support

- Family guidance/counsel

- Opportunities for meaningful family involvement

According to Ong et al. (2004), "There is significant research found in the literature on the relationship between positive emotions and Resilience; studies show that maintaining positive emotions while facing adversity promotes flexibility in thinking and problem solving and positive emotions serve an important function in their ability to help an individual recover from stressful experiences (Ong et al., 2004), and maintaining a positive emotionality facilitates in counteracting the physiological effects of negative emotions". Personal well-being is fostered, help develop social resources and encourages individuals to build good coping skills (Fredrickson & Branigan, 2005). Staying positive during crisis advances adaptive coping skills (Fredrickson, 2004). Empirical evidence profoundly comes from studies on resilient individuals, who have the ability and who have a predisposition for coping strategies that elicit positive emotions, such as finding advantage, cognitively appraising the situation, applying humour, being hopeful and are have goal directed coping (Fredrickson, 2004). These behavioural tendencies of coping promote resistance. Individuals who tend to approach problems with these methods of coping may strengthen their resistance to tension and trauma by allocating more positive emotional resources (Ong, Bergeman, Bisconti & Wallace, 2006).

Resilience was thought to stem from predisposed personality characteristics that interact with environment; thus the past and current experiences of people that make them defenceless in the face of adversity were perceived as part of an individual's life (Sameroff, 1989, as cited in Cohler et al., 1995). "Bio-social processes, involving cultural and environmental influences, were recognised as important factors to be considered" (Luthar, 2006;

Rutter, 1993). The nature of risk and helplessness stemming from studies was integrated, and Resilience was determined to be a crucial concept in the developmental stages of a child. Masten and Coatsworth (1995) note that these studies identified diverse variables that seem to be major protective factors for children including personal resources such as attractiveness, intelligence, strong family support, good parental supervision, and community support. Luthar (2006) commented that, "The knowledge gained from these studies formed the basis of several intervention programmes aimed at mitigating the effect of adversity on children, and the catalyst for exploring the phenomena widely".

Along with innate personality traits and family support, additional resilient factors such as intelligence, personal achievement, self-discipline, family and social support, and problem solving skills were identified (Richardson, 2002). Garmezy (1993), in his study on parental schizophrenia, found most of the participants were well, and observed significant protective factors as self-discipline, good problem solving, humour and critical thinking which made them resilient.

Resilient people do encounter negative distress but they are inclined to maintain a sense of well-being in the face of adversity (Davidson, 2000). Davidson suggests that, "Resilient individuals also have the ability to learn from the experience" (Curtis & Cicchetti, 2003; Davidson, 2000). The results from Garmezy's study with schizophrenic mothers prompted researchers to further their investigation in identifying individual diversity in responding to adversity (Luthar et al., 2000; Masten, 2001). Resilience studies were conducted mainly on children, specifically in the development of mental illness. It was revealed that children had special personality attributes to not only survive the adversity but also adjusted to their environment (Masten, 2001; Cicchetti & Garmezy, 1993; Garmezy, 1993; Luthar et al., 2000).

"These children were being invincible or invulnerable to adversity" (Anthony, 1987; Luthar, 2006; Masten, 2001).

Luthar (2000) stated that, "While most research has focused on the development of pathology, it is also important to better understand protective factors that may mitigate the development of PTSD, which has been developed over the last decades, and addresses this perspective". "Resilience has been characterised by the ability to 'Bounce' back from negative emotional experiences and by flexible adaptation to the changing demands of stressful experiences" (Tugade & Fredrickson, 2004). Luthar et al. gave an outstanding impression of this construct and proposed using the term "Protective Factors" when describing processes that alter the effects of adversity (Luthar et al., 2000). The next section details the definition and role of protective factors and risk factors in Resilience.

3.6   RISK FACTORS AND PROTECTIVE FACTORS

Earlier Resilience studies mainly focused on investigated child development as the initial and primary focus of study. This allowed developmental psychologists to determine the risk factors for developing later difficulties in life due to adversities (Masten, 2001; Werner, 1993; Rutter, 1987). They identified "Protective" variables that appeared to promote health and well-being to counterbalance the risk factors (Hoge et al., 2007). Benard (1991) writes that research done on children nurtured in difficult conditions, such as Stress, Poverty, Abuse, Negligence, Poor Parental Supervision and Criminality, had a positive relationship with Resilience. Garmezy (1991) and a group of researchers found similar findings and reported the similar experiences and outcomes of their studies - children who somehow are "Invulnerable," "Stress- Resistant," "Hardy," "Ego-Resilient," "Invincible," are "Resilient," irrespective of major disturbances in their lives (Benard, 1991).

"Protective factors are defined as characteristics of the child, family and wider environment that reduce the negative effect of adversity on child outcome" (Masten & Reed, 2002).

A protective factor is any issue that counteracts the influence of risk behaviour, assists individuals in not involving in negative coping behaviour and and/ or promotes alternative ways of dealing with stressors (Spooner, Hall & Lynskey, 2001). "A number of factors, including child IQ, emotion regulation, parenting, low parental discord, advantaged SES, effective schools, and safe neighbourhoods are associated with positive outcomes in the context of high risk" (Masten & Reed, 2002).

Risk factors are defined as, "Conditions or variables associated with a lower likelihood of positive outcomes and a higher likelihood of negative or socially undesirable outcomes" (Jessor, Turbin & Costa, 1998).

"A risk factor is any factor associated with the increased likelihood of a behaviour that usually has negative consequences. Risk factors include family history of substance abuse, poverty, low deviant behaviour, low perceived life chances and poor school work" (Spooner, Hall & Lynskey, 2001).

In most research the term is "High-risk" is categorised children with the background from dysfunctional families (Kumpfer, 1991). Researchers include substance abuse, attention deficiency disorders as personal risk in their definition of high risk samples factors Stouthamer-Loeber (1993). According to Luthar and Zigler (1991), it is important to differentiate risk factors or stressors; failing and disappointments can influence individual and those events that are not under control such as death and disability. Richardson (1990) "Risk factors are defined primarily by chronic adversity in the environment of the child, are stressors considered the stimuli for disruption and integration, thus beginning the resiliency process towards

maladaptation or resilient reintegration". The environmental stressors foster the psychological and sociological process of the child (Kumpfer, 1991).

Researchers vary widely in the definitions of Resiliency, and the ways in which they measure the construct (Masten, 2001). Many researchers (Hannon, 2003; Howard, 1999; Nettles & Pleck, 1993) express that risk and promotive factors differ widely as per environmental and cultural contexts. Generally, researchers define internal protective factors as the personality predispositions of the child, cognition, reacting to outside world, activity level, disposition, responsiveness to people indicating social orientation, effective communication, concentration, internal locus of control and self-development (Werner & Smith, 1993). External protective factors are the support structures in the child's world, presence of parents and good parenting, emotional support, peer relationships, morals and values and access for support and help when needed. Bronfenbrenner's (1974) early research on Resilience has expanded the research into protective factors; current studies gone beyond the boundaries of risk factors by analysing the traits and "Protective" factors those "Traits, conditions, situations and episodes that appear to alter or even reverse the predictions of [negative outcome] and enable individuals to circumvent life stressors" (Segal, 1986; Garmezy, l991).

Ahangar (2010) says that every individual is anticipated to have internal and external skills that aid them to equip protective factors to face crises and assist the person to thrive, learn and develop towards a leading a good metal life. Inner skills include self-discipline, social awareness, self-efficacy, caring attitude, resistance skills, leadership qualities, goal setting and meeting the goals; external skills comprise Family, Peer Groups, Friends, Academic Excellence, Healthy Interaction with parents and school through involvement in school activities, social support with parents and school.

Benard (1991) adds that for a successful intervention, prevention strategies interventions must focus on developing and strengthening fostering positive environmental situations which reinforce positive behaviour, consequently, personality attributes, family support and communities are the determiners of psychologically healthy individual successfully embracing crisis and still thrive. He elaborates as below:

Individual (child) – Resilient children have as discussed personality attribute, responsiveness, good communication skills, empathising nature, perceiving the situation in a humour perspective, flexibility ability to look for alternative ways of addressing the situation. "Resilient children have a sense of humour; have the ability to generate comic relief and find alternative ways of looking at things, as well as the ability to laugh at themselves and ridiculous situations (Masten, 1986). Resilient children are positive and make the situation pleasant and elicit positive behaviours form (Werner & Smith, 1982; Demos, 1989). As a result, resilient children strike good relationships with their friends, community and family from early childhood (Berndt & Ladd, 1989; Werner & Smith, 1982). The above attributes are absent in the people battling with alcohol, substance abuse, crime and delinquency. (Benard, 1991), elaborates that, "Research on resilient children has discovered that problem-solving skills are identifiable in early childhood". The study conducted by Shure and Spivack (1982) includes the skills and ability to think abstractly, think in reflection, look at the situation as a whole, try to solve it cognitively, and ways of adopting alternative methods to come out of it successfully. Werner and Smith (1982) summarised, "The central component of effective coping with the multiplicity of inevitable life stresses appears to be a sense of coherence, a feeling of confidence that one's internal and external environment is predictable and that things will probably work out as well as can be reasonably expected" (1982). Paradoxically the Sense of Coherence lies in contrast with the vulnerability and "Learned helplessness" observed in individuals who adapt it as a learned response in facing (Benard, 1991).

Family - According to Feldman, Stiffman and Jung, "The social relationships among family members are by far the best predictors of children's behavioural outcomes" (1987). Rutter's research found that even in cases of an extremely troubled home environment "A good relationship with one parent" provides a substantial protective effect (Baumrind, 1985). Families with consistent rules as a reinforce of positive response and with high levels of social behaviour foster resiliency in children (Benard, 1991). Some of the values embedded operate as promoting factors. These are presented as below by Lang, Rosati, Jones and Garcia (1996).

"Positive bonding among family members"

"Parenting that includes high levels of warmth, avoids severe criticism, provides a sense of basic trust, and clear and consistent expectations, including children's participation in family decisions and responsibilities".

"An emotionally supportive parental / family milieu, including parental attention to children's interests, orderly and structured parent-child relationships, and parental involvement in homework and school-related activities."

Environment (School) – Similar to family, schools that call for high academic achievement and provide all the necessary support, and that make learning conducive to the child, have been identified as one of the foundational promoting factors in a child's life (Rutter, 1979; Brook et al., 1989; Edmonds, 1986; O'Neil, 1991; Levin, 1988; Slavin, Karweit & Madden, 1989). Rutter's study found that schools play a pivotal role in shaping, moulding and building a healthy child with all psychological and social resources; the schools in impoverished areas showed significant levels of delinquency, school attendance and achievement (even after controlling for family risk factors). The successful schools seem to have better resources, facilities, rules and regulations, have teachers who showed an interest in

the child's life events, developing them overall through extracurricular activities, and providing vocational opportunities activities (Rutter et al., 1979)

3.6.1   RISK AND RESILIENCE FACTORS IN A POLICE CONTEXT

It is a known fact and also acknowledged that Police work entails a lot of stress and a variety of coping skills specific to policing culture are observed (Cooper, 1998). Prati and Pietrantoni (2010) found that risk and promoting factors have a bearing on Police officials exposed to traumatic scenes. The outcome was that highly resilient Police officers had developed different ways of reacting to situations with high levels of protective factors as against those officers who poorly responded to the traumatic situations. The most inquired topic in policing is based around the issues of PTSD as a consequence of the vulnerability to the policing work, varied basing on the levels of coping (Carlier et al., 1997).

Contemporary research on Resilience focuses in Police work, making them more vulnerable and prone to PTSD than general population (Paton, 2006). The work by Prati and Pietrantoni (2010) lead them to the conclusion that resilient Police officers had immense promoting factors, such as previous experiences, self-confidence, positive attitude and support, contrary to officials who showed low levels of Resilience. The most investigated topic of Police officers' psychological consequences of exposure to critical incidents is post-traumatic stress disorder (PTSD). The prevalence of PTSD varies from 7% to 35% (Carlier et al., 1997) "This variability is due to the presence of multiple risk and Resilience factors". Brunet et al. (2001) writes that perceived life threats to life and peri-traumatic distress are the detrimental elements for the development in Police officers. Carlier (1999) perceives self-efficacy as a psychological well-being and social support is a Resilience promoting factor. A review of disaster victims has confirmed self-esteem as a psychological resource (Norris et al., 2002).

Personality differences also play a crucial role in well-being of Police officers (McCrae & John, 1992). Research on elements of personality called "Big five," namely Neuroticism, Extraversion, Openness to Experience, Agreeableness and Conscientiousness; represent general dimensions of individual differences (Costa & McCrae, 1985; Digman, 1990). The outcome of research from the past thirty years is that individuals high in neuroticism are characterised by a propensity to go through negative sentiments such as anxiety, depression or sadness, as well as being impulsive (McCrae & Costa, 1987). Extroverts tended to experience positive emotions of gregariousness and are fun-loving and assertive. Hart and Cotton (2002) state the Police culture inhibits the expression of emotion, which predisposes officers to use the avoidant strategy. Police officers' avoidance (instead of facing adversity) means that they tend to use negative techniques such as substance dependency and over eating (Anshel, 2000), making them non-productive members (Larsen & Buss, 2005). These finds are supported by as study conducted by Ciarrochi, Robb & Godsell (2005). Protective factors such as acceptance and mindfulness have been connected to enhanced psychological health and well-being enhancement as it may disengage members from damaging, habitual prototype of behaviour (Cirrochi & Gosell, 2005; Ryan & Deci, 2000).

As suggested by psychological literature, people with more stress resilient personalities suffer substantially less psychological hazards in response to the same exposures as others; these people are believed to possess positive traits (Optimism, Positive Emotionality, Hardiness, Hope and Ego Resilience) that correlate negatively with physical and psychological health symptoms (Kobasa, 1979; Seligman, 1998). These individuals will appraise the environment as maintaining more challenging aspects, with the potential for benefits such as learning and personal growth (Schaubroeck et al., 2011). With significant demands, they perceive that they have ample reserves to convene the stressful demands (Selye, 1976). The construct of Resilience has been operationalised and has been investigated as hardiness (Maddi,

2005); it refers to a personality trait which indicates how an individual might interpret critical incidents and life stressors. Paton, Moran and Colless (1995, 2003) express that Police officers are routinely open to stressful situations, which is perceived as an antecedent to the progress of PTSD. However, evidence suggests that positive outcomes occur as well and therefore most Police officers seem to adapt well and do not develop psychological ailments (Paton et al., 2003) Rather they use psychological coping skills such as hardiness permit them withstand the stressful situations and manage their lives more meaningfully (Antonovsky, 1990). "Hardiness has been identified as a protective factor that reduces the probability of trauma and psychological reactions" (Frederickson, 2003).

3.7   RESILIENCE THEORIES

Resilience theory emerged from the studies of children vulnerable to psychopathology, emerged resilient despite nurtured difficult life situations (Van Breda, 2001). Building on general ideas inferred from different instances or occurrences, theories have tried to explain or predict complex processes that illustrate causal relationships among concepts (Klien & Zedeck, 2004). Numerous researchers have focused their study on Resilience (Fletcher & Sarkar, 2013), with common features in their approach, primarily with Resilience as a dynamic process that changes over time. The majority of Resilience theories are specific to particular populations such as adolescents, families and Police officers. Some of these theories are mentioned below:

1 The Broaden-and-Build theory of Positive Emotions.

2. Antonovosky's Salutogenic theories.

3. Metatheory of Resilience and Resiliency.

4. The Stress Shield Model of Resilience.

5. Nursing model of Resilience.

6. Adolescent Resilience model.

A few theories are focused on and explained in detail in this research.

3.7.1   THE BROADEN-AND-BUILDTHEORY OF POSITIVE EMOTIONS

The Theory of Positive emotions departed from traditional approaches studies (Fredrickson, 2004). Broaden-and-Build theory infers why and how positive emotions are useful, how they aid in understanding and how they help in coping with (Fredrickson, 1998, 2001). This theory hypothesise that negative emotions block rational thinking and shrinks or narrows one's thought processes, and conditions them to think and act in a specific way. This deprives a person from broadening the thought processes through positive emotions such as joy, inspiration and satisfaction, which further formulates a person's mindsets and builds resources to face challenges (Fredrickson, 1998, 2001). Fredrickson infers, "This is therefore named the Broaden-and-Build theory of positive emotions. This perspective on positive emotions might help explain why those who experience positive emotions in the midst of stress are able to benefit from their broadened mindsets and successfully regulate their negative emotional experiences".

Studies on positive emotions confirm with the research illustrating cognitive and social advantages connected with positive emotions (Isen, 1999). The Broaden-and-Build theory works from the premise that both positive and negative emotions are dissimilar but harmonise to create a set of cognitive and physiological outcomes (Fredrickson, 1998). The author proposed that positive emotions facilitate greater capacity to broaden and enhance cognitive ability and engage in activities that are adaptive (Fredrickson & Cohn, 2010). Over time this broadened behavioural repertoire builds skills and resources (William, 2005) in an upward and

transformative fashion (Fredrickson & Cohn, 2010). Cohn (2010) states that positive and negative emotions are not mutually exclusive, they assist each other, balance and acclimatise functions, thus when a stressful life event occurs people limit down the possible responses which could otherwise widen their responses in crisis (Fredrickson, 2001). Positive emotions enable an individual to widen his thought processes and choose a range of skills and actions to handle the situation successfully (Fredrickson, 2001). Positive emotions help distressed people deal with the situation and move forward leaving negative emotions behind. Individuals with higher levels of positive emotions can use it as coping skills and draw various resources to deal and excel in the face of adversity (Tugade & Fredrickson, 2004).

Positive emotion theory is categorised into focussed and defocused attention: the first stage is defocused attention; in this stage an individual uses his right brain, perceives new possibilities and a wide range of resources and permits and connects two parts of brain to commit together to formulate concrete personal skills; whereas the second stage, focused attention narrows down the options allowing negative emotions to dominate with now possibilities of new learning (Rathunde, 2000).

The physiological consequences of positive emotion reactions are illustrated; emotion regulation in specific negative emotions triggers cardiovascular reactions that prepare the body for a particular event, contradicting the cardiovascular after effects are undone after the experience of negative emotions, in a situation like this an individual experience positive emotions (Tugade & Fredrickson, 2004). Rathunde (2000) infers "In contrast, positive emotions broaden the thought-action repertoire, which should 'Undo' the lingering cardiovascular after effects of negative emotions". Thus, in line with the Broaden-and-Build theory, positive emotions appear to have a unique ability to physiologically down-regulate

negative emotions (Tugade & Fredrickson, 2004); positive emotions have capacity to regulate and monitor physiological impacts around negative emotions (Fredrickson, 1998).

Reference to Broaden-and-Build theory and well-being are put forward by various researchers such as Panksepp (1993), who states positive emotions elevate flexible cognition and creativity. The connection between Resilience, positive emotions and construct granularity, where individuals convey impinge on critical encounters with differentiated terms and discrete emotion labels and on the other hand less granularity, with discrete labels that only indicate core affect (Tugade et al,. 2004). Positive emotions positively impacts Resilience that illuminate life happiness and contentment and ego Resilience, which enables one to integrate oneself into changing environments without succumbing to life stressors and return successfully from stressful events more confidently than the individuals with low ego adaptability (Cohn et al., 2009). One of the characteristics of Broaden-and-Build is the ability to adjust with the environment stimuli and build resources that mitigate negative emotions while simultaneously developing positive emotions (Danilowski, 2012). The adaptations have been shown to be beneficial in areas of therapeutic application, crisis management, enhanced job satisfaction and performance and coping skills development (Danilowski, 2012).

To summarise, the theory describes the thought, action and response of an individual, which will widen their functions and develops personal resources. (Frederickson, 2004). Individuals who engage in more positive thinking and behaviours are better able to adapt to their environments and elicit more fulfilling lives, engage in personal resource development, which promotes health longevity (Fredrickson, 1998). This field of study is relatively new with few longitudinal studies that would evidence the strength of positive versus neural emotions (Danilowski, 2012).

3.7.2   STRESS SHIELD: A MODEL OF POLICE RESILIENCY

This model was developed (Paton et al., 2008) following Antonovosky's definition of Resilience. The model was developed based on the view that a resilient person will identify sources of coping mechanisms, and inculcates them to endure the challenging events of life, making life more meaningful and manageable. The model proposes that a resilient Police officer has equipped himself with good relationships and interactions with their team. Further, with organisational support, displays that they are able to manage their life meaningfully, while still discharging their duties as a Policeman (Burke, 2006). Paton (2006) asserts that the development of the model emphasises past experiences in order to build Resilience, and enhance Police officers' capacity to accommodate to the future risk and uncertainty. "The stress shield model of Resilience integrates person, team and organisational factors to provide a proactive framework for developing and sustaining Police Officers' Resilience" (Paton et al., 2008).

The models of occupational climate, personality and empowerment theories culminated in the "Stress Shield Model of Resilience" (Paton et al., 2008).

Occupational Climate: the knowledge of **t**he functioning of organisation is crucial so that the individual can make an informed choices and act during unfavourable situations (Burke & Paton, 2006).

Personality Factors Influencing Resilience: Thomas and Velthouse infer experienced Police officers have vast experiences that enhance meaning and efficiency in their duties in traumatic situations (Thomas & Velthouse, 1990). "They are committed to contributing collective efforts" (Behling, 1998), and "demonstrating greater levels of perseverance" (Hough, 1998).

Peer Related Factors in Resilience: Supervisory support: Management with good communication skills foster cohesion and boost morale between groups, and facilitates positive

reinforcement which enhances leadership, and improves cohesion and effectiveness (Paton et al., 2008).

Peer Cohesion: Facilitates meaning in individual's work, the sharing of knowledge and skills, leading to competence and Resilience, and helps in resource acquisition.

Trust: "Trust consequently allows individuals to experience meaning in their work and encourages teamwork; thereby contributing to Resilience" (Burke & Paton, 2006).

Empowerment: If resources and support organisations are available and accessible, a Police officer can use them wisely and effectively, providing the satisfaction of service delivery (Conger & Konungo, 1998). "It is predominantly through empowerment that indivi-duals develop Resilience, as empowerment allows for positive self-event assessment, an organisational climate, peer cohesion, and a resilient personality" (Conger & Konungo, 1998).

To conclude, this model was inspired by the work of Antonovsky (Paton et al., 2008). This model elaborates Resilience as resulting from the relationships between the person, their team and broader organisational factors, where organisational intervention can enhance hardiness and peer support (Paton et al., 2008).

The researcher prefers not to use the above theory in her research as much as it may sound relevant, as it is primarily adapted from Antonovosky's Sense of Coherence. Secondly the theory is relatively new and needs extensive research on the Police population globally to enhance and compare studies; therefore, the theory may not be conducive to the South African Police population.

3.7.3   META-THEORY OF RESILIENCE AND RESILIENCY

This theory was proposed by Richardson (1990). Richardson (2012) asserts that, "Most helping theories and methods are housed under the umbrella of the Metatheory of Resilience and Resiliency" (MRR). Resilience theories of Hardiness (Kobasa et al,. 1982), Self Determination Theory (Ryan and Deci, 2000), Hardiness and the construct of self-efficacy in Social Cognitive Theory (Bandura, 1989) fall under the umbrella of "Resilience and resiliency paradigms". The MRR theory justifies encompassing integrative post-modern thought provoking structure to promote healing at a deeper level with more efficiency (Richardson, 1990).

The first level of resiliency investigation surfaced from the phenomenological identification of characteristics of survivors. It observed personality traits revealing that most individual residing in detrimental and life threatening situations displayed the capacity to develop when faced challenges (Richardson, 2015). The first wave introduced a theory and structure concentrating on strengths rather on diseases or problems (Richardson, 2002).

"The second wave of resiliency inquiry discovered the process of attaining resilient qualities, a process called resiliency (Richardson, 2002), and the third wave exemplified the post-modern and multidisciplinary view of Resilience, which is the force that drives a person to grow through adversity and disruptions". The third wave emphasised understanding the setbacks, and understanding how to deal with them makes it more manageable through resiliency process (Richardson, 2002).

Richardson (2015) "For educational purposes and in counselling clients, resiliency is presented as a simple linear model that depicts a person passing through stages of encountering life events, being disrupted by them, and ultimately growing stronger through the experience".

The resiliency model depicts a single point in time of an individual, it may be a matter of a few minutes of disruption that could become years of struggle, therefore in order to become

more resilient, an individual must experience the trials and tribulations, stressors, challenges, become disorganised, learn through previous experiences and emerge resilient with new techniques and coping mechanisms (Neiger, 1996). "Key components of the model include the Biopsychospiritual, Life Events, Protective Factors, Disruption, Interaction, Disorganisation and Reintegration" (Richardson et al., 1996).

The model can be applied to unnoticeable events with very small disruptions to very serious events; a single event may be made up of several disruptive challenges (Richardson et al., 1996). The same authors note that the experiences of a small event can inspire courage to rehearse or get ready for major challenges with the help of a social / supportive network. Resilient reintegration or maladaptive reintegration could occur with each serial disruption; the one who stays with it in spite of setbacks will surface more resilient at the end (Neiger, 1996). This model also has organisational implications, providing envirosocial roles for law enforcement, parents, educational institutions, psychotherapists and community programmes, teaching children to manage "Falling apart" and facilitating resilient adaptation (Richardson, 2002). No longer should disruption be viewed as a failure, but rather as an opportunity to become more resilient for future life events. Careful monitoring, providing support, offering appropriate re-integrative suggestions, and unfolding resilient adaptations have become new challenges for health educators, prevention specialists and parents (Neiger, 1996).

3.7.4   THE SALUTOGENIC APPROACH

The pathogenic paradigms contended and focussed on diseases, causes and approaches to cure (Strumpfer, 1993 as cited in Kayal, 2004). Paradoxically the salutogenic shifts focus from pathogenic outlook to positive outlook; that is why and how people stay well despite being in and experienced stressors in life (Antonovsky, 1987). According to Antonovsky (1996), "The salutogenic development focuses on positive aspects and the reasons of staying well and coping rather than stressors or detrimental factors, survivors instead of victims; place them on a continuum of health-ease rather than dis-ease suggesting an individual's position on the continuum between the poles of total sickness and perfect health should be studied" (Antonovsky, 1987). However, Antonovsky observed a specific imbalance in the way a person's health was viewed, he enforced to view health, the intention is not to side-line the aetiology of the disease, but to study health from a positive developmental perspective, widening the horizon for alternative ways of gaining and sustaining health (Antonovsky, 1987; Sidell, 2007). The pathogenic paradigm is interested in aetiology of the diseases, the salutogenic stance takes the prospect that disease and stressors are unavoidable and hence instead of shunning away, individuals must actively and pro-actively engage in adaptive strategies (Antonovosky, 1987) and how an individual can live through and survive the stressors, and use them to their advantage (Strumpfer, 1990).

Antonovsky (1979) explained, "The word 'Salutogenesis' comes from the Latin *salus* meaning health and the Greek *genesis* meaning origin". Antonovsky developed the term from his studies of "How people manage stress and stay well", he noted that stress is unavoidable but not all people respond to stressors in a similar manner, instead some stay well, maintain and grow as individuals from those experiences (Antonovsky, 1979).

Stressors are experienced routinely; some are temporary and some permanent (such as disability). Stress can force an individual to choose between reacting negatively or positively, thus it provides two options - either the negative response wherein the person succumbs to the situation or a positive one where they confront, solve, and stay healthy (Eriksson, 2010). Thus, *Salutogenic* means the movement towards health represented as H+. Antonovsky (1979) explained the health continuum and the salutogenic direction in the figure below.

FIGURE 7: A COMPARISON BETWEEN THE PATHOGENIC AND SALUTOGENIC PARADIGMS
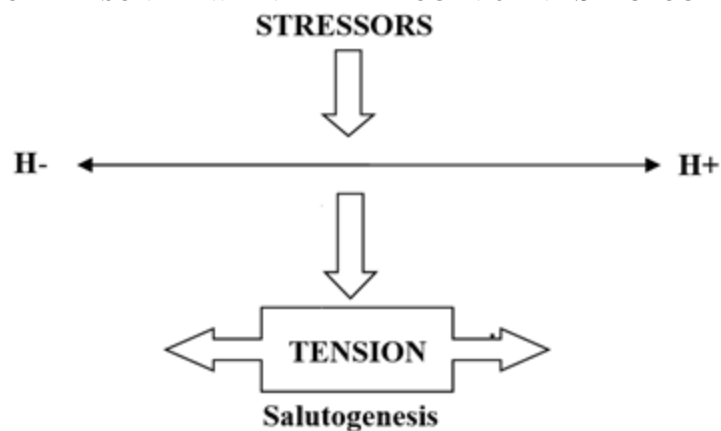
The salutogenic focus on stress research was considered important by Antonovsky (1985) as it provided an innovative and imperative shift from the pathogenic paradigm. His precept however is that both above mentioned paradigms are important and a comprehensive view of coping necessitates the use of both the approaches (Antonovsky, 1993). Antonovsky (1987) writes the main ideology formulated by him is the concept of *Sense of Coherence*, and the main doctrine of this concept is discussed in the next section.

Antonovsky (1979) explained in his salutogenic theory that people encounter stressors continuously and the response feedback of these hardships, are called **Generalized Resource Deficits** (GRDs) along with the **Generalized Resistance Resources** (GRRs). These are all the factors that aid an individual to deal efficiently, and to block the impeding psychological and sociological stressors. Antonovsky (1987) writes, "Typical GRRs are money, knowledge,

experience, self-esteem, healthy behaviour, commitment, social support, cultural capital, intelligence, traditions and view of life. If a person has these kinds of resources at his disposal or in his immediate surroundings there is a better chance for him to deal with the challenges of life, helping an individual to construct coherent life experiences". The GRRs lead to life experiences that a person can draw coping skills from; a reserve from which they could develop a strong SOC - a way of viewing life, and the ability to be in charge of the situation, managing successfully all triggers encountered in life (Carstens, 1995). SOC developed in adulthood helps the person engage in drawing the resources from experiences to meet the threats despite the despite the high intensity of the distress (Antonovsky, 1987). The SOC is the capability to observe, distinguish and manage any complexities happening in life (Lindstorm, 2006).

3.7.5 SENSE OF COHERENCE

The concept of Sense of Coherence (SOC) was innovated by Antonovsky (1979) to illustrate why some individuals become incapacitated under stress, while others maintain and stay well. It arose from the salutogenic method, investigating the reasons for staying healthy and maintaining psychological healthy, rather than study the causes of illness.

 SOC is a theoretical formulation that provides a central explanation for the role of stress in human functioning. "Beyond the specific stress factors that one might encounter in life, and beyond your perception and response to those events, what determines whether stress will cause you harm is whether or not the stress violates your sense of coherence" (Antonovsky, 1987). The focus of salutogenesis is the SOC representing health and illness on to opposite ends of the continuum, and insinuating why some people move towards the direction of health and wellness despite facing distress, while others move towards the degeneration of health (1979).

SOC is theoretical concept developed by Antonovsky (1979) to portray personality orientation which is correlated with individual and interpersonal differences in vulnerability to stress (Antonovsky, 1979). Antonovsky (in Frenz, Carey & Jorgensen, 1993) defined SOC as: "…a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that: a) The stimuli deriving from one's internal and external environments in the course of living are structured, predictable and explicable; b) The resources are available to one to meet the demands posed by these stimuli; and c) These demands are challenging, worthy of investment and engagement." SOC has been defined as a concept that is at the heart of human information development procedure, it aspires to resolve conflicts and tolerate the unavoidable stress of human life (Antonovsky, 1979). SOC helps perceive the world and the individual's environment as complete, manageable, and meaningful, asserting the way people analyse their life influences on their health (Kouvonen et al., 2010; Wainwright et al., 2010). "SOC is applicable on the individual, group, and societal level, and is fluctuating dynamically through life" (Lindstorm, 2006). SOC is basically constructed during childhood stage and continues until early adulthood (Antonovsky, 1985). Antonovsky explains the SOC as the "Extent that the person saw the world as ordered, believed that the myriad of stimuli bombarding the organism made sense or could be structured to make sense, she or he could mobilise the resources which seemed to be appropriate to cope with whatever bugs were current" (Antonovsky, 1996). He further claims that the SOC is not a specific coping style, but a person with a strong SOC will select the particular coping strategy that seems most appropriate.

In general, an individual with a weak SOC views themselves more as a victim than as a survivor (Fäh, 2002). "The latter can better handle demands of life, selecting the assumed *most appropriate tool for the task at hand*" (Antonovsky, 1996, p. 172), and optimally mobilise its resources, thus moving towards the healthy pole of the continuum (Faltermaier, 2005). The

person either decides to remain in the situation or mobilise coping resources and makes adversity as a strength providing situation. In this situation, an individual selects to reinforce SOC in his life (Antonovsky, 1985). Human beings can make positive healthy living by utilising prior experiences. On the basis of accessible resources, human beings can draw coping strategies from prior stable experiences. This can lead comprehensive SOC, which is inspiring, enduring, meaning and manageable and connecting inner and outer worlds (Antonovsky, 1985, 1989). Antonovsky remarks that the strength of the SOC comes from "Shaping order out of chaos in the human organism" (Antonovsky, 1996).

Antonovsky (1979) allots SOC measure into three components: Comprehensibility, Manageability and Meaningfulness. Antonovsky (1987, 1993) sums up as, the three components are inter-dependent and directs the individual's orientation to a healthy life:

a. **Comprehensibility**: This is the level that awareness takes place, and that the individual interprets and feels that the surroundings are comprehensible and consistent. How and to what extent an individual is receiving the stimulus and interprets cognitively to ensure the information is structured and reliable (Carstens, 1995). "It refers to the extent to which one can make sense of stimuli from internal and external environments" (Strumpfer, 1995). Interpreting stimuli from environment is not always gentle and one has to use reason and logical thinking in perceiving and making meaning out of the stressors; a person can infer sense in the event of tragedy such as death and disability (Antonovsky, 1987). A high score on this subscale means that people view the events as predictable, despite that the occurrences are a surprise in life (Antonovsky, 1987).

b. **Manageability:** Individuals feel the available resources are adequate enough to meet the internal and environmental stressors and threats in their life (Antonovosky, 1987). Manageability is thus defined as "The extent to which one perceives that they have the

available resources at their disposal to meet demands of any kind of situation" (Carstens, 1995), and a high score on this sub scale suggest that an individual here seldom feels threatened by stressors, believes that there is a solution to every problem, and the bad time will eventually cease. Antonovsky (1987) postulates that one manages well with the assumption that events will turn to good, that the situation will improve and turn out well. Kobasa (1982) asserts that individuals with this orientation believe that their behaviour is determined by their own choosing, can perform tasks efficaciously, have resources under their control to initiate change in their environment, and they are likely to meet their goals.

c. **Meaningfulness**: This is the most important element in SOC, where people feel some occurrences and aspects are worthy of their time and energy, the extent of influence and the degree of involvement in various realms of life (Antonovosky, 1987). Meaning-fulness is viewed as the most significant part of SOC as it provides inspiration to endow their energy in order to voluntarily own up the stressors that encounter a person in their life (Carstens, 1995). According to Ryff and Singer (1998), "Meaningfulness refers to the extent to which an individual feels that life makes sense emotionally and cognitively; Life events are seen as challenges, worthy of cognitive and emotional investment and commitment". High scores on this construct means the person commits themselves if they view situations that are worth the trouble; if they are then the person gives in all their energy to fight challenges (Antonovsky, 1987).

To what extent a person develops these SOC elements, how he pursues and endures with confidence and self-efficacy, and being hopeful that events will turn out to the best, is determined by an individual's sense of coherence, which in turn is consistently grounded in the person's situation, values and culture. Antonovsky (1993) emphasises that, "A person's socialisation is fundamental to how a person sees the world and how strong their SOC will be".

Antonovsky (1987) described, "The relations among the three components as inextricably intertwined as the correlation between them was high, not ideally perfect". Antonovsky (1979) claimed that the person's place on SOC scale will be predicted by the component of meaningfulness, as it is a motivator to deposit all the energy which the individual perceives is worth the fight. Antonovsky (1987) claims an individual with high comprehension and high meaning in life will probably find that someone with a high comprehension and low meaning will have issues in growing a stronger sense of manageability as it gets difficult to access coping resources to face the adversities.

Studies and their outcome have affirmed the theory; in fact, a good healthy resilient person displays a strong SOC. In 2007, the salutogenic research area was updated and presented in a comprehensive systematic analytical review covering the whole international research area; psychologically healthy people possess good SOC, these individuals manage, physical, social their mental health better (Suominen & Lindstorm, 2008).

3.7.6   SOC IN SOUTH AFRICAN CONTEXT

SOC has been extensively researched in South Africa (1987). Van Zyl and Stander (2013) write, "SOC explores the nuances of managerial stressors and coping mechanisms within the South African business environment; with the assistance of salutogenic approach human resource issues were addressed, which became a unique her contribution". The focus is positioned in understanding how managers can enhance their ability to operate and optimise internal resources to cope with routine work demands (Van Zyl & Stander, 2013). Their results indicate that, "There is still cultural sensitivity, yet cultural segregation, within the South African business environment". This finding corresponds to the investigations and interpretations put forth by Cilliers and Coetzee (2003) as well as Cilliers and Kossuth (2002) in different South African contexts (Van Zyl & Stander, 2013). The results and models

concentrate on the significance of relationships, fairness, equality and transparency in diversity management. These researchers used strategies to the development of high SOC in the managers: interventions were focused on two levels, that is the management and employee, to ensure the emotional well-being of the managers well both an organisational and individual level, to ensure and sustain the well-being of managers (Van Zyl & Stander, 2013). Various South African researchers have supported and validated this notion (Jorgensen, 2009; Spangenberg & Orpen-Lyall, 2008; Van Zyl & Rothmann, 2012). Studies (Barkhuizen & Rothmann, 2004; Rothmann & Rothmann, 2010; Van Zyl et al., 2010) have emphasised a variety of outcomes related to health and well-being, a current crucial issue in South African organisations.

It has been indicated that SOC is a major life reference that anchors, acts, and mediates between work demand and emotional well-being (Rothmann, Steyn & Mostert, 2005). SOC triggers and activates both conscious and unconscious methods connected with higher stress endurance and level lowers levels of burnout; engage in work, higher levels of efficiency, and consistent changes in the experience of positive affect (Mayer, 2011). Additional studies point that a high level of SOC buffers the onset of physical illnesses (Rothmann et al., 2005). Similarly, Donaldson and Ko (2010) conclude that, "Well-being at work can bring optimal benefits to organisations and employees." Support is established between SOC and functional health status South African context (Hutchinson, 2005). Antonovsky (1987) developed a questionnaire with 29-item measure, referred to as the SOC-29, alternatively titled Orientation to Life Questionnaire. A shorter version with a 13-item measure was also developed. The SOC scale has been used mainly in organisation targeting the studies on job stress, burn out and efficacy (Albertsen, Nielsen & Borg, 2001). The above mentioned research findings add value to the utility and application of SOC; "Is a life-long process and consequently we find the highest mean SOC values among the oldest living in society" (Eriksson Hitchhiker, 2010).

3.8 THE RESEARCHER'S RATIONALE IN ADAPTING SALUTOGENESIS MODEL

Antonovsky (1987) claimed that SOC was a universal mechanism that could be applicable to any culture, and research has proved that this is true. The SOC scale developed by Antonovsky (1987) "Comprises items that have been found to be universally meaningful across sex, social class and region and has been used in 14 languages". A study by Bowman (1996) found evidence it is applicable to various cultural groups. Hence this scale is appropriate as South Africa has a rich and diverse population. Studies have supported the fact that it spans out the entire life, it is learnt response, and "Has a strong correlation to perceived health, mental well-being and quality of life" (Eriksson & Lindström, 2005). Nilsson and Lindstorm (1998) note that, "SOC has been compared and proved to be useful in learning processes".

The research undertaken targets the Police population of South Africa. Police undergo and face challenges and life threatening events routinely. A small percentage of Police population are vulnerable to psychological ailments as depression and PTSD, while the remaining Police members adapt to the policing environment. It does not convey that the remaining officers are perfectly fine; they have faced adversities and have suffered psychological conditions detrimental to their mental health, yet with the assistance of EHW (Employee Health and Wellness), and management and family support, are reintegrated back into work. Despite the fact that they may not go home alive at the end of the shift, they are happy, work relentlessly, and spring to action when duty calls. While some Police members succumb to suicides, some to severe PTSD, the rest bounce back to work with or without support. These Police officers unquestionably have identified protective or promotive factors help them cope with the daily trauma.

Antonovosky's salutogenic approach undeniably applies to the policing world of work. How Police members have shifted towards growth and development, and why some members travelled to the opposite continuum of the salutogenic scale, is mentioned in his theory.

This researcher used personality indicator MBTI to ascertain the personality types and measured Resilience, using the SOC - 29 item measure. Resilience literature has repeatedly found personality profoundly impacting an individual's Resilience. Utilisation of MBTI and SOC is thought of to be an advantageous combination measures in addressing all the issues. At the outset SOC is suitable and immensely relevant in investigating Resilience, risk and protective factors in combination with their personality types, which would support SOC and add worth and contribute significantly to the field of Resilience.

3.9   SUMMARY

Positive Psychology and its positive impact on the organisation, POB and PsyCap are discussed in this chapter, elaborating on the four constructs of PsyCap, which is made up of self-efficacy, hope, optimism and resiliency. Resilience is discussed in detail along with the models of Resilience. Risk and protective factors are discussed along with Resilience. Resilience within the Police context is outlined. The researcher also defends the rationale in adapting the salutogenic model in the research.

CHAPTER 4

RESEARCH METHODOLOGY AND DESIGN

4.1 INTRODUCTION

This chapter presents an overview of Research Methodology and design used in the study. Firstly, different types of Research Methodology in the Social Sciences will be discussed and explored in order to establish an appropriate method for the study. Further the chapter focuses on the Research Design, Participants, Sampling, the Measures used in gathering data, as well as the Data Analysis Techniques. The Psychometric Properties of the Instruments used are discussed in detail. Ethical considerations are also discussed.

4.2 DEFINITION OF RESEARCH METHODOLOGY

Research Methodology is a system of investigation, which shifts from the underlying theoretical assumption to formulate design, followed by collecting data (Myers, 2009). Methodology refers to, "The ways of obtaining and analysing data" (Polit & Hungler/, 2004). Methodology includes the Design, Setting, Sample, Methodological Limitations, Data Collection and Analysis Techniques. Therefore, it is described as logical group of strategies that are complementary and have the capacity to create data findings which replicate the research questions (Burns & Grove, 2003). Research Methods are the Various Methods, Strategies and Procedures, where the entire above are used by the researcher to work towards the objective of the research (Rajasekar, Philominathan & Chinnathambi, 2013). It is explored further by Burns & Grove (2003) who say that statistical methods are planned as per the research objectives, are Scientific in nature that involves Theoretical Procedure that are essentially planned, which are unbiased using appropriate Statistical Approaches to collect data, to explain collected data based on experience in association with observation and

reasoning and that is scientifically validated. (Rajasekar, Philominathan & Chinnathambi, 2013).

It is also defined as the Study of Methods by which knowledge is gained and provides the planning involved arriving at the findings and conclusions (Rajasekar, Philominathan & Chinnathambi, 2013). The researches should note that study in question may be addressing several problems, but may apply one or more Methodologies (Henning, 2004). Researcher focuses on Research Questions to investigate systematically by employing suitable method that addresses the questions (Industrial Research Institute, 2010); If not there would be hindrances in arriving at conclusion, hence employing correct Methodology is crucial. Therefore, it is important the researcher has to carefully consider the methods used for the study undertaken to scientifically prove and validate the findings (Rajasekar, Philominathan & Chinnathambi, 2013).

The next section covers different data collecting methods, along with the rationale of the researcher's choice of Mixed Method for this research.

4.3   RESEARCH APPROACHES IN SOCIAL SCIENCES

Crotty and Croswell (1998, 2009) state that research approaches provide the knowledge upon which the researcher builds the Methodology for the research study. Crotty (1998) elaborated that it is important that the researcher explains the Philosophy being adopted. Many of the approaches to Social Science research have adapted their ideas from Positivism; however, these have been challenged (Smith, 1998; Gill & Johnson, 2005).

4.3.1   QUANTITATIVE METHOD

Quantitative methods are Systematic, Scientific and Establish the Relationships and connections by Investigating Quantitative Properties (Creswell, 2008). The Quantitative method is utilised to establish connections or relationships between constructs where statistical

inference can help to ascertain the relationship between variables (Hussey & Hussey, 1997). Quantitative research is associated with Positivism Theoretically and Philosophically as it aims to test a hypothesis, through analysing and explaining when and how a phenomenon occurred (Croswell, 2008).

The focus of Quantitative research lies in collecting large data sets and generalising the findings to the general population (or a specific section of the population) in question to elaborate on a specific occurrence (Wadsworth, 2010). The advantage of Quantitative method is that it is in numerical form, where statistical strategies are used for investigating the research objectives. Descriptive or Inferential Statistics are used, such as measures of Central Tendency, T-Tests, ANOVA, Correlations and Regressions (Madrigal and McClain, 2012). The accumulated raw data provides Facts, Trends, Demographics, Age Groups, Employment History, Differences between groups Employing Variances and Regression (Madrigal & McClain, 2012).

The greatest strength of the Quantitative Method is the Descriptive Analysis because of the huge data collection at a single shot, (Madrigal & McClain, 2012). Quantitative Methods, participants become tool of statistics, may ignore the significant information contributed by the participants (Mondal, 2015).

4.3.2   QUALITATIVE

Collis and Hussey (2003) say that, in contrast to Positivism, the Interpretive Approach has a subjective epistemology that usually follows inductive logic, and follows Qualitative Methods reliant on theories adapted in the study. This method investigates various disciplines and subject matters using varied approaches (Denzin & Lincoln, 2000). The method comprises of Open Ended Questions or Closed Ended Questions, Analysis of Text or Pictures, Observation, Body Language and Expression, representing information in Figurative and

Tabulation forms and includes researchers' personal interpretation of the findings (Madrigal & McClain, 2012). Qualitative research allows flexibility, permitting the researcher to respond to subjects' data as it emerges during a session (Madrigal & McClain, 2012). Qualitative inquiry is best suited for Social Sciences for it expands our understanding of Ideas, Intentions, and Meanings; it is beneficial in exploring complex societal understand-dings. Qualitative methods can be used to understand complex social processes, to summarise necessary aspects of occurrences and life experiences from the view of research respondents (Malterud, 1998), and "To uncover beliefs, values and motivations that underlie individual health behaviours" (Berkwits, 1998). The rich data gained through this method is often unavailable from any other methods (Silverman, 2006). Silverman (2006) further writes that Qualitative approach conveys productivity, in terms of interviews and responses, yet it has to prove its benefits by scientific validation.

4.3.3   MIXED METHODS

Mixed Methods research is becoming an increasingly popular approach within the Social Sciences and Health Sciences (Azorin & Cameron, 2010). Creswell (2008) explains that Mixed Methods studies employ multiple methods, popularly using Quantitative and Qualitative data, then integrate the results to establish triangulation. The objective of Mixed Methods is to help analyse the results in a better way than using a Single Method (Creswell Plano-Clarke, 2007). Medina (2009) writes that it is sometimes referred to as Mixed Methodology, Multiple Methodologies or Multi-Methodology research. Mixed Methods research tenders both the Comprehensive Contextualised information and the Natural Reflection of respondents, but is a more time consuming exercise.

4.3.4   BENEFITS OF MIXED METHODS

Greene, Caracelli and Graham (1989) proposed the benefits of Mixed Methods: Triangulation, Complementarity, Development, Initiation and Expansion; a range of research investigations by using different techniques for different research components. Bryman and Bell (2007) indicated multiple purposes of Triangulation; Qualitative Research and Quantitative are complementary, one supporting the other in order to validate and substantiate the findings. Employing both the methods in the study facilitates the relationship between the study constructs, and allows a researcher to study them from different perspectives. Creswell (2009, p. 214-215) suggests that the researcher profits from two different analysis that are used simultaneously.

4.3.5   LIMITATIONS OF MIXED METHODS

Creswell and Plano-Clarke (2007) writes that Mixed Methods are difficult because they are viewed as time and money consuming, while further the researcher has to adopt and equip expertise in disseminating the information from both methods (Azorin & Cameron, 2010). Creswell (2009) writes twin analysis should have a point of convergence and have to be channelled to allow integration. However, this may lead to discrepancies, influencing the data negatively in interpreting the outcomes.

4.3.6   TYPE OF MIXED METHODS

Mixed Methods as defined as those Research Designs that include at least one Qualitative Method and one Quantitative Method (Greene, Caracelli & Graham, 1989). Johnson and Onwuegbuzie (2004) state that, "Mixed Methods is the study where the researcher imperatively Mixes or Merges Quantitative and Qualitative Research Techniques, Methods, Approaches, Ideas, Language and the outcomes from two different method into a single study".

In this study the following definition put forward by Plano-Clarke (2005) is applied:

"*Mixed Methods* is a research design with *Philosophical* assumptions and methods of enquiry that guides the direction of collecting and analysing data and the mixture of *Qualitative* and *Quantitativ* data in a single study. Its aim is that the combination provides a better understanding of research problems than either approach alone".

Creswell and Plano-Clarke (2011) synthesised information from numerous fields of work such as Nursing, Education, Social and Behavioural research, which contributed to their classification. While researchers used different designs and methods, and diverse terms, it was observed that the methods interconnected. The overlapped methods are categorised into three sub-methods of Qualitative data collection. The identified methods were, "The first is the Convergent Parallel Mixed Method, second being the Explanatory Sequential Mixed Method, and the third, the Exploratory Sequential Mixed Method" (Creswell, 2012). The researcher chose the *Explanatory Mixed Method* for this study. The rationale being that the researcher planned to analyse the results and then use the results to select the sample for the second phase.

4.3.7   CONVERGENT PARALLEL MIXED METHODS DESIGN

This method permits the researcher to collect data using Quantitative and Qualitative inquiry separately, and then evaluate and contrast the findings to see if the findings corroborate. The key assumption of this approach is that when employing different methods, even though the output results are in different formats, scoring Quantitative measures and interpreting Qualitative interviews should both yield similar nature of results (Creswell, 2014). The primary focus of Mixed Methods is to survey Quantitative results with statistical analysis and substantiate the findings by exploring more detail (or helping explain unexpected results) using structured or semi-structured interviews to better comprehend the results of a Quantitative study (Terrell, 2012)

4.3.8   EXPLANATORY SEQUENTIAL MIXED METHODS DESIGN

Here the researcher explores the study in two phases: firstly, the researcher investigates the Quantitative data, analyse the outcomes, and then plans the second phase on the basis of first phase (Terrell, 2012). In the second phase the study sample is purposefully chosen and the nature of questions to be asked are determined from the results from the first phase. (Creswell, 2010).

4.3.9   EXPLORATORY SEQUENTIAL MIXED METHODS DESIGN

The opposite of Explanatory is followed in this method, the researcher explores the subject area using Qualitative data, which is then used for a second phase of Quantitative Methods (Creswell, 2010). "Like the Explanatory Sequential approach, the second database builds on the results of the initial database". The focal point of this method is to choose or develop and then use the test measures with particular samples of populations, and then to observe if data from a small group could be generalised to a large sample of a population (Creswell & Plano-Clarke, 2011). The researcher works in three levels, the first stage being Exploratory, choosing appropriate measure is the second and finally administer the measure to the sample representing the general population (Creswell, 2014). Terrell (2012) writes that primarily data is integrated for interpreting purposes and validates the findings through triangulation. It then explores a phenomenon by generalising Qualitative findings to different samples and ascertains if the integration outcomes address the research objectives and inquiries.

The researcher's rationale in choosing Mixed Methods depends on the positive contributions mentioned above, which in this study not only identifies Personality Types that are Resilient but also explores the Protective or Promoting Factors in a Resilient Policeman. The researcher has to administer the questionnaires, interpret the results and then choose

purposeful sampling in order to proceed to the second phase. After all the above methods, researcher confirms that the Explanatory Method is more suited and beneficial for the study which would provide the desired results.

4.4   RESEARCH DESIGN

A Research strategy or design is a general plan of how a researcher goes about addressing the research questions that have been set out by the researcher, which contains objectives derived from objective questions which will specify how the researcher intends to collect Data, Constraints, Time, Resources, Finance and Ethical Issues (Thornhill et al., 2003). This study employs the Explanatory Sequential Mixed Methods design, as researcher uses a two-phase project to collect data, both Quantitative and Qualitative respectively. Explanatory design in Qualitative study implies collecting and analysing Quantitative and then build Qualitative data directly from Quantitative data and is done in two consecutive phases within one study (Reuters, 2015). Creswell (2010) explains that, "The Quantitative results typically inform the types of participants to be purposefully selected for the Qualitative phase and the types of questions that will be asked of the participants". The researcher recognises and interprets the outcomes of Quantitative findings, that unfold additional information that could corroborate the Quantitative findings and the statistical deviations that exist in the sample group (Plano-Clarke et al., 2003). The authors further elaborate that the "Overall intent of this design is to have the Qualitative data to help explain in more detail the initial Quantitative results".

Therefore, the Explanatory Design was considered best suited to the current study as the aims and objectives are better addressed. The purpose of the research is primarily Descriptive and Explanatory. The research data is collected through questionnaires to investigate the connection between two constructs, and explore the relationship between Personality Types and Resilience based on previous theory. The general objective of the study

is to ascertain if there is a relationship between Personality Types and SOC in terms of Resilience, where the Qualitative method helps explore the Protective Factors that are linked to an individual's Personality and his / her adaptation to the environment.

Phase 1: Quantitative Method, MBTI and SOC questionnaires were administered and the data collected after the completion of the questionnaires. *The objective of this phase was to determine the relationship between Personality Types and Resilience.* Questionnaires were scored before embarking on the second phase.

Phase 2: A purposeful sample was selected based on the responses of the first phase. Participants who scored extreme scores and mediocre scores were chosen for the Qualitative study. Semi-structured interviews were conducted with the Police members from the sample who were highly Resilient, low and moderate, in order to study the Protective Resources that they adapt or strive for in the face of adversity.

4.5   PARTICIPANTS

The study employs questionnaires as opposed to experimental methods, thus the participants are not addressed as subjects (APA, 2011). The participants were the Police members (Crime Scene Attenders and Investigators) of the South African Police Service (SAPS) of KwaZulu-Natal (KZN), who have served five years or more in the SAPS. A random sampling technique was used. All participants were capable of answering in English in order to comprehend and complete the questionnaires. All Policemen have a Grade 12 qualification as a requirement to be recruited into the SAPS so an interpreter was not required, and were therefore able to give informed consent in the research project without a language interpreter.

4.6   POPULATION AND SAMPLE

The study population is Crime Scene Investigators of SAPS in KZN. The study population consists of approximately 600 Crime Scene Attenders and Investigators. This Police population is exposed to Danger, Violence, and Traumatic situations, and is at risk of developing Psychological illness such as Depression and Post-Traumatic Stress Disorders (PTSD).

According to Thornhill, Lewis and Saunders (2007), sampling techniques are methods that are used to select a sample from the population by minimising it to manageable size; these techniques are used when inferences are made about the target population (Leeuw, Hox & Dillman, 2008). Similar characteristics are identified if the same is big and adequate enough to be tested. (Zikmund, 2003). Sample size impacts the findings if not represented accurately (Burns & Bush, 2010). The larger the sample, the more accurate the reflection of the population (Saunders, Lewis & Thornhill, 2009).

4.7   SAMPLING IN QUANTITATIVE APPROACH

Survey population was drawn using **Non-Probability** sampling to conduct the Quantitative study. A Non-Probability sampling means "That the researcher has no way of knowing the Probability that a particular case will be selected for the sample" (Fink & Kosekoff, 1998). A criterion was used to select the sample; Police Officers serving at the high-risk units who had served 5 years or more at the South African Police Service and who attended the crime scenes often and were exposed to traumatic situations. Harris (1998) says that the advantages of Non-Probability sampling saves time, is cost effective and less complicated than Probability methods. Therefore, a sample of 600 members was considered adequate on the basis of the following rationale:

Larger sample sizes permit researchers to better ascertain the average values of their data, and avoid errors from testing a small number of samples (Zamboni, 2015). Larger samples more precisely display similar tendencies to the general population from which they are drawn (Cronbach, Gleser, Nanda & Rajaratnam, 1972; Marcoulides, 1993). There are several issues important in determining sample size (Bright, 1991, pp. 46-47), such as representativeness, population size, the nature of the study type, and the type of data processing.

A major concern in Quantitative method is the sample size; it should be adequately big enough to make a representation of the population from which deductions are made (Simon & Goes, 2012). Samples which are either too small or too large have a negative impact on the statistical tests, because either the sample is not big enough to make generalisations or is too big to reach any conclusions (Hair, 2006). For statistical investigation purposes Tabachnick and Fidell (2007) established that, "A sample size of 300 is adequate for Factor Analysis and for Regression Analysis a sample size of 'N>=50 + 8*M' is adequate where M is the number of Independent Variables". Hair (2006) suggested that, "A sample larger than 100 is needed for Factor Analysis and, as a general rule, the observations should be Five times the number of Variables". Therefore, in the undertaken research, the number of items within both of the questionnaires combined is 122 items, multiplied by five amounts to 610, whereby 600 is considered an adequate sample. Bailey (1987) writes that a major limitation is that it limits the possibility of Generalising.

The sample under study consisted operational Police members of SAPS. The Police Officers in general are considered to be "At Risk" with higher frequency of PTSD and other Psychological illness in comparison with other field of work (Clohessy & Ehlers, 1999). Police Officers develop Police Personality Styles within first two years of joining the service and exhibit emotional detachment tendencies (Evans, Coman, Stanley & Burrows, 1993), the

sample criterion was that the Police members should have been in the Police service for five years or more. The study population composes of all race groups however was predominantly made up of African males. Since all SAPS members undergo an intake Psychometric selection, their literacy level was adequate to follow the instructions, to complete questionnaires and to respond to the interviews in English.

The concept of saturation is complex and difficult to define, and is a neglected entity (Fusch & Ness, 2015). Qualitative studies emphasis a smaller population when compared to Quantitative studies. Ritche, Lewis and Elam (2003) explain that, "There is a point of diminishing return to a Qualitative sample" - as the study goes in-depth exploring all aspects, the outcome of the study will not necessarily lead to more information. This is because one or two life experiences enables coding that becomes an essential part of the analysis. Recurrences are not crucial in Qualitative research, as the understanding of one occurrence of the data is potentially equivalent to multiple occurrences of the data. Qualitative research looks for meaning and understanding, rather than accepting or rejecting a hypothesis (Crouch & McKenzie, 2006). Lee, Woo and Mackenzie (2002) suggest that smaller populations are adequate for the studies using Multiple Methods.

Charmaz (2006) suggests that the objectives of the research projects are the motivators in designing a research and choosing the sample size. Qualitative study stops when there is repetition of information thus reaching saturation (Fusch &Ness, 2015). A study saturates (Walker, 2012) when no new information is obtained and when further coding is no longer reasonable (Guest et al., 2006). On the contrary, Strauss and Corbin (1998) suggest that, "The longer researchers examine, familiarise themselves and analyse their data there will always be the potential for the new theme to emerge, instead, they infer that saturation will be area of concern when it attains a point it adds no value for further research and becomes counter-

productive, to the research in question" (p.136). Data saturation is not uniform; the saturation level in one study could be insufficient to another. Hence researchers concur on some general principles and concepts, emphasising that when new data provides no new themes or codes, and generates identical finding then the proceeding investigation should cease (Guest et al., 2006). Consequently, there is no definite number of participants engaging in the study and it lacks pattern, forcing researcher to follow the precedent set by previous researchers (Guest et al., 2006). A variation is observed, major proportion of the samples (80%) follows the guidelines set by Bertaux (1981) of 15 and some adhere to the higher number of 50 suggested by Ritchie (2013), irrespective of the Methodologies (Mason, 2010).

Mason (2010) suggested the following could be a guideline for the Qualitative sample:

- Ethnography and Ethno Science: "Morse (1994, p.225) said 30-50 interviews",

- Bernard (2000, p. 178) states that "Most studies are based on samples between 30-60 interviews for Ethno Science",

- Grounded Theory Methodology: Creswell (1998, p. 64) "Said 20-30"; Morse (1994, p. 225) said "30-50 interviews",

- Phenomenology: Creswell (1998, p. 64) said "5 to 25",

- All Qualitative research: Bertaux (1981, p. 35) said 15 is the smallest acceptable sample (adapted from Guest et al., 2006).

The researcher relies on the saturation of responses; therefore a definite sampling account can only be obtained during the process of Qualitative data collection.

This research was done in a Police environment with Crime Scene Specialists. Permission was granted by the SAPS National Office to conduct the research. Prior arrangements were made to schedule the venue and time of administering the questionnaires.

Psychometric testing was done ethically adhering to the ethics stipulated by the Health Profession Council of South Africa (HPCSA). The purpose of the study was revealed to the participants. Respondents were given a voluntary choice either to participate or decline to be a part of the research project. All concerns raised by the participants were addressed, and a written consent was obtained by the members participating in the research process. Confidentiality was emphasised and maintained throughout the research process. The MBTI and SOC scale were administered together. MBTI instruments can be administered either individually or to a group. In this study the questionnaires were administered to a group. The instruments were scored and individual reports were provided to them to find out their Personality Profiles. They had a right to decline or disagree with the report if they felt it was not their ideal Personality Report. They were allowed to re-write the questionnaires if they needed to ascertain their MBTI codes and their level of resilience.

4.8   DATA COLLECTION

The data collection was conducted in two different phases, with Quantitative data collection done in the first phase, and Qualitative phase with purposeful sampling in the second. The rationale behind this strategy was that the Qualitative sample was selected on the basis of the results provided by the Quantitative data. The Quantitative results are then analysed and categorised on the basis of extremely Low, Moderate and Higher scores on the SOC measure. In the second phase part of the same population was used in the second phase, but they are purposely chosen on their scorings on SOC. The aim of this design was to investigate In-Depth Information and Additional Information on Protective Factors; which Quantitative study was unable to provide them.

Phase 1: Crime Scene Investigators were specifically chosen from all other components. The selected Police officers were in the unit of Detectives, Community Service

Centre, Crime Analysts and Local Crime Record Centre of South African Police Service (SAPS). Broad spectrums of participants were chosen (operational members) as these participants do attend, witness and manage the crime scenes. The survey sample for this phase was chosen on the criteria of five years or more in the employment of the SAPS, and were administered the questionnaires.

Phase 2: Semi-Structured interviews were conducted with the members. Confidentiality was emphasised, they had the autonomy to participate or withdraw from the process. The interviews were recorded only with the members' consent. Consequently, a significant amount of information was taken down as notes by the researcher during and after the interviews. The criteria used to choose interviewees depended on the score of their resilience scale (high, moderate and low resilience

4.9   MEASURING INSTRUMENTS

Two measures were used in the study: MBTI and SOC to measure personality types and resilience

Phase 1: **Quantitative Method** - Myers Briggs Type Indicator (MBTI) form M measures the Personality Types (Katherine Cooks and Isabella Briggs). The measure has 93 forced choice items, when scored gives 16 different Personality Types. Additionally, the Sense of Coherence (SOC) instrument measures Resilience. The questionnaires were administered, collected and scored to sort the members for the second phase. The MBTI form M and SOC questionnaires were administered to collect the data.

Phase 2: Qualitative method - In the second phase semi-structured interviews were conducted. The main aim of the interviews was to Accumulate Information, Study and Analyse the Protective Factors and find if they are connected Personality Types. Therefore, interviews

were conducted in the second phase. Questions are framed focusing on participants' work and work environment, stressors, challenges, coping mechanisms and support structure.

4.9.1   MYERS BRIGGS TYPE INDICATOR

This section has an in-depth discussion of the measure, Katherine and Isabel Briggs Myers postulated the "Myers Briggs Type Indicator", a Personality Measure formulated from the Typological Theories proposed by Carl Gustav Jung (1921) in his book "Psychological Types". Jung's vision was to know oneself, understand and appreciate Personality differences, to grow as a healthy individual, and to augment harmony while embracing diversity (Myers, 1998). Jung theorised that, "There are four major Psychological operations by which we perceive and experience the world: Sensation, Intuition, Feeling and Thinking" (Kaplan & Saccuzzo, 2009). Decades ago Katherine Briggs and Isabel Myers operationalised Jung's (1921, 1971) theory. A fourth-dimension Judging and Perceiving 'JP' was added to Jung's existing three dimensions by Myers and Briggs (Myers, 1999). Jung (1921) refers to Personality Typing as a system for understanding human behaviour, based on the belief that people are born with specific Personality Types and that their types do not change throughout life (Jung, 1921). That said, people develop, grow and adapt a range of behaviours that are appropriate to given situations. Briggs, McCauley, Quenck and Hammer (1998) stated that Personality Typology is dominated by a dimensional approach to Personality Description, in which scores for each Personality Trait is considered in isolation, while the unique combinations of factors can provide more information. Written at seventh grade reading level, it is appropriate for adults, and high school students, and may be administered individually or in groups (Myers & McCaulley, 1985; Myers, McCaulley, Quenck & Hammer, 1998, 2003). There are four dimensions: EI - Extraversion and Introversion, SN - Sensing and Intuition, TF - Thinking and Feeling, JP - Judging and Perceiving. The index has many parallels to the literature (Morris, 1997) and refers to commonly recognised origins to Jung. According to its

developers, the MBTI measure has four components with opposite poles, measuring the dimension of Personality: The four personality dimensions are coded. An illustration of MBTI code ESTJ is as below:

E - Extrovert   S - Sensing

T -Thinking   J - Judging

Short description: This person gets his energy externally, is practical, realistic, relying on his experiences than on his emotions, assertive and have last minute bursts of energy to work, is analytical and works efficiently. *(Briggs, 1998)*

The four dimensions of MBTI converge with the "Big Five" theory (e.g. McCrae & Costa, 1989). It has proved successful in selection and placement of personnel contexts (Schmit & Ryan, 1993; Tett, Jackson, Rothstein & Reddon, 1994). The factor "Neuroticism" fills the much-needed gap in the Big Five, which is contained in MBTI (Harvey, Murray & Markham, 1995) - making the MBTI a viable candidate for assessing the Five-Factor Model as well.

4.9.2   WHY PREFER MBTI?

- MBTI is easy to understand

- It offers a logical and consistent model of human behaviour.

- It can be useful in self-management and interpersonal skills area.

- Reliable and the results have been supported by on-going studies.

- Easy to administer, applicable to all cultures and available in various languages

- MBTI results are reliable "The MBTI assessment is highly regarded as a diagnostic tool for team environments and effectively assists project team members in recognising each other's attributes in constructive ways. The vast majority of team interventions at Shell utilise MBTI profiling." *Rob Hart, Learning Division Manager, Shell Australia (2006)*

- "In college-age people, the MBTI Step II and Strong assessments can bring about a two-year jump in maturity and confidence in two weeks. I see it all the time." *Darlene Garcia, Career Counsellor, Colorado College (2010).*

- The indicator is popular and is used extensively in Self-Awareness, Team Development, Conflict Resolution, Marital Counselling, Career Choice and Leadership.

- Team development–identify the under lying issues, diffuse tension and brings cohesion and team spirit, enhances team productivity.

4.9.3   APPLICATIONS OF MBTI

Research and applications of MBTI are effective in diverse South Africa. (MBTI, Manual, JvR, 2007). MBTI helps in developing individual strengths, guarding against one's own weaknesses, and appreciating the strengths of other Personality Types, which makes life interesting (Myers & Myers, 1980, p.281). Abundant research, positive outcomes and successful organisational applications have MBTI extremely popular; the application range from Self-Awareness, Career Counselling, to Litigious Tasks (Briggs & Myers, 1976; Brown & Harvey, 1999; Hall & MacKinnon, 1969; Harvey, 1996; Hartzler & Hartzler, 1982; Myers &McCauley, 1985; Sample & Hoffman, 1986). A numbers of MBTI Psychometric property studies have been conducted (Harvey & Murray at al., 1994). MBTI have surpassed well to the level of criticisms the measure received (Pittenger, 1993). MBTI is on level in terms reliability and validity of the measure (Harvey, 1996).

MBTI have excelled in occupational choices; a data base has been compiled gathering all Personality Types into a list of preferred occupations opposite to their Personality (Myers & McCaulley; Myers et. al., 1985); the list is coded to correspond with the occupational list of US Department of Labour relevant to Personality Types. To standardise the cultural gaps MBTI

was re-standardised in 1977 TF index (Myers & McCaulley, 1985); now applicable across all cultures.

Abundant research has been conducted on MBTI and its application to various fields. A study by Leon Maes (2003) on influence of Personality preferences and change following a leadership development programme, organisational strengths and weakness associated with their types (Leon & Maes, 2003). Short and Grashe (1995) compared MBTI scores with the Holistic Stress Test, and reported a number of significant relationships with Stress and Coping. McCrae and Costa (1986) reported a positive correlation between Extroversion and Coping Mechanisms that included positive feelings and humour. Endler and Parker (1990a) reported a positive correlation between Coping and Extroversion in women. In contrast to the above research Ruiselova and Ruisel (1995) reported no relationship between E-I, S-N and coping variables. As measured with life orientation questionnaire (SOC), researchers reported that Ts and Js displayed positive correlations with coping skills of manageability and coherence. Hirsch (1985) puts forward that "Personality Types can be extensively used to identify organisations, team types and organisational culture, which he says is based on the assumption that the collated Personality Types of members within the organisation can determine the combined organisation's Personality Type".

MBTI creates self-awareness, knowing their preferences helps individuals in decision making (Hirsch, 1985) as well as identifying their strengths and areas of development. Members find that using Personality Type helps them in assessing their strengths and areas of development (Hirsch, 1985). These concepts were emphasised in Jung's theory; he inferred to know one's area of dominance, try develop the auxiliary attitudes and slowly develop all the under developed functions of Personality in order to grow and develop as a person (Vacha-Haase & Thompson, 2004). Jung stressed the fact that there are individual differences and

normal variations in Personality, because there are more normal than clinical Personalities in the population (Vacha-Haase & Thompson, 2002). Multiple studies have been conducted (Salter et al., 2005) on MBTI's usefulness as a measure of Personality, evidence of relationships between Psychological types and Organisational roles was found to be effective (Steckroth, Slocum & Sims, 1980). Information systems and managerial effectiveness has been studied by Gardner and Martinko (1990), and correlated positively. Researchers view different type preferences such as "Gifts Differing" (Vacha-Haase & Thompson, 2002); reinforcing Jung that no type is superior to the other. "Considerable research was not conducted in South Africa, post 1990, MBTI research has become more prevalent (de Beer, 1997), and studies on Stress, Coping Resources, Employee wellness, Leadership, Emotional Intelligence and Career Choice are done. Research (Coetzee, Jansen& Muller, 2009) indicated that personality types differ in terms of the level of their coping resources".

4.9.4   PSYCHOMETRIC PROPERTIES: RELIABILITY AND VALIDITY

Reliability refers to consistency of either measurement or design (W Paul Vogi, 2007). A test showing the extent to which the test items measure the same dimension or preferred type is known as internal consistency; MBTI's internal consistency was brilliant with a coefficient of .85 for each of four dimensions (Taylor & Yiannakis, 2007). Carlyn (1997) affirm that, "The reliability of type categories seems to be satisfactory". The Split Half reliabilities exceeded .75, and Test-Retest excelled (p. 465). Test-retest exceeded .70, but scores on dichotomies were low (McCarkley & Carskon, 1983). MBTI tests have well established reliability correlations ranging from 0.89 to 0.92, the reliability based on Split Half and Cronbach Alpha Coefficients ranged between 0.89 and 0.91 on all four of the dimensions (Myers et al., 1998). With regard to reliabilities across diverse samples, Schaubhut et al. (2009) reported Cronbach Alpha Coefficients, across diverse samples for various employment levels ranged between 0.87 and 0.92; for different ethnic groups between 0.83 and 0.92; and across

different international regions the range was between 0.81 and 0.91. According to Beuke, Freeman and Wang (2006), the MBTI instrument is the most widely used Personality Inventory in the world (Myers, McCaulley, Quenk & Hammer, 1998). The MBTI has an 85% reliability rate on Test Re-Test, was affirmed by the researchers.

The inventory is applicable across cultures globally (Myers et al., 1998). The translated versions of Psychological Instruments differ and may be influenced by culture (Hofstede & Hofstede, 2005). The earlier versions of MBTI were subject to criticisms for the reliability over the years (Clark & Estes, 2002; Pittenger, 2005; Howes & Carskadon, 1979; McCauley & Carskadon, 1983; Stricker & Ross, 1962).

Despite these criticisms, the MBTI instrument has been successfully translated into several languages (Bents & Wierschke, 1996; Sim & Kim, 1993; Nordvik, 1994; Stalikas & Fitopoulos, 1998).

Van de Vijver and Rothman (2004) stated MBTI was not originally designed to measure diverse cultures, there was no dissimilarities found when tested on a very diverse group of South African. This affirms the scale is reliable enough to use on South African population. A study conducted by Taylor and Yiannakies (2007) using Form M reflected; 74% of participants conceded with all four letters of the code and 96.6% on three letter, insinuating Form M can be administered on South African population. This study was corroborated with U.S. MBTI for internal consistency reliabilities.

Researchers Van Zyl and Taylor (2012) reported, "The reliabilities of the four dichotomies are good for the Afrikaans sample, and are very similar to those reported in the MBTI® Manual (Myers et al., 1998)". Form M was administered for the South African population irrespective of races; no item bias or any adversity was found – it occurred in the study ESTJ was most prevalent, followed by ISTJ in South Africa (De Beer, 1997; Taylor &

Yiannakis, 2007). In terms of reliability, Van Zyl and Taylor (2012) stated that, "Reliability analyses confirmed that MBTI can be reliably used for South African population and overall the reliabilities are in line with international results obtained, thus the assessment does not appear to display consistent bias against any one group, gender or ethnicity". Taking all the scientific studies and arguments into consideration the researcher firmly concurs that MBTI is safe for the South African population; it is believed the reflections of MBTI on the Police population could be in line international results. If there is huge discrepancy found it could be the target group South African Police Service, functions in a very diverse society in comparison with other countries. It is obvious Personality Types research (using MBTI) focused mainly on Occupational Choices, Leadership, Coping and Burnout. Few or no attempts have been made to use MBTI in the Police environment to study the coping mechanisms of Police officers.

4.9.5   VALIDITY OF THE MBTI ASSESSMENT

How well a measuring tool measures the variables it is meant to measure and uncover the underlying findings (Sullivan, 2011). Cronbach and Meehl (1955) write, "A valid assessment maintains the same relationships with other assessments over time". Construct validity determines the validity of Personality Test, displaying predictive ability like other Personality measures (Myers, 1989). Convergent and divergent validity are found when the results are similar to other measures, and when measures fail to relate with other tests respectively (Ghiselli, Campbell & Zedeck, 1981). MBTI Validity feedback from researchers accounts to 75 % (Briggs Myers et al., 1998).

Myers (1995) refers Validity of both Forms M and Q is established through Factor Analysis, Correlations, Exploratory and Confirmatory factor analyses with related measuring tool".

- Introverts spend time indoors and they appreciate office bound (Schaubhut, Thompson & O'Hara, 2008).

- Intuitive people are artistic than the sensing people (O'Hara, Thompson, Donnay, Morris& Schaubhut, 2006).

- Thinking people are more realistic and in the present than feelers. (Quenk, Hammer & Majors, 2001).

- Judging individuals like order and neatness than perceivers. (Quenk, Hammer & Majors, 2001).

Thompson (2008), express successful applications and reliability of the measure has propelled MBTI to popularity, mainly with the work place issues as Conflict, Team Management and Productivity, is fulfilling the visions of Jung, Myers and Briggs in self-growth and development (Schaubhut, Thompson& O'Hara. 2008). Currently the measure is available in 21 languages (Thompson, 2008).

4.10   SENSE OF COHERENCE

Antonovsky (1979, 1987) developed two scales of SOC, questionnaire; one with 29 items and the other with 13 items concerned with mental health coping and managing. Erickson and Lindstorm (2005) insinuate SOC with its brilliant study outcomes and applications; the theoretical framework has become a milestone and has been translated in 33 different languages. Reliability and validity as the Psychometric Properties of the scale are highly acknowledged (Antonovsky, 1993; Erickson& Lindstorm, 2005). Research studies indicated SOC findings have only supported only one dimension out of three (Callhan & Pincus, 1995; Flannery & Flannery, 1990; Hawley, Wolfe & Cathey, 1993). Contrarily other studies have supported all the three components (Bishop, 1993; Feldt & Rasku, 1998; Gana & Garnier, 2001; Hart, Hittner & Paras, 1991; Kravetz, Drory & Florian, 1993).

4.10.1 RESEARCH AND RELIABILITY OF SOC

In terms of reliability and validity, SOC has found to be a good measure, studies have shown internal consistency. It has emerged as a valid protector of health (Jergse & Vara, 2006) and mental well-being (Feldt, 1997), emphasising people with high score in SOC were shielded from the stressors. SOC is negatively correlated with clinical dimensional constructs such as Anxiety, Hostility and Depression (Strumpfer, 1990). Otto (2002) found the scale to be low with Depression and Major Depression (Carsten, 1995). SOC emerged as a stress resistant in the studies of Petrie and Brook (1992). The scale is highly correlated with self-esteem (Bowman, 1996).

South African studies were concerned with the relationships with stress and its aetiology, and found SOC was negatively correlated with stress (Wissing, DE Waal &De Beer, 1992; Caims, 2001). Another South African researcher found a high correlation with the coping abilities of cancer patients, a high correlation with cardiac patients (Madhoo, 1999), all these findings direct to Antonovosky's statement that an individual's SOC is strengthened following stressful life events. The conducted study to ascertain the link between MBTI and employee wellness reveal that Sensing and Thinking dominated the target population; extraverts were highly correlated with SOC, while Introverts were on the opposite end of the continuum (Du toit, Coetzee & Visser, 2005). Ericksson and Lindstorm (2007) affirm this by saying, "In 124 studies using SOC-29, the Cronbach's correlation ranged from 0.70 to 0.9; Test Re-Test correlations show consistency and range from 0.69 to 0.78". The authors add, "SOC seems to be reliable and valid, applicable to all cultures, with consistent prediction of how people manage in stressful situations and stay well".

SOC lacks longitudinal studies as SOC is said to have spanning through life therefore longitudinal analysis are worth studying (Suominen & Lindstorm, 2008). The rationale behind

this seems to be that Antonovsky was focussing only on the factors of staying well in adversity (Flansberg & Madsen et al., 2005). Researchers affirm that the lack of predictability in SOC is not a concern because in life uncertainty triggers crisis, which as per the researchers should not be weighed as negative, as repeated exposure makes one resilient (Flensberg & Madesen et al., 2005).

4.11   DATA ANALYSIS

Data Analysis is the process interpreting, integrating using statistical and logical techniques converting the raw data into meaningful conclusions (Shamoo & Resnik, 2003), various analytic procedures "Provide a way of drawing inductive inferences from data and distinguishing the signal (The Phenomenon of Interest) from the noise (Statistical Fluctuations) present in the data."

Field (2009) asserts data analysis follows behind data collection to create an understanding of the findings. This section presents the different techniques used for data analysis by the researcher. In this research, separate methods of analysis were employed to study the Quantitative and Qualitative data. An Explanatory Method was used in analysing the Qualitative data; while the outcomes of the Quantitative results were used to arrange the Qualitative method. The Quantitative results in this research, MBTI and SOC, led to purposefully choosing the Qualitative sample from the Quantitative sample, as well as prompting the nature of questions to be framed for the semi-structured interviews to explore the protective factors. Open-ended questions were used to allow the participants the opportunity to unravel the information.

The researcher interprets the Mixed Methods results, and integrates and discusses these in the discussion chapter. The second phase follows depending on the results of the first phase. Qualitative method has uses semi-structured interviews. Open-ended questions will be framed

to get in-depth information on Risk and Promoting Factors, which the Quantitative Method is unable to do. The Mixed Methods researcher interprets the follow-up results in a discussion section of the study. This interpretation follows the form of first reporting the Quantitative and discussing the Qualitative by reflecting the responses of the respondents as they are in italics. The results of both the methods are then integrated to ascertain if the methods are mutually supportive, and also to ascertain triangulation in the study occurred.

4.11.1 PHASE 1: QUANTITATIVE

Quantitative research analyses and observes regularities, adopts the positivist approach in collecting data, disseminating data through inductive method to make statements and generalising it to the population (Jokobsen, 2013). The Statistical Package for the Social Science (SPSS) programme will be used (Nie & Hull, 1968). A statistician was employed to assist with the analysis once the data had been captured. In addition, descriptive and inferential statistics were used in order to gain an understanding of the obtained data. Descriptive statistics that were used in this study include Standard Deviation, Minimum and Maximum Range, Mean and Standard Deviation. Pearson Product Momentum Correlations were used to specify the relationship among the variables in the study. The Chi Squared Test was also used. A Chi Square Statistic is a measurement of how expectations are compared to results, "The data used in calculating a Chi Square Statistic must be random, raw, mutually exclusive, drawn from independent variables and drawn from a large enough sample" (Saunders, 2009).

Descriptive Statistics were used to describe the sample's responses and performance on MBTI and SOC. Descriptive Statistics describes the central attribute of Quantitatively collected information (Mann, 1995). Measures of Central Tendency, Measures of Dispersion, Variance, Correlations, Kurtosis, Skewness were some of the statistical methods employed in analysing the Quantitative data (Trochim, 2006). Mean is the sum of all scores divided by the number of

scores (Aron & Aron, 2002). The mean is used to describe the average score of the sample on MBTI and SOC. Mean adds together all of the test results and then divides it by the sum of the total number or '*n*', also called average (Russell, 2015). The median is used when the statistical readings in the list are odd, the central value is determined by splitting the list, and it is the two middle readings got by dividing the list when the list is even (Russell, 2015). Whereas the mode is the measure of central tendency that indicates the score in the frequency distribution that occurs most often (Shaughnessy & Zechmeister, 1994). Another way to think of the mode is that it is the value with various recurrences and the biggest number peak in the normal distribution curve (Shaughnessy & Zechmeister, 1994).

According to Shaughnessy and Zechmeister (1994, p. 45), whenever a measure of central tendency is applied, it should be accompanied by an appropriate measure of dispersion: range, the standard deviation and variance also called the "Width" or the "Breadth" of the distribution. As per Cozby and Harris (1993, 1998), the standard deviation is the extent of deviation from the mean in the group or population Range is the most straight forward measure of the Width or Variation of a distribution; the lower values are subtracted from higher values (Hulbert, 2003, p. 79). The standard deviation describes approximately how far on the average a score is from the mean (Shaughnessy & Zechmeister, 1994, p. 369). The authors add that "The result of standard deviation has technical advantages that outweigh the slight disadvantages of an approximate description of the average variation from the mean" (Aron & Aron, 2002, p. 46). The researchers conveys a detailed appropriate statistical measure can only be deeded after the Quantitative method have yielded the results,

4.11.2 PHASE 2: QUALITATIVE DATA

Semi-structured interviews were used in this phase. Interviews are effective tools in accumulating the information through pre-planned questionnaires and open-ended questions

surrounding the research in question (Shneiderman & Plaisant, 2005). Interviews can be flexible, informative, useful, and very effective, as the researcher or interviewer can lead and manoeuvre constructively to focus on a specific issue or several research concerns. The interview method itself is the main advantage, it is a face-to-face process which instils trust and confidence in the respondent. It can come to logical conclusions, through themes that contain a wealth of information. Further, the research can alter the format based on the need and design of the research (Genise, 2002; Shneiderman & Plaisant, 2005).

4.11.3 SEMI-STRUCTURED INTERVIEWS

This method entails both interviews with structured and semi-structured questions; the former uses prepared questionnaire in the view of standardising the responses and maintain consistency in the process, the latter semi-structured using open-ended questions to give participants the liberty of expressing themselves to provide additional information, if they consent to do so (Shneiderman & Plaisant, 2005). The information was then transcribed, analysed, and coded (Genise, 2002) using a thematic analysis.

4.11.4 THEMATIC ANALYSIS

In this phase, Qualitative data, such as semi-structured interviews and recordings from focus groups, were analysed Thematically. Themes and Patterns relating to the variables of Personality Types and Resilience were identified and coded in the interview transcripts. Irrespective of the strategies used in collecting data, a formal generalized procedure was used in analysing the Qualitative results (Guest, 2006), the systematic steps followed are as below:

Step 1. **Familiarising with the Data**: the researcher should familiarise the data, transcribe it in written format. In order to avoid inconsistencies, the data needed to be separated into patterns, and sorted depending on the source of the data (Creswell, 2014). Guidelines were essential, and adhering to them produced a reliable and quality investigation in Thematic

Analysis (Braun & Clarke, 2006). It also required careful observation for verbal and non-verbal cues such as remarks, body language or small utterances or exclamations, whether verbatim or otherwise (Edwards, 1993). What was important was that the transcript retained the information needed from the verbal account, and in a way, that was "True" to its original nature (Edwards, 1993). Transcribing data in detail can promote the interpretation skills of the researcher (Lapadat & Lindsay, 1999).

Step 2: This first step was a preparatory stage; the researcher collected the rich data using audio or video taping with consent or sketch book of thoughts to transcribe and disseminate later. (Creswell, 2012), the researcher collected data using the semi-structured interviews.

Step 3. Generating Initial Codes: Braun & Clarke (2006) recommend that once the researcher is familiarised with the data, they can identify phrases, ideas, content, interesting facts and the context of information, and then should categorise the data so that it can be coded. The process of coding is an element of Qualitative investigation (Miles & Huberman, 1994), to arrange the data into meaningful categories (Tuckett, 2005). This process entailed considering, Verbal, Non-Verbal and Gestures frequently used by the participant (Braun & Clarke, 2006). Coding helped in Expanding, Renovating, Re-Capitalising and Re-Reading the impressions and notions involved in the data, for it endows more possibilities structuring and investigation the information (Atkinson, 1996).

Step 4. Searching Themes: Themes are different than codes, themes are words, phrases or sentences frequently used by the respondents making it an emerging or potential theme (Guest, MacQueen, Namey, 2012). Themes comprises of stories with ideas, experiences, culture, action, futuristic goals that could aid in providing descriptions used to explain events (Saidana, 2009). Themes are generated from information, following repeated phrases, change

in subject, identifying similarities and differences, analogies and these are assimilated into a cluster called main themes (Clarke, 2006). The researcher had to observe and take note of the information that was missing and that was present, which yielded and elicited themes, and helps in arriving at a conclusion in labelling that theme (Saidana, 2009). "This phase, re-focused the analysis at the broader level of themes rather, which involved sorting the different codes into potential themes and collating all the relevant coded data extracts within the identified themes" (Braun & Clarke, 2006).

Step 5. **Review the Themes**: Not all information fits in, therefore the researcher had to look for the Extraction that helps or disprove the proposed theory; permitting to advance, develop and revisit the themes, because at this point the researcher labelled themes – present themes may shrink and merge into another theme or reduce the themes into sub themes that are too huge. Braun and Clarke (2006) write, "This phase involves two levels of reviewing and refining themes". Level one involved relooking into the codes to see if there is overlapping or deviations of codes, which could have suggested the presence of a new pattern or non-existence of a theme (Guest, MacQueen & Namey, 2012). If themes do not fit the researcher had to rearrange, create new themes, classify them under another theme, or discard and then Thematically map and label the themes, (Braun & Clarke, 2006).

Step 6. **Naming Themes and Defining Them**: By define is to recognise the meaning of the theme and ascertain what dimension or part of the information they are absorbing and place them under a consistent theme (Braun & Clarke, 2006). Each theme has to be analysed in detail, should be checked if it corresponds to the research question; to ensure themes are not overlapping on each other (Creswell, 2014).

Narrative approach was used to communicate the research investigation (Creswell, 2014). This comprised of detailed discussion, short descriptions and examples with interacting themes (Braun & Clarke, 2006).

Step 7.**Produce a Report**: A final step was the report or feedback of the analysis of Qualitative inquiry; Thematic analysis is written, which affirmed the importance, objectivity and validity of the Qualitative research (Braun & Clarke, 2006). It is crucial that the report is Structured, Non-Repetitive, Concise, Comprehendible, Logical account of the story told reflecting the participant's version of the story, providing sufficient proof of the themes (Clarke, 2006).

Qualitative Validity adds value to the research; it is the accuracy of the findings of the study (Creswell & Miller, 2000). According to Creswell (2010), "A validation of findings occurs throughout the steps in the process of Qualitative research; it does not carry the same connotations in Qualitative research as it does in Quantitative research, nor is it a companion of Reliability or Generalisability". Qualitative precision was established by following the above mentioned steps by which the researcher checked for the accuracy of the findings by employing the above mentioned procedures, while Qualitative reliability indicated that the researcher's approach is constant (Gibbs, 2007).

4.11.5 TRIANGULATION

An amalgamation of the Qualitative and Quantitative findings is known as Triangulation (Rothbauer, 2008). The methods complement mutually by covering for any short comings in data gathering. Denzin (1978) writes that, "Triangulation checks out the consistency of findings generated by different data collection methods: It is common to have Qualitative and Quantitative data in a study. These elucidate complementary aspects of the

same phenomenon. Often the points where the data diverges are of great interest to the researcher and provide the most insights".

Rathbauer (2008) says, "Triangulation is most commonly used in data collection and analysis techniques, but it also applies to sources of data, it can also be a rationale for multiple investigators in team research." Triangulation addresses the concern of analysing validity of Qualitative research findings, and the realistic challenges of using multiple approaches (Rothbauer, 2008). The validation of data is augmented when one set of information was compared to the other set of approaches (Rajasekar & Philominathan, 2006). Dawson (2009) illustrates that authenticity of survey method in the population was checked against interviews by employing triangulation to confirm the survey methods.

A mixed approach should ensure balanced results, multiple method analysis generates triangulation in collecting and analysing the information (Rajasekar & Philominathan, 2006; Dawson, 2009). The research area under investigation gives better results by multiple approaches, which is affirmed by triangulation. (Rajasekar & Philominathan, 2006; Dawson, 2009).

In Social research triangulation is used to avoid bias and establish validity, it is feasible to employ multiple method approach to study the empirical phenomenon (Blaikie, 2000; Scandura & Williams, 2000). It is an ethical necessity to validate the findings through various sources of data (Yin, 2003). It collects multiple perspectives, multiple data sources, respondents and multiple methods to gain complete comprehension of the issue investigated by evaluating the data if they correspond with each other (Creswell, 2003; Patton, 2002), and strengthens research findings. "It is one of the most important ways to improve the trustworthiness of Qualitative research findings".

Triangulation enhances reliability by decreasing systematic error through utilising multiple ways of analysing data (Brannen, 2004). If the multiple methods are producing different outcomes, the researcher has to look into individual scores of the methods to close the gap in order to reflect the true scores, thereby increasing the richness of data along with reliability and validity (Riche & Lewis, 2003).

Lincoln (2000) describes triangulation as "Crystallisation which is more than the concept of triangulation". The same account of details is told through different methods, various sources and different angles (Richardson, 1995), by emphasising various aspects, depending on different stages of the study. Borkan (1999) explains "An extended form of Crystallisation which is known as Immersion and Crystallisation: immersing oneself into the data by collection, analysing, summating and arriving to conclusions, whereas Crystallisation is to halt the process to examine in detail the articulations, patterns and themes observed during the immersion process" (p 314).

4.12   ETHICAL CONSIDERATIONS

Researchers should realise ethical issues will surface before, during and after study, if the personal spaces are not observed (p 201). Creswell (2003) states that, "The researcher has an obligation to respect the rights, needs, values and desires of the informants". A list of ethical considerations prior, during and post research is proposed by Miles and Huberman (1994). Some of the issues involve the following:

"Informed Consent, Harm and Risk, Honesty and Trust, Privacy, Confidentiality, and Intervention and Advocacy" (Miles & Huberman, 1994).

One of the highest concerns is cultural insightfulness focussed by Silverman (2000); proper procedures needs to observed to sustain the respondents' confidentiality, dignity and

anonymity, hence the researcher should be cultural sensitive and refrain from influencing his / her own values. Ethical issues are discussed in detail as follows:

Informed Consent: The researcher should inform the participants, regarding the purpose and aim of the study, role of the participants in the research needs to be conveyed before their participation (Silverman. 2000). The researcher works for the SAPS organisation. She first addressed the officials and purpose and the aim of the study. Emphasised that the participation was voluntary and all information divulged will be kept confidential and only the researcher has access to the information provided by the officials. They were also conveyed that no feedback will be reported to the commanders as the research was done independently and it was not funded by the organisation. Following the ethical code of HPCSA the consent form was read and the willing officials consented and signed the consent form.

Harm and Risk: The researcher assures that no harm is caused during or after the process, whether Physical or Psychological due to their participation in the Trochim (2000a). The researcher, being a registered Psychologist, is an experienced Counsellor and Debriefer and was equipped for any kind of problems, issues or crisis to deal effectively with the participants. All participants were told that if they are experiencing discomfort can withdraw from the research project and emotional support will be provided and it will be ensured that the Police officer is stabilised before he / she leaves the venue. No Police official reported any nature of Stress or Trauma during the process. Yet contact number of the Psychologist was forwarded to the members to call should they experience any kind of distress.

Honesty and Trust: Following the stipulated guidelines enhances honesty and trust. A rapport was established with the participants to put them at ease and their concerns were addressed. Care was ensured that the rapport could not damage their professional performance or could exploit or harm others (Smith, 2003). Researcher established rapport before

administering the questionnaire. Explained what the questionnaires measured and how they will be used in the research project. The Police members were encouraged to ask or raise objection to clear confusions.

Privacy, Confidentiality and Anonymity: Susan Folkman (APA, 2000) "Writes the researcher should maintain Confidentiality throughout the process and thereafter, the information of the participants will not be used for any other purposes. Upholding an individual's right to Confidentiality and Privacy is a central tenet of every Psychologist's work. Researcher in Qualitative study should address if the situation is conducive and if they are willing to communicate sensitive (Smith, 2003), the participant can cease the interview if they are uncomfortable. The participants should be aware how their information is used and photos, videos if any, will be stored and secured post research and if need be their confidential record will be destroyed (Trochim, 2000a). To ensure Confidentiality is not breached unintentionally, Sound proof interview rooms are imperative in Qualitative (Smith, 2003). The researcher followed all the steps stipulated. The participants had all the information of the aim of research, how their data will be used and confidentiality before they answered the questionnaires. All answer sheets after scoring were kept in a secured place, where only the researcher had access to it.

Voluntary Participation: Despite all the above-mentioned precautions, it should be ensured that the participants understand their participation in the project is only for research purposes and it is voluntary (Silverman, 2000). Voluntary participation was repeated several times to ensure they were not obliged to answer the questionnaires.

4.12   SUMMARY

This chapter entails statistical analysis of the thesis. Research Methodology and various Methodologies were defined. The research was designed in two phases using Explanatory

Mixed Methods. **Phase one**: MBTI and SOC questionnaires were administered to 623 participants. **Phase two**: Qualitative method, conducted semi-structured interviews with 26 respondents. The Statistical Package for the Social science (SPSS) programme was used in studying the Quantitative data, whereas Thematic analysis was used in interpreting the Qualitative data. Triangulation was discussed and highlighted and special consideration was given to ethical consideration.

CHAPTER 5

QUANTITATIVE RESULTS

5.1   INTRODUCTION

This chapter presents the results of the study. The first section of the results describes the demographic characteristics of the participants. This is followed by presenting the 16 Personality Factor (16 PF) with details of prevalence of participants falling into each category. The relationship between the personality types and levels of resilience are presented next.

5.2   DEMOGRAPHIC PROFILE OF THE PARTICIPANTS

Results from Table 1 below shows that majority of the participants in the study (82.2%) were males with the remaining 17.8% being females. About half of the participants in the study (49.5%) were between the ages of 26 and 30years while 31%, 10.3% and 9.2% of the participants in the study were between the ages of 31-35 years, 20-25 years and 36 years and above respectively. The majority of the participants in the study were Africans (93.6%) followed by Indians (3.9%), Coloured (1.5%) and Whites (.9%).

It was further observed that close to half of the participants in the study were single (46.8%), with 33.9%, 18.7% and .6% of the participants being married, partners and divorced respectively. The majority of the participants in the study (81.1%) had between 4-10 years of working experience in the organization with the remaining 11.9% and 7% of the participants in the study reporting to have been in the organization between 11-15 years and 16 years and above respectively. Finally, it was observed that close to half of the participants in the study (45.7%) had normal resilience while 32.2% and 22.2% had low and high resilience respectively.

TABLE 7: DEMOGRAPHIC CHARACTERISTICS OF THE PARTICIPANTS IN THE STUDY

Characteristics	Frequency	Percentage (%)
Gender		
Male	542	82.2
Female	117	17.8
Age Groups		
20-25 years	67	10.3
26-30 years	323	49.5
31-35 years	202	31
36 years and above	60	9.2
Race		
African	617	93.6
White	6	0.9
Indian	26	3.9
Coloured	10	1.5
Marital Status		
Single	308	46.8
Married	223	33.9
Partners	123	18.7
Divorced	4	0.6
Years of Service		
4-10 years	532	81.1
11-15 years	78	11.9
16 years and above	46	7
Resilience		
Low Resilience	212	32.2
Normal	301	45.7
High Resilience	146	22.2

5.3 PREVALENCE OF PERSONALITY TYPES AMONG THE PARTICIPANTS IN THE STUDY

The results from Table 2 below show that the majority of the participants (52.2%) had the Guardian personality type- Extraverted Thinking with Introverted Sensing (ESTJ). This was followed by participants who are the Duty Fulfillers-Introverted Sensing with Extraverted Thinking (ISTJ) constituting 17% of the total sample while 7.4% of the sample were The Executives- Extraverted Thinking with Introverted Intuition (ENTJ). It was also observed that 5.5% of the participants were The Caregivers-Extraverted Feeling with Introverted Sensing (ESFJ) while 2.9% each of the participants in the study were The Doers- Extraverted Sensing with Introverted Thinking (ESTP) and The Visionaries-Extraverted Intuition with Introverted Thinking (ENTP) respectively.

Two percent (2%) of the participants in the study were The Scientists- Introverted Intuition with Extraverted Thinking (INTJ) while 1.8% and 1.7% of the participants were The Artists-Introverted Feeling with Extraverted Sensing (ISFP) and The Givers-Extraverted Feeling with Introverted Intuition (ENFJ) respectively. It was also observed that 1.4% each of the total sample were The Inspirers-Extraverted Intuition with Introverted Feeling (ENFP) and The Thinkers-Introverted Thinking with Extraverted Intuition (INTP).

It was further observed that 1.2% of the total sample were The Protectors-Introverted Intuition with Extraverted Feeling (INFJ) while 1.1% of the sample were The Nurturers-Introverted Sensing with Extraverted Feeling (ISFJ) and .8% each were The Performers-Extraverted Sensing with Introverted Feeling (ESFP) and The Mechanics-Introverted Thinking with Extraverted Sensing (ISTP). However, none of the participants in the study is an Idealist-Introverted Feeling with Extraverted Intuition (INFP).

TABLE 8: SUMMARY OF THE PERSONALITY TYPES OF THE PARTICIPANTS IN THE STUDY

Personality Types	Frequency	Percentage (%)
Extraverted Thinking with Introverted Sensing (ESTJ)	344	52.2
Extraverted Sensing with Introverted Thinking (ESTP)	19	2.9
Extraverted Feeling with Introverted Sensing (ESFJ)	36	5.5
Extraverted Sensing with Introverted Feeling (ESFP)	5	0.8
Extraverted Thinking with Introverted Intuition (ENTJ)	49	7.4
Extraverted Intuition with Introverted Thinking (ENTP)	19	2.9
Extraverted Feeling with Introverted Intuition (ENFJ)	11	1.7
Extraverted Intuition with Introverted Feeling (ENFP)	9	1.4
Introverted Sensing with Extraverted Thinking (ISTJ)	112	17
Introverted Sensing with Extraverted Feeling (ISFJ)	7	1.1
Introverted Thinking with Extraverted Sensing (ISTP)	5	0.8
Introverted Feeling with Extraverted Sensing (ISFP)	12	1.8
Introverted Intuition with Extraverted Thinking (INTJ)	13	2
Introverted Thinking with Extraverted Intuition (INTP)	9	1.4
Introverted Intuition with Extraverted Feeling (INFJ)	8	1.2
Introverted Feeling with Extraverted Intuition (INFP)	0	0

5.4 PERSONALITY TYPES AND RESILIANCE

The relationship between the personality types and levels of resilience are presented in

Table 3. The results showed that a slightly high number of participants with ESTJ personality

type (53.2%) exhibited moderate levels with 52.7% and 50.5% exhibiting high and low levels of resilience respectively. This relationship was not significant (p = 0.826). It was also observed that with regards to the ESTP personality type, only 4.1% of those who had this personality type had high levels of resilience, with 2.3% and 2.8% showing moderate and low levels of resilience respectively. The relationship between the ESTP personality type and resilience was not significant (p = 0.571). It was also observed that 6.6% participants who had the ESFJ reported moderate resilience level while 4.7% and 4.1% of participants who had the ESFJ reported low and high resilience levels respectively. However, the relationship between the ESFJ personality type and resilience was no significant (p = 0.458).

Further, it was observed that 1.4% of participants who had the ESFP personality type reported high resilience levels while 0.7% and 0.5% of the participants who had the ESFP personality type reported moderate and low levels of resilience respectively. However, the relationship between the ESFP personality type and resilience was not significant (p = 0.609). It was found that 9.6% of participants who had the ENTJ personality type reported high resilience levels while 7.5% and 6.3% of the participants who had the ENTJ personality type reported low and moderate levels of resilience respectively. However, the relationship between the ENTJ personality type and resilience was not significant (p = 0.463). It was also observed that 4% of participants with the ENTP personality type reported moderate level of resilience while 2.1% and 1.9% of the participants reported high and low levels of resilience respectively. However, the relationship between the ENTP personality type and level of resilience was not significant (p = 0.298).

TABLE 9: RELATIONSHIP BETWEEN RESILIENCE AND PERSONALITY TYPES (16PF)

16 PF	Resilience Levels			
	Low (N=212) (%)	Medium (N=301) (%)	High (N=166) (%)	*p values*
ESTJ				0.826
Yes	50.5	53.2	52.7	
No	49.5	46.8	47.3	
ESTP				0.571
Yes	2.8	2.3	4.1	
No	97.2	97.7	95.6	
ESFJ				0.458
Yes	4.7	6.6	4.1	
No	95.3	93.4	95.9	
ESFP				0.609
Yes	0.5	0.7	1.4	
No	99.5	99.3	98.6	
ENTJ				0.463
Yes	7.5	6.3	9.6	
No	92.5	93.7	90.4	
ENTP				0.298
Yes	1.9	4.0	2.1	
No	98.1	96.0	97.9	
ENFJ				0.455
Yes	2.4	1.0	2.1	
No	97.6	99.0	97.9	
ENFP				0.997
Yes	1.4	1.3	1.4	
No	98.6	98.7	98.6	
ISTJ				0.652
Yes	15.1	17.6	18.5	
No	84.9	82.4	81.5	
ISFJ				0.364
Yes	1.4	1.3	0.1	
No	98.6	98.7	99.9	
ISTP				0.266
Yes	0.5	1.3	0.0	
No	99.5	98.7	100.0	
ISFP				0.142
Yes	3.3	1.0	1.4	
No	96.7	99.0	98.6	
INTJ				0.803
Yes	2.4	2.0	1.4	
No	96.7	98.0	98.6	
INTP				0.012
Yes	3.3	0.3	0.7	
No	96.7	99.7	99.3	
INFJ				0.533
Yes	1.9	1.0	0.7	
No	98.1	99.0	99.3	

Further observation from Table 3 shows that 2.4% of participants with ENFJ personality type reported low level of resilience while 2.1% and 1% participants ENFJ personality type reported high and moderate levels of resilience respectively. However, the relationship between the ENFJ personality type and resilience was not significant (p = 0.455). It was found that 1.4% each of the participants with the ENFP personality type reported high and low levels of resilience while only 1.4% of the participants the ENFP personality type reported moderate level of resilience. The relationship between the ENFP personality type and resilience was not significant (p = 0.997). It was further observed that 18.5% of the participants with the ISTJ personality type reported high level of resilience while 17.6% and 15.1% of the participants with the ISTJ personality type reported moderate and low levels of resilience significantly. However, the relationship between the ISTJ personality type and resilience was not significant (p = 0.652).

On the other hand, only 1.4%, 1.3% and 0.1% of participants who had the ISFJ personality type reported low, moderate and high levels of resilience respectively. However, the relationship between the ISFJ personality type and resilience was not significant (p = 0.364). It was observed that 1.3% of the participants who had the ISTP personality type reported moderate level of resilience while 0.5% of the participants who had the ISTP personality type reported low level of resilience. However, none of the participants who had the ISTP personality type reported high level of resilience. The relationship between the ISTP personality type and resilience was not significant (p = 0.266). It was also observed that 3.3% of the participants with the ISFP reported low level of resilience while 1.4% and 1% of the participants with the ISFP reported high and moderate levels of resilience respectively. The relationship between the ISFP personality type and resilience was not significant (p = 0.142).

It was observed that 2.4%, 2% and 1.4% of the participants with the INTJ personality type reported low, moderate and high levels of resilience respectively. However, the relationship the INTJ personality type and resilience was not significant (p = 0.803). It further found that 3.3% of the participants with the INTP personality type reported low level of resilience while 0.7% and 0.3% of the participants with the INTP personality type reported high and moderate levels of resilience respectively. The relationship between the INTP personality type and resilience was statistically significant at the .05 alpha level (p = 0.012). Finally, it was observed that 1.9%, 1% and 0.7% of the participants with the INFJ personality type reported low, moderate and high resilience levels respectively. However, the relationship between the INFJ personality type and resilience was not statistically significant (p = 0.533).

5.5   SUMMARY

In South African Police Service, ESTJ's are more prevalent than other personality types followed by ISTJ and ENTJ. Least prevalent is ISTP and there was no participant with the personality code INFP. In relation to personality and resilience ESTJ's was found to be more resilient (52.7%), whereas the next dominant personality type who exhibited high resilience was ISTJ (18.5%). Almost the same percentage of ESTJ's (50.5%) showed low resilience followed by ISTJ with 15.5%. Resilience exhibited was high with the ENTJ (9.6%) when compared to their representation of the sample 7.4%. No other inferences can be drawn by the quantitative study as it was targeted to ascertain only the personality codes and their relation to resilience.

CHAPTER 6

QUALITATIVE ANALYSIS

6.1   INTRODUCTION

This chapter is focused on the second phase of date collection: the Qualitative method. Semi-structured interviews were used in order to collect the necessary information, in support of the first phase of the research. In this chapter, the Qualitative analysis is discussed based on the responses of the participants. Data was coded, themes and sub themes were identified. The subjects' responses are represented in italics.

6.2   RESULTS

The researcher used the technique of saturation to determine sampling size. An open-ended questionnaire was developed and used by the researcher. The researcher depended on multiple forms of data in the interviews, such as Observation, Documentation and Body Language, rather than relying on a single source of data. Creswell (2014) mentioned that Qualitative researchers collect data, Face to Face through Observation, Documents Notes, Observes Body Language, and Utterances of the Participants in this interview method. The participants were purposefully selected from the Quantitative sample to investigate the role and impact of risk and protective factors. The participants who scored high, medium and low on their sense of coherence (SOC) scores were selected for the second phase of research. This connected them to their Personality types and the protecting or promoting factors that shielded them from adversities and provided coping skills to recoil to the normal functioning.

The participants' responses are reported as per their reflection in italics. Main themes and sub-themes were identified and discussed. 26 respondents participated in the interviews, they will be referred as by the letters A to Z to maintain confidentiality. The researcher has included her views and perceptions to expand on the findings.

TABLE 10: REFLECTING MAIN THEMES AND SUB-THEMES

Main themes	Sub-themes
Exposure to traumatic scene	Training
	Past experiences
	Positive emotions
	Colleague's death on scene
	Children involved in the scene
Stigmatisation	Seeking assistance form Employee Health and Wellness (EHW)
	Confidentiality
Support (Protective factors)	Inadequate organisational support
	Lack of empathy
	Increased workload
	Lack of resources
	Family support
	Lack of empathy
	Poor medical benefits
Coping	Resilience
	Acceptance of the situation
	Positive attitude and being happy
	Active and inactive participation
	Utilisation of EHW services
	Hobbies
	Futuristic goals

6.3   THEME ONE: TRAUMATIC EXPOSURE

Sub-Themes: *Training, Past experience, Positive emotions, Colleague's death on scene* and *Children involved in the scene*.

6.3.1   THEME TRAUMATIC EXPOSURE

Senior officers who developed tolerance to the scene usually recall their first scene vividly. Junior Policemen also reflected the same.

Participant A mentioned, *"Bodies or bad bodies does not affect me as I have killed the fear while I was working at a mortuary."*

Participant C said, *"My first time I was shocked to see the double murders, my commander arranged for Debriefing and gave me the rest of the day off. But next day it was not so bad and I managed it."*

Participant M expressed, *"The scene was a bit hard but I managed to cope without any help."*

Participant H ascertained, *"No nothing affected me, if I am stressed I would definitely seek help from the professionals."*

Participant G expressed that, *"I was mentally prepared, but still it's not easy, I spoke to my girlfriend about it, she is very supportive, it was fine."*

Participant P expressed, *"I was troubled initially, now I am used to it and have grown stronger."*

Participant R said, *"It affected me, I cried a lot privately, fought with my fiancée and home stress added to it, I found it hard with no support. I did not know about Debriefing then, but somehow I coped."*

Participant Y reflected, *"I am in a crime record centre; I can handle dead bodies of any nature but will not go to the mortuary and attend to the autopsy. When I attended mortuary the first day, I threw up, fled from there. Since then I am performing office bound duties and have applied and am waiting for a transfer from this unit."*

Respondent S said, *"One is not the same after witnessing the gruesome scenes, yes I am strong, but something, I think I am very different from the general population."*

Respondent P responded, *"Our job is very different from Doctors or other Professionals, we are trained to be hard, but you change after few months or years, you adapt*

that new you. As much as I am in control I can't easily speak to the outside people, I think I can relate well with Police members, most of them are my friends."

Participant C claims, *"I can handle any situation; I have noticed I don't talk or mix well with people. I do drink once a week, but I am not an addict."*

Participant Y said, *"I don't drink, I know who to speak to. Yes, after witnessing a post-mortem I learnt about myself, I am not that tough at all."*

Respondent V said, *"My first introduction to the crime scene was shocking, I came home and drank, I drink socially only."*

Respondent N mentioned, "I have to receive Counselling, consult a Psychiatrist and take my medicine to get rid of anxiety."

Participant K said, *"I drink occasionally, I am strong, I feel I am different, solve problems differently, seems I have a Police Personality, I don't do drugs or drink like a fish, being in the Police has brought an order in my life, I stick to it."*

Participant Z admitted, *"I drink occasionally."*

Participant R stated, *"I have no support, to drown my sorrows I drink, but don't go overboard."*

Respondent X said, *"I depend on medication not alcohol, it aggravates the problem, it does not solve it."*

Most respondents mentioned that they managed to cope with the impact of gruesome crime scenes. They also vividly recalled their attendance on their first crime scene and mentioned that they will never be able to forget them. It is concluded by the above responses, that some get through trauma with alcohol and medicine. Some claim they are strong, that nothing affects them, and that their life is under control. The majority of participants

acknowledged the fact that their Personality has shifted either towards being tougher or more Resilient, but still different than they originally were.

Police members think they are unable to blend well with the general population as the nature of their work is diverse and they are different to the general population.

6.3.2   SUB-THEMES: TRAINING

Police are trained to be Resilient and not all Police officers experience Trauma and Burnout.

Participant F said, *"Training in the academy has taught us to be strong and field Training has made me even stronger by teaching and exposing us to scenes which we would be doing as part of our duty."*

Participant F mentioned, *"Nothing affects me it was all part of our Training. We are Trained to stay calm in all situations, but basically I am an emotionally strong person."*

Participant U said, *"No I was fine, we were taught and we were prepared for anything in the line of duty. Before I went to my first scene, I was briefed by the field Training officer and the seniors at the station on what to expect, so it did not affect me at all."*

Participant B added more saying, *"I knew what to expect before I could join the Police, that the Training will be tough, has to be away from the family and I was prepared for this. I learnt a lot in Training including socialising and mingling with different cultures and understanding their culture, it has made me even stronger to combat crime. Culture helps in dealing with the community."*

Participants F reflected that, *"Adjustment is a big problem. I am the only child at home, pampered and therefore discipline became an issue. I forgot everything once I started my Training. It was interesting and I am what the academy has made me today."*

The research found that along with Training, individual Personalities played an important role in officials handling their first crime scene and coping with it. Most of the participants acknowledged that their academy Training indeed played an important role in shaping them as better Policemen, adept in handling any kind of crime scenes.

6.3.3   SUB-THEMES: PAST EXPERIENCES

Past experience was one of the sub-themes that emerged, from the participants' responses.

Participant W shared that, "*Some of my colleagues and junior officers were stressed, not me, I think because I am used to it and due to my experiences I know what to do in such situations.*"

Participant Y put forth, "*No scene upsets me, it has no effect. I am a strong person and my years of work and duty has taught me to handle it very well. In fact I motivate and talk to those who are affected and encourage them to see the psychologists or seek some kind of help.*"

Participant R shared, "*In the beginning I could not handle the smell of the blood, it was too strong, I had flash backs but it lasted for two days. Now I take precautions and I am prepared if I am attending a gruesome scene with lots of blood.*"

Participant Q said, "*I am 20 years in the service now. It is all old now. I can attend to any kind of scenes it does not bother me.*"

Participant F conveyed, "*My experiences have taught me what to do in a particular situation. I even help the Trainees in handling the scene and explain to them how they can overcome the crime scenario if it is bothering them.*"

Participants J, said, "*Two years is enough for a Policeman to have all that experience in dealing with the crime scenes and situations. I have learnt from my mistakes and have grown as an individual.*"

The participants reflected that their past experience and that of their colleagues positively assisted them in dealing with Trauma. They got better with every scene they attended, as it became a learning experience through applying techniques that worked in the past.

6.3.4   SUB-THEMES: POSITIVE EMOTIONS

Positive Emotions; elicit the Positive Outcomes. It helps in balancing Physical, Psychological and Emotional well-being, which are markers of optimal well-being. The above is reflected in some of the participants' expressions.

Participant A said, *"Before joining the Police I worked as an undertaker, sometimes it was stressing and worrying, but I had to do my job. I try to clear my head, never let negative thoughts cloud my judgement. Comparing the work, I have done this is nothing. If I am stressed, I find interesting things to do and try to be happy that at least I am protecting and serving the public."*

Echoing this statement participant B asserts, *"I take life as it comes, try not to dwell on that. There are so many things I can do and be happy about, I do the feed the needy every month and that gives me immense happiness which is incomparable."*

Positive emotions have been identified as Facilitating Approach of behaviour; it prompts the individuals to engage in activity with their environments (Cacioppo et al., 1993; Carver & Scheier, 1990).

Participant N reflected, *"I am emotionally very strong, I help people around me if I find them Traumatised or I take initiative talking to the commander about the situation. Talking helps and it worked with my colleagues, now my commander has tasked me to take care of the Traumatised members in terms of supporting and assisting them. Really nothing makes one happier to see one's colleague come out of the situation and be strong to resume duties."*

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Participants D said, *"Crime scenes are sad, but I attend to the scene looking for clues, so that the perpetrator is behind bars. When an arrest is made, oh! I am so happy and when he is declared guilty, then I know I have done my job. I am happy I provided closure to the family. So instead of looking at things negatively, I always think about how I managed to help the family. So, I am in the right job and I am happy to be here and serve the community."*

Members concluded in their responses that "Being emotionally strong" kept them motivated in their work. They are happy about their jobs as they are doing greater good by serving the community.

6.3.5 SUB-THEMES: COLLEAGUE'S DEATH ON SCENE

Police officers usually battle to handle a colleague's or any Policeman's death. Since they consider all Policemen as family members, a Policeman's death on the scene can impact them deeply.

Participant O expressed the same feelings, *"A Policeman should not die like that in the hands of criminals. We are only doing our job. Last scene when I saw my colleague's body, the stars on his shoulder, and the uniform made me cry and I stood there immobile, weeping, I was not assisting to comb the crime scene."*

Participant T mentioned, *"We are accountable for every bullet we discharge, but the criminals have nothing to account for. I am angry with the criminals, with the people who don't understand us and with the management and government not doing enough to put the criminals away. Our lives are always in danger."*

Participant C responses were similar, *"We are not sure when leaving home, that we will come back alive. Seeing a Policeman lying down dead is not a good sight emotionally, it makes me think, I could be the next."*

The participant L echoed that, *"A few years back my partner was shot and dead. Criminals have more rights and freedom. Look at us, we have a firearm but are unable to protect ourselves, every bullet is answerable. Why kill a Policeman, he is only doing his duties, yet we are condemned by the media and community should something go wrong."*

Most participants were of the opinion that situations like the above are difficult, and that they affect all Police members negatively, but at the same time it unites all Police members, irrespective of race and gender, when they lose a colleague.

6.3.6   SUB-THEME: CHILDREN INVOLVED IN CRIME SCENE

The majority of the participants acknowledged the fact that regardless of the amount of training they receive, they are not prepared them to handle and deal with cases where children are involved, be it rape, assault, murder, or kidnapping.

Participants U expressed concerns and anguish based on the past experiences of attending to the scenes of children *"When I saw the little body, first it was shock that swept over me, I was angry with everyone around me, wanted to punish the criminals myself. I also thought how the parents would take this news and how they will come to terms. I was quiet most of the time, reaching home I did not speak much, it was playing on my mind."*

The above participants along with E and M spoke to their commanders and attended debriefing sessions. In their words, *"Debriefing made it a lot better, yet this anger was persisting with me for some days. What did the innocent do to be raped and killed in such a horrific manner? They are so lovely and innocent how someone could do this barbaric thing, I can't understand."*

Participants A, E, G, M and N, who have children that age expressed, *"I did not know I was attending to a child's body. When saw the little limp body, I was numbed and shocked, I was reminded of my children. All along I thought as though it was my daughter. Thoughts ran*

through me, what I would do if I find my little one's body. I was enraged; I would have killed them if they were in front of me. I sat next to the little girl and cried. It took me quite some days to get over it. Still I remember the face of the child."

It was ascertained that most participants can handle crime scenes, but it affects them when they witness their colleagues or a Police officials' body, and they were extremely sensitive to a child's crime scene. Some Police officials personalised it, while some participants sought professional help for their mental well-being.

6.4   THEME TWO: STIGMATISATION

Sub-themes: *Seeking assistance from Employee Health and Wellness (EHW)* and *Confidentiality*.

6.4.1   THEME: STIGMATISATION

All members echoed the above mission of SAPS: their duty is to protect the community. They witness dead bodies and death every day and it is part of their lives. Yet they hesitate to get help due to branding themselves as unstable.

Participant O expressed similar views, *"We work for society; the very society blames us for crimes. They don't understand what we go through, we have family too, we have to be strong for them and continue work as though nothing happened. We know it is part of our job, our bread and butter, we endure and survive. Do we have a choice? We ignore and carry on our duties."*

Participant S said, *"Yes there is Debriefing, how it is going to help us, because after attending Debriefing we attend another murder scene probably the same day or after, so I don't bother, besides if I take Psychologist's help, next day at the station my colleagues laugh and joke about it, so I rather not take help."*

Royle and Farrell (2009) write that, *"The literature shows that individuals with mental health problems are subjected to Discrimination, Prejudice and Ignorance and are significantly Stigmatised. Stigma occurs when elements of Labelling, Stereotyping, Cognitive separation into categories of 'Us' and 'Them,' status loss and discrimination co-occur".*

6.4.2 SUB-THEME: SEEK ASSISTANCE FROM EMPLOYEE HEALTH AND WELLNESS (EHW)

The majority of the participants mentioned that they are aware of the services of Debriefing and have at some stage or motivated their colleagues to seek assistance of EHW. Participants C, G, N, V and Y's concerns were the same. The responses of participants regarding EHW services are as below:

Participant S said, *"Crime scenes were not easy to handle, they were devastated, spoke to the commanders and arrangements were made to be Debriefed."*

Participant Y stated, *"My Debriefing extended to Trauma counselling, I will not go back there and therefore I am refusing all the courses I am nominated because I do not wish to waste state finance on me."*

Participant Y further said, *"Counselling with EHW is helping me; I am coping with my stressors and my feelings and have come to terms with trauma."*

Participant V verbalised, *"I could not sleep in the night, I saw the Chaplain from EHW, who prayed and Counselled me, and then I consulted the Psychologist who referred me to a Psychiatrist, now I am on medication for anxiety. I am doing fine with the holistic approach of intervention."*

Therefore, it is ascertained that Police members are aware of the services provided by EHW and know where to look for help. Some participants expressed differently. Participant A expressed, *"One has to make use of the resources available at one's disposal to get better. We*

have Psychologists and Social workers who know our work and are the best to ask for assistance.”

Respondent B said, *“My commander is supportive and makes arrangements with the Psychologists for Debriefing. I don’t see any Stigma. It is better to get help than to be stuck in a situation.”*

Participants C, D, E and F all expressed similar views about using the services of Psychologists and Chaplains. Respondent G said *“Police members should attend Debriefings and Counselling and talk about the situation.”*

Police member I stated, *“Members must stay positive and use EHW for further intervention.”*

Member J said, *“I did attend Debriefing and I felt better.”*

Respondent L said, *“I only speak to my colleagues, if I consult Psychologists, it has a bearing on my transfer and promotion.”*

Participant R said, *“I was in a bad state, I used to cry a lot. I received help from EHW, who further referred me to a Psychiatrist. Medication is helping me and I am managing on my own now.”*

Member T commented, *“I will take care of myself and use all the resources available at work to get better and function optimally because I hate to sit at home feeling sick.”*

Participant U said *“I was not affected by the scenes, but my colleagues were. My commander made arrangements for Debriefing sessions, which helped them a lot.”*

SAPS has the EHW unit, which is comprised of Psychological services, Social work services and Spiritual services. Psychological service is tasked with Counselling, Trauma Debriefing, Career Session, Alternative Placement, Crisis Intervention etc. Social work services emphasise Family Intervention, Implementation of HIV/AIDS and Disability programmes. Spiritual services conduct Home and Hospital visits, and provide Couples

Counselling, Funeral and Memorial services. In order to reach the SAPS members, EHW has to do intensive marketing of the services emphasising Confidentiality. The rest of the participants answered with the same response of using EHW for the intervention and support because being Police Psychologists, they understand Policemen better than external Psychologists. Some members prefer consulting external health professionals as they believe their Confidentiality is compromised and they are branded as soft-hearted Policemen.

6.4.3   SUB-THEME: CONFIDENTIALITY

Confidentiality is the main issue which stops Police members from getting assistance or any kind of early intervention. Police members feel Confidentiality is compromised by EHW professionals. Most of the interviewees were of the opinion that their counselling sessions would be discussed with their commanders, and by consulting a Psychologist or a Psychiatrist it would ruin their career in terms of promotion and affect their transfers.

Participant F put forth, *"I have come to know negative issues about my colleagues when they consulted EHW, how will I know my visit to EHW will be Confidential, I am scared of seeing EHW, back in office people joke and say you're such a baby, can't handle one scene, so I will never see anyone from EHW if I am suffering with stress or Trauma"*.

Participants C was confident, *"No I don't have that issue, initially I was scared too. Now after consulting so many times, my problems stay Confidential, I have complete faith and trust in EHW and their services. Stigmatisation was also a concern."*

Participant K said, *"I did consult a Psychiatrist for a Traumatic condition. My firearm was removed from me, I was not sent on operational duties. When I applied for promotion I was disadvantaged because I was not performing operational duties, besides management thought my medication had side effects and I was unable to function without it. So I will discourage anyone who wants to consult a Psychiatrist or be Admitted to the Hospital."*

Participant H's response was contrary, *"I am strong, I am not affected by the scenes, but if I am Traumatised or God forbid have PTSD I will definitely take help of EHW or a Psychiatrist and be admitted to hospital if it is going to make me better. Having a good and happy life is all it counts. I am open to any help."*

Participant G admitted that, *"SAPS is a big organisation, so there is no Confidentiality. EHW may be Confidential, once the management gets the report, it is discussed in the meetings and that goes to national office, irrespective there is no Confidentiality. In the Police everyone knows every other member's problems, therefore it does not bother me and I don't mind seeking any help, internal or external, as long as I am in good health."*

Participant O said, *"In this organisation, everything is transparent, you discuss in Confidence, next thing you hear you are the subject of discussion, so besides work I don't talk about my personal matters or my family at work."*

Participant W stated, *"Everything has a bearing, your Illness, Temporary Incapacity, your Stress etc. all impacts when considering for a post or promotion. So it is better not to say anything."*

It emerged that Policemen are reluctant to receive any help unless it was made mandatory by his or her commander. They perceive EHW as working together with their commanders, breaching Confidentiality. They are of the opinion that consulting EHW will have a negative effect on their promotions and transfers.

6.5   THEME THREE: SUPPORT

Sub-themes: *Inadequate Organisational Support, Lack of Empathy, Increased Workload, Lack of Resources, Poor Medical Benefits, Family Support,* and *Personal and Psychological Well-Being.*

6.5.1   SUB-THEME: INADEQUATE ORGANISATIONAL SUPPORT

Members seemed unhappy about the management over several issues. Half of the members reflected as below.

Participant T, *"We work so hard, our lives are in danger, yet get no commendation from the management. Our salaries are so poor. Look at our work place, it is unclean. We don't have enough resources; don't have as much as gloves to attend an accident scene. Yes some members are not tough; they succumb to the pressure and stress and are admitted to the hospital. How many commanders visit their members at the hospital? My friend badly needs a transfer and another colleague is suffering from major depression, they don't want to medically board him. He is more Stressed with the paper work than the Stress itself. Management should look into the merit of the case and help the members. Instead they are losing members."*

Some participants' experiences were different. Participant N initiated, *"My commander understands us, he asks us if we need Debriefing and talks to the Chaplains and arranges for hospital visits and sessions, he appreciates our work. I don't see a problem there. But in the Police there is no reward like a medal or cash price on a job well done."*

Participant H added, *"When I save a life, or bring the criminal to books, I know I have done my job, justice is served. I don't expect anything from management, I feel rewarded inside, and the satisfaction that you made a difference to a life is unimaginable."*

Participant V said, *"Management did not do anything to help me. My commander insists I attend Debriefing sessions on my rest days, I travel 40km a day, I have obligations towards my family, and management don't support us."*

Participants F, K and L said, *"Our commanders refer us to EHW, not that they care about us, they just have to follow the protocol. But management does not give us Positive*

feedback for our work; forget about rewards, even as much as commendation letters or honouring the members."

In general, Police members reflected that the significant factors affecting them along with the dangers of Policing duty, Inadequate Support, Lack of Communication, Demands of Work Overflowing and one's home life as main contributors to feelings of Stress. Some of the members related that their commanders were understanding and arranged for Debriefing and Counselling immediately. Every member agreed that transfer was an issue, management did not understand their circumstances and they were usually turned down on the grounds of shortage of manpower. Alternatively, they had to look for cross transfer. From their responses, it was clear that some members expected motivation and appreciation of their work from the organisation, whereas for some it was internal satisfaction and they accepted the situation as it was. It was all about their locus of control whether it was internal or external.

6.5.2   SUB-THEME: LACK OF EMPATHY

Almost all law enforcement agencies are the same: subject to Rules, Regulations, Opportunities and Problems. Police managers may have forgotten or blocked their own earlier experiences, thus their insensitivity or lack of empathy to the Psychological needs of Police officers was evident.

Participant Q mentioned, *"I spoke to my mentor and manager about my feelings; they said I must get used to it, I will attend and witness more of those scenes and was warned I should not book off sick."*

Participant R expressed, *"When I reported to my commander, instead of referring me to EHW he gave me advice that it will get better and asked will I seek assistance from EHW for each job done on duty."*

Participant X reported, *"I was affected by the scene, I asked my commander for two days leave to deal with it, and my leave was turned down. One of colleagues who is suffering with PTSD, his transfer was turned down on the basis that he must look for cross transfer. Management is delighted when you combat crime successfully, but are not ready to take responsibility or support the members in dealing with the consequences"*.

Participant K commented, *"They are expected to work despite how they feel, they are on standby duties, have little children and babies with no one to take care of them, yet they have to drop everything to scenes at midnight. They have no compassion or sympathy."*

Participants B, D, N, R, L, O and P put forward, *"Forget about showing emotions, they don't take our situations into consideration. Today my transport picked me late due to traffic congestion; my commander picked on me and reprimanded me in the parade for being 10 minutes late. They forget we are human beings. Some things are beyond our control. If I am late next time I will receive a warning. I was embarrassed, felt as I am treated like a child."*

Member C said, *"I have so much time due, I am not allowed to take, due to shortage of manpower. I can't have a family life, I missed many occasions like Birthdays, Weddings, hey but work comes first. I don't mind doing work, but I need some sort of support and encouragement from the management here."*

The outcome on this theme was that commanders and supervisors refer officials to Trauma Debriefing, but that they are Insensitive with the issue of granting Leave or Temporary Incapacity Leave, and Approving Transfers or Alternative Placements which are Trauma related. The SAPS management does not take cognisance of them and their families. Members feel despondent due to management's lack of support and understanding.

6.5.3   SUB-THEME: INCREASED WORK LOAD

None of the participants had taken prolonged sick leave or temporary incapacity leave due to mental illness. Only one participant mentioned that he took the day off after attending a gruesome scene.

Participant Q replied, *"At the station in my unit three constables are on prolonged sick leave, we have to carry the burden; it is too much to do."*

Member L said, *"Policemen taking sick leave is really a burden on us. Our dockets are escalating, so is our work."*

Participant U said, *"The people who are Traumatised are given office bound duties until they get better. Fact is they don't get better and other Police members have to share the work, which is unfair on our part."*

Participant A mentioned, *"Extra work is not a problem to me. The only issue is we don't get a chance to take leave and I have time due that lasts for the whole year, due to extra work load I am unable to take time off, always I am filling in for other people."*

Respondent E added, *"I am not heartless, I understand their situation, but who cares for us? We will be burnt out and then what? I am not with my family for most functions and weddings. Management should do some kind of intervention for them to return to work, so that it helps them and us too."*

Most of the participants reflected the same thoughts about increasing work load due to a colleague's sick leave. Some members articulated that, *"Police members can handle the crime scenes; it is the people who come with their Qualifications and Degrees as Crime Scene Experts and bag a higher rank than us, after attending to a few scenes they book off sick. We have to take over their cases, this is unfair. Management must subject them to some kind of Police Training so they recruit people who are capable of coping. Currently I am doing two people's job and have no time to take leave, yet other people can be on temporary incapacity*

leave. I get frustrated sometimes. They don't fill up the vacancies as there is critical shortage of manpower."

Due to temporary incapacity leave and sick leave the rest of the members have to share their work and hence are burdened. Therefore, they are unable to take their leave, and are feeling the stress and pressure working on them.

6.5.4   SUB-THEME: LACK OF RESOURCES

Participant V indicated, *"We do not have any spare private rooms for interviewing the suspects, same applies to our Counselling as well. Psychologists are unable to conduct their Debriefing or Counselling here, we are expected to go to their office but only on our rest days."*

Participant P added, *"Management don't realise the dangerous situations we work in, we don't have basic equipment like gloves while dealing with victims' bodies covered with blood. Sometimes vehicles are not worthy to drive on gravel roads, noisy radios, all make it difficult. Yet we are ready to attend another scene, we try to keep ourselves happy, because what's the point of being sad knowing that we will do the same work and be in the same environment again and again."*

The same content was expressed by Participant K *"Our own management fails us, I can't blame the public if they blame us or misunderstand us; because the public is not aware about inadequate resources, they blame us as our service delivery is poor."*

Participant P echoed the same as above, *"Despite all shortages we do our job, at the end of the day we are happy we all are alive and no member was dead. If the operation goes wrong they look for reasons to blame. This is all done with minimum resources available."*

Participant S said, *"We are not blessed with resources like big stations, sometimes we run out of forms, have faulty computers, no storage space and the shortage of space at the office makes us despondent."*

Respondent Q mentioned, *"Some stations we visited at the rural areas have no electricity, or wash room facilities, how do they expect us to work like that? Even though we don't work at that station, our fellow colleagues who work at that station is like our family. Some stations have no proper holding cells for the detainees. Still we survive and do our job".*

The SAPS is a big organisation, and any change or movement is very slow. Where logistics and resources are concerned, there is abundance of paper work involved, in most of the issues the approval has to be granted by the National Office. This chain of command sometimes slows down the process and hampers the service delivery.

6.5.5 SUB-THEME: POOR MEDICAL BENEFITS

Police work is one of the most dangerous occupations in comparison to rest of the emergency services. Not all Police officers react similarly in a given situation, and some succumb to Psychological illness such as Depression and PTSD. Medical benefits are available specifically to deal with depression and PTSD. However, Police members feel the available benefits are not enough to cater for or cover the medical demands. Participants expressed different views about the medical insurance in the Police.

Participant M replied, *"I am a constable for the past 6 years, I am unable to afford a higher plan, I go for the lower plan. The lower plan is not enough to cover a family of four. My medical aid exhausts midyear; I am forced to pay cash. I am not reimbursed the full amount I pay, I owe doctors money and I am in debt."*

Respondent O said, *"My wife underwent an operation last year. Even though it was in-hospital benefit, only some amount was paid for the service providers, the rest I am paying every month."*

PolMed has different boards for Depression, Back Injury and so on, and members were aggrieved that it is not enough with the Police members suffering with PTSD and long term Psychological illness.

Participant X replied, *"Medical aid only provides 22 days of hospitalisation for Rehabilitation facilities. Some Police members were admitted to the Rehabilitation facility, medical insurance did not pay for the full course of 28 days. They ask motivation for everything and they lose the documents faxed to them leaving the member to fend for himself."*

Participant A reflected quite differently, *"I don't fall sick often, my medical aid is mainly for my family. But you have to manage your benefit, I know some of them misuse and blame the medical aid."*

Participant E stated, *"Medical schemes are there to make money. Every year the premium goes up but the benefits stay the same."*

The rest of the members stated, *"We Policemen mostly suffer with Psychological conditions, or Injury forcing us to consult specialists, where most of them claim cash, they don't accept medical aid. Reimbursement of the money is an adventure. Additionally, at work they ask for a Psychiatrist's report, which can further cost R1500 just for a piece of paper. Medical insurance only pays part of the money and the balance is paid by the member. We don't have that kind of cash. Medication is another story, very expensive. We should have something in place which covers comprehensively."*

In summation, Police members are not happy with the medical aid scheme, which they think is inadequate to meet the medical requirements of the members. Police members also expressed displeasure regarding the inefficient administration and delay by medical insurance. Almost all participants perceived benefit issues in a similar manner.

6.6 THEME: FAMILY SUPPORT

Due to stigmatisation Police officers are reluctant to acknowledge stress or any kind of Psychological illness, and therefore they refrain from sharing their experiences and emotional burden. They specifically exclude their family members in order to shield them from their Traumatic experiences, irrespective of the fact that they take work home in one form or the other. Some Police officers discuss work as their family is the single source of support in coping.

Participant E expresses as, *"I don't share work issues with my family. As it is they are always worried about my safety, overly I don't want to stress with my issues."*

Respondent M said, *"Since my sister is also in the Police I talk to her, I have no problem sharing, as we support each other."*

Participant I expressed, *"I don't involve my family in my work matters."*

Participant L commented, *"My family is the biggest support I have, I do discuss my problems, but I don't trouble them with every day stressors, at the end of the day they are my coping system I don't want to stress them."*

Participant X said, *"My family is aware of my stressors, they support me therefore I am strong; besides I take the assistance of Social workers and Psychologists."*

Respondent A replied, *"My wife stood by me and supported me in my bad times. I talk to her about all the activities that take place at my work."*

Participant Q mentioned, *"My parents are old so I don't bother them but I communicate with my brother and sister, after every operation they call me and we talk."*

Participant R commented, *"My main support, my parents, passed away, I get stressed quickly, then my friends help me, I still I miss my parents."*

Participant O said, *"I confide in my mom and friends, it helps because no one can understand Police work besides their families and their Police colleagues"*

Participant U said, *"I was consuming alcohol a lot; I pulled through with the support of my commander and my family. They stood by me, then I realised what a solid support I had I did not realise it."*

Respondent H said, *"I have good social and family support and my siblings are close to me. I share everything with them, they even make Police jokes."*

Respondent Z said, *"I have good support of my family and girlfriend, I talk to them about my work, they are always encouraging and inspiring."*

Participant B said, *"I am on good terms with friends, people and my family, I am always happy. If I am distressed I communicate with them."*

Participant M stated, *"I am on good terms with my family, I communicate with them. Without their encouragement, I would not have consulted a Psychiatrist nor taken my medicine."*

Participant V said, *"I discuss my work with my family and girlfriend. They need to know what is going on in my life."*

Respondent C replied, *"The first scene I attended was a horrible experience, I vented to my mother and sister. Since then they make a point of asking if I attended a scene and how I was feeling."*

Participant G said, *"I keep work away from home, I only confide in my fiancé."*

Interviewee F said, *"I usually give a rundown of what happened at work and they are also interested in my work. In a way they are learning to stay away from danger."*

Participant P conveyed, *"I balance both my work and personal life. I don't bring stress or particular issues home, but in general I communicate with them."*

Participant S said, *"I try to deal with it myself by motivating myself, attending counselling sessions and taking my medicine."*

The participants' responses lead the researcher to the conclusion that most Policemen do discuss their work with their family members, and make them aware of their work situation in order to give them the transparency of what goes on in their work life. Some members were specific not to include family members in their work stressors. Most members reflected that their family members are their biggest support and source of coping. In general, the Policemen's work circumstances influence their family and quality life. According to the Police members their family is their only support - they don't want to lose them - so they shield them from all the problems they are experiencing.

6.7   THEME FOUR: COPING

Sub-theme**:** *Resilience*, *Acceptance of the Situation*, *Active and Inactive Participation*, and *Hobbies and Goals*.

Analysis of Qualitative methods revealed; the members who are coping have family support among their resources to deal effectively and perform productively. Some Police officers mentioned that, besides their family and friends, they were blessed with an understanding commander. Additionally, members had adapted skills such as praying, meditating and visiting the traditional healers. Participants' responses are reflected below.

Participant Q said, *"I have my family to talk to as my brother is a Policeman, he supports me a lot and therefore I learn a lot,"*

Participant L stated *"I spare my family with the problems. I only talk to my best buddies."*

Participant O expressed, *"My commander realises the situation, whether stressed or not he makes arrangement for debriefing sessions."*

Participant X stated, *"I have a good grounding, I have my family and friends, I pray and I never give up, I always keep on trying. I talk to EHW they are our support."*

This statement was supported by participant U's response, *"I am a very positive and fit person. I have a very good and supportive family and commander. Because of their support and help I am out of alcohol, I am clean for five years."*

The opposite was expressed by participant R, *"I am very private, I have cried privately a lot, I don't talk to my family about my work. I do consume alcohol regularly."*

Member T said, *"I take the initiative of talking to my commander whenever I am overwhelmed, it helps."*

A similar view was echoed by Participant Z. Member W added, *"I stay with my extended family, with my grandmother, mother and sister, but keep friends away, they are trouble. My commander emphasises that should we have any problems we need to contact EHW."*

Respondent E said, *"I don't share any work problems with my family as I have other ways of dealing with it, as long as I am mentally healthy."*

Respondent I repeated, *"I share with my father, mother and the Psychologists."*

Respondent D said, *"I saw very gruesome scenes, went through terrible times, but with the help of my family, friends and colleagues I am fine, I don't know if I would survive without them and their support."*

Respondent H replied, *"I have a network of support of family and friends; additionally, I have EHW as our support structure."*

Participant B said, *"I have parents, siblings and friends. I am spiritually inclined, and go to church regularly."*

Participants F, P and J expressed the same as above. Participant K's response supported the previous respondents' views.

Participant N said, *"I only speak to my friends. My wife works, I don't want to worry her. With the help of medication and friends I am pulling through."*

Participant V said, *"I spoke to the Chaplains, sometimes I talk about my problems with my family, I prefer EHW because they understand our job very well."*

Participant Y said, *"I prefer professionals like Social workers and Psychologist than sharing my problems with anyone else, only if I feel I am unable to manage the problems."*

Participant G said, *"I talk about my problems only with my fiancé, as I don't want to put my family in any kind of danger."*

The last respondent, participant S said, *"I consult professionals and friends rather than my family, they don't understand my world."*

More than half of the respondents shared that, when it comes to leave and time due their commander does not grant it immediately, but when he realises if members are not coping with either work or family related issues, he refers them to EHW. He makes sure they are dropped off and picked up at the EHW offices. They said, that they know commander's hands are tied and he can help only in some matters

It is evident through the participants' responses that most of the members cope, they look for coping mechanisms. Some members share their feelings and problems with their family, friends and commanders. Some choose to seek professional help while others opt out. Some members do not want to distress their families nor get professional help, but instead resort to negative coping mechanisms such as alcohol and substance dependency.

6.7.1   SUB-THEME: RESILIENCE

It is established in literature and the definition of resilience discussed in the previous chapters. Resilience is Individualistic, with Personality dispositions and Protective Factors one seeks or develops in the face of adversity; manage, cope and bounce back to normal functioning. Resilience adds value to the job and self-efficacy.

Participant K mentioned, *"I attended many scenes with dead bodies, shooting etc. but it did not affect me, I am trained to do that and help the community and I am doing my job. Well it will give me more satisfaction if the criminals are brought to justice, and then my purpose is fulfilled."*

Participant A mentioned the term 'Resilient', *"I am Resilient, working as undertaker made me strong, even then I was not scared to work on a dead body."*

Participant N said, *"I was not well after attending to double murders, I was referred to EHW, consulted a Psychologist and the Chaplain prayed for me. Now I am fine, nothing to worry about, after that I have attended to countless murder scenes."*

Participant D expressed, *"I did attend Trauma Debriefing; I am back to normal, now I know how to deal with it."*

Participant Y said, *"No scene upsets me, in fact I take an active role in referring my friends at work to EHW."*

Participant H gave a similar response. It is quite evident in participant V's response, *"Yes I experienced Trauma; I spoke to experienced members at the station. The experienced members were very helpful, their knowledge, tips and insight made us strong so I was ready to attend the next scene. Yes, negative things tended to vanish."*

Participant Y said, *"I was mentally prepared for what to expect so it was not bad at all."*

Respondent I's response was, *"I had no effect, I did not experience stress."*

Participant A said, *"So far by God's grace I am fine, should something happen, I will deal with it myself."*

Participant S replied, *"After attending to a murder and culpable homicide I was not well, I attended Counselling sessions and also motivated myself."*

Participant T replied, *"I have occasional stressors, I will try not to dwell on them, I block them out by reading books and getting busy."*

It is concluded on this theme that not all Police members get Traumatised, and those who are affected return to the baseline of functioning with some assistance of counselling or debriefing. The affected Police members are referred to external health professionals such as Psychiatrists, Spiritual services, Rehabilitation centres etc.

6.8   THEME: ACCEPTANCE OF THE SITUATION

Medical Boards, Transfers, Promotions, and Incapacity Leave are the main issues that place stress on members. Most transfer cases are due to Trauma, Stress, and PTSD.

Participant H mentioned, *"I passed the Psychometric testing to join the dog unit, but my commander turned it down due to shortage of man power, I was very disappointed. I told myself there will be another chance. I applied again after two years, this time my new commander approved it and now I am a dog handler."*

Participant B quoted, *"So far there are no disappointments. I will take it as it is and I always pray and my prayers are answered."*

Member W said, *"I can handle disappointments, I have overcome the stage of anger and grudge. Once the negative attitudes are shed, positive feelings make life more meaningful."*

Participant T said, *"I have not experienced any disappointments, but I am ready to face any kind of stress or disappointment by using the available resources."*

Respondent Z said, *"I applied to write Psychometric testing for the dog unit, but my application never went through. I was very disappointed. Life goes on. I tried again and was successful."*

Respondent S replied, *"I was very disappointed when my transfer to the unit was turned down. I wanted to be close to my family. I am on medication, I can't fight depression on my*

own. I approached EHW to assist with my transfer, I am still waiting for it. I am hopeful and believe I will get my transfer. I know these things take time, therefore I am not stressed but am waiting patiently."

Participants Q and F replied they have no disappointments so far. Participant A said, *"I think I will handle any pressure or disappointment because to achieve goals one has to overcome hurdles."*

Respondent X said, "I was disappointed when I did not get the promotion. I will not give up, I will keep on *applying."*

Participant L stated, *"My transfer was turned down. I accepted it, and focused on the future. I applied again and at last got it. One must keep calm and be patient and one will get through it."*

Respondent I said, *"I was not sad, but was doing future thinking, I sought help from EHW for my transfer."*

Member M said accepting situations is important: *"There is a time for everything, my time will come. I was hopeful and positive, that is what I did when I was not promoted."*

Participant E, D and F reflected the same as above. Participant C mentioned, *"I try avoid disappointments by remembering good experiences, that will make me feel better."*

It is concluded that most of the participants will be able to handle disappointments: some members with support and coping skills, while some get professional help. Challenges with transfers and promotions are a part of any organisation. The SAPS is a big organisation where all members who applied for promotions or transfers will not be accommodated or recommended. Members realise these are inherent issues of the organisation and consider it as part of the job, and accept it or wait for an opportunity to re-apply or reconsider.

6.8.1 SUB-THEME: POSITIVE ATTITUDES AND BEING HAPPY

Police members expressed as follows for this sub-theme:

Participant X said, *"I came out of the situation by praying, talking to friends and sometimes depended on medication to heal myself. But I was very optimistic that I knew with all the help I will get better."*

Participant U explained, *"I thought I was fine, until I started consuming alcohol. I saw external Psychologists, my family and my commander helped me get through this situation, now I don't consume alcohol, not even on social occasions. I was drowning in my sorrows but I realised that life is beautiful; God has given me an opportunity to serve people that got me out of the hell hole. Now I always see the brighter side of the problem. I am more happy and hopeful than ever I was."*

Participant R said, *"I do not consume alcohol because it does not solve the problem. I am always positive, a go-getter and know things will work out for the best and I never allow anything to get me down."*

Participant Z said, *"I have a big and happy family with mother, grandmother, sister and my girlfriend. I have attended countless scenes; I don't get stressed or traumatised. I talk with my family and friends. My family is full of fun, we always talk and joke and are very optimistic people."*

Participant W expressed the reflections as to having a family, *"I discuss everything with my mother and supportive commander. My daughter and mother understand my work. I am proud of myself that I save lives and that makes me happy and look forward for to the next day."*

Respondent E reported, *"I will not discuss with my family if I am stressed, I don't want them to be worried about me, but have very supportive friends, besides I will deal with it myself.*

I am a happy-go-lucky person, I don't think a lot but I am always very positive, that makes my outcomes also positive. It is part of the package."

Participant I said, *"I am positive at all times. I know where to seek help if I need one it and have a supportive family. During my rest days, we have fun playing games, telling jokes, I help my wife and we are a very happy family."*

Participant A elaborated, *"Life is a challenge; one has to overcome hurdles in order to reach the goals. Well additionally I have a God-sent supportive and caring wife and parents. I am optimistic in my life."*

Interviewee D said, *"I was stressed and traumatised when I attended a fire scene and saw the burnt bodies. I received all sorts of help, attended Debriefing sessions, spoke to my family who introduced me to a traditional healer in order to sleep well. Now I am okay and since have attended numerous scenes, with no effect, now I know how to handle. I am happy that I am feeling well and I am performing my duties effectively."*

Member H responded, *"I did not have any negative effect. I accept the things as they are, as it is a learning process. Should I get stressed I have family and friends and can always seek assistance from Psychologists. Life has got more to it than being sad or depressed."*

Member V said *"I experienced trauma. Management did not do anything. I spoke to my friends, girlfriend and consulted Psychologists because they understand our work and I made it."*

Member H stated, *"I am an optimistic person, I does not let anything deter me. I can cope with any situations. I don't believe in Stigma, you have a problem, talk to your family and friends, for more intervention talk to professionals to get better soon and get back to work."*

Participant Q thinks stated, *"It is part of the training. If I have doubt I talk to my seniors. I have a sister and husband who are close to me and I discuss anything with them."*

Similarly, participant S prefers family and expressed the same views as participant Q. Police officer A said, *"Life is a challenge, one has to overcome the difficulties in order to see the light at the end of the tunnel, but get help if you are not coping. One is responsible for his own Mental and Physical health. It is then one achieves goals and that is the purpose of life. I want to grow and learn more and am happy."*

Participant B mentioned, *"Talk to someone and get help, the sooner the better."* Respondent C stated, *"If it is not comfortable seeking help, then help yourself. Think about the good experiences, that makes one positive."*

Participant D and E shared the same views as C. Participant F said, *"One has to be positive, always hopeful; things will work out for the better. There is a reason for everything that happens and one must focus on the future."*

Participant H repeated, *"I am willing to seek advice if I am stuck and also share mine. I accept situations as they come as I believe there is time for everything. Until then keep doing your job and be productive."*

The same views were expressed by respondent I but they added, *"Contact EHW and get all the help available to get better. I don't like being sick, I must take personal care."*

Participant K said, *"I tend to ignore things and keep it to myself, it is part of duty. Life is too short to be unhappy."*

Participant L echoed the same about being positive. Participant M stated, *"Acceptance of any good or bad situation is half the battle won, feeling down and being negative affects one's life and work."*

Participant R mentioned, *"I have been through a lot. I did not talk to anyone, I cried privately. I started consuming alcohol. I can't speak to my family they don't understand; I thought I could solve the problem. Well eventually my commander helped me when he saw my work slacking."*

Member S stated, *"I don't let work problems affect me, I don't make it personal. One should take personal care. I, can't do wrong things and expect my commander or my family to worry about it."*

6.8.2 SUB-THEME: POSITIVE ATTITUDES AND BEING HAPPY

Police members expressed as follows for this sub-theme:

Participant X said, *"I came out of the situation by praying, talking to friends and sometimes depended on medication to heal myself. But I was very optimistic that I knew with all the help I will get better."*

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Respondent E reported, *"I will not discuss with my family if I am stressed, I don't want them to be worried about me, but I have very supportive friends, besides I will deal with it myself. I am a happy-go-lucky person, I don't think a lot but I am always very positive, that makes my outcomes also positive. It is part of the package."*

Participant I said, *"I am positive at all times. I know where to seek help if I need it and have a supportive family. During my rest days, we have fun playing games, telling jokes, I help my wife and we are a very happy family."*

Participant A elaborated, *"Life is a challenge; one has to overcome hurdles in order to reach the goals. Well, additionally I have a God-sent supportive and caring wife and parents. I am optimistic in my life."*

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Member H responded, *"I did not have any negative effect. I accept the things as they are, as it is a learning process. Should I get stressed, I have family and friends and can always seek assistance from Psychologists. There is more to life than being sad or depressed."*

Member V said, *"I experienced Trauma. Management did not do anything. I spoke to my friends, girlfriend and consulted Psychologists because they understand our work and I made it."*

Member H stated, *"I am an optimistic person, I do not let anything deter me. I can cope with any situations. I don't believe in stigma, you have a problem, talk to your family and friends, for more intervention talk to professionals to get better soon and get back to work."*

Participant Q stated, *"It is part of the training. If I have doubts I talk to my seniors. I have a sister and husband who are close to me and I discuss anything with them."*

Similarly, participant S prefers family and expressed the same views as participant Q. Police officer A said, *"Life is a challenge, one has to overcome the difficulties in order to see the light at the end of the tunnel, but get help if you are not coping. One is responsible for one's own mental and physical health. It is then one achieves goals and that is the purpose of life. I want to grow and learn more and I am happy."*

Participant B mentioned, *"Talk to someone and get help, the sooner the better."*

Respondent C stated, *"If it is not comfortable seeking help, then help yourself. Think about the good experiences, that makes one positive."*

Participant D and E shared the same views as C. Participant F said, *"One has to be positive, always hopeful; things will work out for the better. There is a reason for everything that happens and one must focus on the future."*

Participant H repeated, *"I am willing to seek advice if I am stuck and also share mine. I accept situations as they come as I believe there is time for everything. Until then keep doing your job and be productive."*

The same views were expressed by respondent I but he added, *"Contact EHW and get all the help available to get better. I don't like being sick, I must take personal care."*

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Participant L echoed the same about being positive. Participant M stated *"Acceptance of any good or bad situation is half the battle won, feeling down and being negative affects one's life and work."*

Participant R mentioned, *"I have been through a lot. I did not talk to anyone, I cried privately. I started consuming alcohol. I can't speak to my family, they don't understand; I*

thought I could solve the problem. Well eventually my commander helped me when he saw my work slacking."

Member S stated, *"I don't let work problems affect me, I don't make it personal. One should take personal care. I can't do wrong things and expect my commander or my family not to worry about it."*

Respondent T communicated, *"I am able to balance work and family Stress with help. Therefore, baseline is where one must be happy and healthy to function normally and lead a happy life with your family."*

Participant U responded with similar views as participant T. Another participant, respondent V added, *"I was not doing well, chocking on my own sorrows. After speaking to EHW I realised, I as a person, as a Policeman, am important. I am here for the greater good, serving the community. From then I am looking after myself. Now I find pleasure in little things, that makes a lot of difference, my perception of life has changed."*

Those Police officers who were affected came back to baseline of working with support from their families and intervention, with self-confidence, and with a positive attitude. Having a positive attitude emerged strongly as a factor that comprised of Family Support, Spousal Support, Friends, Spiritual Intervention, Psychological Intervention, Traditional Healers and helping other Police officers fight through the ordeal, etc. Most of the participants reflected that one is responsible for his / her emotional and mental well-being. Accepting a good or bad situation is essential, to move on or to seek assistance. If a person is happy then work is a pleasure, there is personal growth and good family bonding. An internal locus of control was emphasised by the optimistic Police officers.

6.8.3 SUB-THEME: ACTIVE PARTICIPATION AND INACTIVE PARTICIPATION

Active participants are open to any option to help deal with the emotional or psychological issues, to function productively and effectively.

Participant P stated, *"Talking to people helps, and then why not Police Psychologists?"*

Participant S said, *"I attended Counselling just to motivate my colleagues, I also pray and self-motivate."*

Participant F mentioned, *"I referred myself to be Debriefed; members should be open minded and should stay positive. Success will come in time. I see myself as a successful Policeman. I am proactive, play sports, the best stress buster."*

Member G said, *"We work in the Police force, these things are expected. If one is unwell then talk to friends or professionals. Take action, problems don't solve themselves. We do have operational debriefings occasionally, which really help."*

Respondent V said, *"I spoke to a Chaplain, in fact I asked my commander to arrange for a session. I hate being sick. People should take responsibility."*

Participant N said, *"I did everything to get better and get out of the mood, prayed, took medicine and consulted EHW."*

Respondent K stated, *"I personally am unfazed, I don't get affected. If one is having stress they must realise the problem and sort it out, I will definitely see EHW to help myself, I cannot stay in that bad mood forever. I have helped affected members."*

Member B said *"I take things as they come, I have to accept them. I am spiritually inclined; I talk and keep myself sane."*

Member H stated, *"I will seek help if I am traumatised, I should accept the situation; they will not be the same, by doing so I am motivating my colleagues to participate in debriefing. I am also involved in coaching cricket to children during school holidays. That gives me immense joy."*

Some members were passive about receiving help to heal themselves. Participant T mentioned, *"I will not tell the truth at home because they don't understand my work. I know how to deal with it myself."*

Participant R said, *"I experienced Trauma, all the time I used to smell blood; I did not wish to talk to anyone because time will heal, but sometimes I talk to my friends."*

Participant O said, *"I am a private person, I do not disclose myself. Even though my colleagues advise me a lot, I only trust some of them. I occasionally speak to my mother."*

Member Y mentioned, *"What I saw at the mortuary I can't talk to anyone about it, it was gross, I did not discuss it with my family and that is why I wanted my transfer from that unit as I wanted to spare them from any agony. I silently suffered, but gathered my courage and went to see a Counsellor for my transfer purposes."*

The responses overlapped with the sub-theme of Resilience in the previous question. Therefore, the responses may seem similar to the previous question. It was concluded that some Police members were willing and active to promote their mental health, while others ignore it, thinking time will heal or that they will seek help when they really need it. *Some avoid thinking about work or avoid consulting with Psychologists, assuming that would make him / her a weak officer.* Police officers consider their experiences are unique, believes "Cow boys don't cry", hence they hesitate to talk or discuss their stressors.

6.8.4   SUB-THEME: HOBBIES

Since the question was targeted to ascertain their hobbies, therefore focus was only on the Police members' hobbies. No sub-themes were identified.

Participant A said, *"I love action movies, love nature, motorcycling makes me very happy. That is what I do on my rest days which energises me and relaxes me. When I go back to work I am confident and up for any challenge."*

Participant B said, *"I listen to music, watch soccer and love boxing. I push my problems away when I am engaged in my hobby."*

Respondent C said, *"I go to gym and walk on the beach. Specifically, beach walking is very relaxing; I forget all my problems, the next day I go to work with a fresh mind."*

Participants D E, F and G responded, *"I play basketball and spend time with my family and listen to music, but I can only do this during my rest days."*

All the respondents said, *"When I report to duty I am all active and energised."*

Respondent H and J said, *"I love fishing and spend my time with my son. Fishing actually concentrates and helps me focus and solve my stressors because fishing requires a lot of patience and concentration."*

Participant L replied, *"I watch movies and read books."*

Respondent M replied, *"I am a sporty person, I love jogging, running, dancing and listening to music. After the activities, I am fresh and feel good. No one can be sane after witnessing what we witness. Therefore, I spend this quality time for myself to build and make myself stronger."*

Participant N gave the same answer as M. Participant R said, *"I watch movies, I forget all my worries. Actually, I get to solve my problems and attend to them with a clear head."*

Participant T said, *"I love to read anything, books, newspapers and listen to the news. Reading relaxes me and I am a new person after spending time reading, it also widens my knowledge."*

Participant U said, *"I listen to music, read, play soccer and watch television that takes my mind off stress."*

Respondent V mentioned, *"I love reading history, when time permits I go to gym and watch movies."*

Participant X stated, *"I read books, exercise and communicate with people I am friendly with."*

Participant Y mentioned, *"I read a lot of books and newspapers and also do road running. Reading calms my mind, increases concentration and helps me do my task better. Sometimes my wife and child run along with me."*

The last respondent repeated, *"I am fit; I play soccer, tennis and cricket. It relaxes me and makes me very happy."*

It is summated from the above participants' responses that most of the Police members interviewed had hobbies that helped them with their work issues, easing stressors, and making them active to face challenges. Hobbies kept them engaged to their work. Most of them were stated that they did exercises, went to the gym, listened to music, and so on. Interestingly, most participants mentioned that they love reading books or newspapers, and listening to music. Irrespective, all interviewees replied that their hobbies keep them focused. They were active and believed in being proactive, taking responsibility rather than staying idle to deal with the stress. Additionally, hobbies helped them solve their problems by adapting different approaches to deal with their issues.

6.8.5   SUB-THEME: FUTURISTIC GOALS

This question was meant to ascertain their goals, optimism and hope, it did not target any concrete underlying issues of the organisation. Therefore, this question lacks a main-theme or sub-theme.

Participant A said, *"I see myself still working for the Police. Do more arrests and learn how other units work."*

Participant B stated, *"Five years from here I want to see myself being a dog handler. I love dogs and it is my passion."*

Participant C expressed, *"Hopefully I will be promoted because I am a very hard worker and do not give up easily."*

Respondent D related, *"I will protect and serve, I am not worried about promotion, it happens when the time is right."*

Participants E, F, G and H all responded with the same content, *"I will still be in the Police, probably promoted. I want to learn more therefore I want to move to another unit or Special Task Force to gain more experience."*

Respondent I stated, *"I will be more mature with knowledge and wisdom, able to choose a unit that will utilise my skills and groom me."*

Participants J, K and M mentioned, *"I love the Police, my father was a Policeman. I want to be like him, and I am passionate about what I am doing. I want to join the Task Force to curb the crime."*

Participant L reported, *"I am not sure what the future holds for me, I think I will be in the Police protecting and serving. By God's grace probably I will be promoted."*

Participant N said, *"I want to help people and curb the crime; that is all I am interested in, even after five years."*

Respondent R stated, *"I will study and then see if I can apply my studies at work."*

Respondent S said, *"I intend to continue in the Police, hopefully I will be promoted."*

Another participant, respondent T, said, *"My intention is to help the vulnerable people and keep them safe."*

Participant K said, *"I am a hard worker and will work my way up. If I am not promoted, I will be disappointed, but I will be fine with that."*

Participant X mentioned, *"In five years I will see myself with a degree in Policing, I will have gained more knowledge and hopefully be promoted."*

Participant Y said, *"I will be a dog handler, and I will work towards that."*

All participants are hopeful, optimistic, have plans for the future and are committed to their work. None of the Policemen wanted to leave the SAPS, which reveals their long-term goals. Most of the Police members interviewed preferred to further their studies and look for better opportunities within the Police organisation.

6.9   CONCLUSION

This chapter discussed the findings of the Qualitative analysis, highlighting the views expressed by the respondents. The themes identified fitted together well, and they answered the research aims. Respondents reflected their views on how they handle Trauma and Stress, and how they used the support structures available, dealing with the management, handling disappointments, identifying their support systems, and how they balance their work and personal life. An interpretation of the research findings was discussed based on the themes and sub-themes extracted from the participants' experiences of Trauma, and though attending Debriefings and Counselling sessions.

CHAPTER 7

DISCUSSION OF QUANTITATIVE AND QUALITATIVE RESULTS

7.1 INTRODUCTION

This chapter discusses the results of the study as reflected by the Mixed Method Approaches In a way, this chapter seeks to synchronise what the study Quantitatively and Qualitatively found, and link it back to the aim and the objectives of the study.

- *To determine whether there is a relationship between Personality Types and Resilience.*

- *To determine whether Resilient individuals have Protective Resources or Factors to manage Trauma and maintain equilibrium to return to base line.*

- *To determine the Risk Factors (Non-Protective Factors leading to negative outcomes) in Non-Resilient Police members.*

In this research 623 Police officers participated in the Quantitative aspect of the study, and 26 members participated in the Qualitative aspect. The statistical analysis was limited, as the Quantitative phase was used primarily to obtain the Personality Types or MBTI codes of the participants, and ascertain their level of Resilience. The findings of the Qualitative study are summarized briefly in terms of main themes that emerged. This discussion further links exiting literature in the various sections to follow to provide deeper context.

7.2 MBTI TYPES AND RESILIENCE

One of the main objectives of the study is to determine if a relationship exists between Personality Types and Resilience. The Myers Briggs Type Indicator (Myers, 1997) and Sense of Coherence (Antonovsky, 1979) instruments were used. At its outset, the study hypothesises the above link: that a relationship does exist between Personality Types and Resilience. The

Quantitative study findings reflect that the Crime Scene Attenders in SAPS dominated with the ESTJ personality types, 344 participants (52.2%), followed by ISTJ, 112 participants (17%) and ENTJ with 49 participants (7.4%). Least prevalent is ISTP and ESFP, with 5 (.85%) participants each type. There was no participant with the personality code INFP.

In relation to Personality and Resilience, the ESTJ Personality Type was found to be more Resilient (52.7%), whereas the next dominant Personality Type who exhibited high Resilience was ISTJ (18.5%). Almost the same percentage of ESTJ's (50.5%) showed low Resilience followed by ISTJ with 15.5%. The ENTJ (9.6%) Personality Type exhibited high Resilience when compared to their representation of the sample (7.4%). The INTP participants (3.3%) and INFJ participants (1.9 %) responded poorly to crisis situations, making this Personality Type poorly adapting to Police trauma.

The Quantitative findings supported the Qualitative study by manifesting and proving a point of convergence. Most of the participants in Qualitative study were ESTJ's who showed high Resilience and some them were low on Resilience.

The next prevalent Personality Types was ISTJ, which exhibited 18.5% Resilience and 15.1% on low scale of Resilience. This could be attributed to individual differences and their reaction to a given situation, available support mechanisms and positive attitudes one adapts.

The current study pointed out that individual difference exist, which was evident in their coping mechanisms. ESTJ Personality Types came across Resilient, some ESTJ's scored low and also reflected the same in Qualitative study, where the members said they lacked the supporting factors as understanding commanders, family support and helping partner. The Qualitative aspect of the study reflected that ENTJ Personality Types had challenges in dealing with traumatic scenes. Some were able to return to work through a holistic intervention approach, including the help of Counselling and Psychiatric intervention. Alternately, others

were on prolonged sick leave and were assigned lighter duties. Individual differences exist and therefore they appraise the situation differently and react to threats drawing resources for coping based on their past (DeNeve & Copper 1998). Pre-dispositions of Personality make individuals behave and react in diverse ways (Ahangar, 2010). These Pre-dispositions determine how an individual reacts and interacts to his surroundings (Huffman et al., 1991). Researchers have looked into factors that differentiate one person from another; it is established Risk and Protective Factors have a major impact on individuals in evaluating the Traumatic situation and responding to it. Some emerge successfully, while other adopt negative coping mechanisms (Masten & Osofsky, 2010); Protective Factors shelter and shield a person from disasters by enabling them with the resources to combat the adversity.

Campbell-Sills (2006) suggests people who innately deny the traumatic situations and its impact on them, respond poorly, because they are not aware of their strengths and potentials in dealing with the situations. INTP and INTJ personality types reflected which supported the above in the Qualitative phase. They believed they are strong and can deal the situation on their own strengths and later found they were not adapting to the situation.

Police environment makes officials emotionally detached, but rather that they are trained to be tough, and the learned responses from senior officers reinforce the junior officers to adapt the behaviour. The undertaken study has revealed that ESTJ and ISTJ personality types are Resilient irrespective of the training they receive. The researcher, on the basis of the study, extrapolates that a combination of ESTJ, ISTJ mutually with ESTP complementarily can make a fairly Resilient team. Recruiting trainees with the above personality code is ideal in having a potentially healthy Police service.

From organisational perspective it will not be practical, since likeminded individuals will have identical blind spot which negatively impact the developmental areas they could

possibly overlook or miss. Another challenging aspect is that the MBTI instrument is not developed in recruiting personnel, as it is meant to sort individuals but not categorises them. Irrespective MBTI can be administered post recruitment as part of the academy training, to identify the types, monitor their performance and do the necessary intervention in crisis situations to mitigate the stressors. Trainee's education in MBTI and Resilience needs to be imperative; this creates self-awareness, can identify their strengths, weaknesses and work the issues with the assistance of Employee Health and Wellness. Psych-Educational workshops should be facilitated to empower and regular support group arranged on "Multiple Stressors" can help Police members in dealing with their problems, develop a sense that they are not "Unique", and erase the illusion of stigma and build Resilience within the group. The above said programmes promote morale and the companionship within the Police service.

7.3   IMPACT OF TRAUMA ON POLICE SUICIDES

It was established in both the Qualitative and Qualitative aspect of the study that not all Police officers were affected by their first crime scene they attended. Most of the officers expressed that they knew the expectations of the job, and were aware of the imminent danger on duty. They mentioned their acquisition of their skills in handling the crime scenes came from the tough training they received at the academy. Some officers were injured performing field training even before resuming their duties, yet they were enthusiastic joining their post and expressed that training made them strong.

The Quantitative aspect of the study revealed that 50.5% of the ESTJ Personality Types displayed low Resilience. This was confirmed by ESTJ's responses on Qualitative measures. They commented that they were not strong enough to handle continuous exposure to traumatic scenes, but that they were not suicidal. They needed time to process their thoughts and emotions, and with assistance resumed duties. The next dominant group - ISTJ - in the study

also exhibited low Resilience (15.1%), supported by Qualitative studies. Their responses were identical to that of ESTJ, they would never consider suicide; rather look for alternative ways of dealing with Police stress. The Personality Types of ISFP, ISFJ and ISTP revealed low Resilience (confirmed by the Qualitative data), where participants responded that they considered suicide, however due to their responsibilities and obligations they withdrew their suicidal ideation. Some respondents mentioned they are under the care of a Psychiatrist for their Traumatic Stress Reactions, Depression and Post Traumatic Stress Reaction (PTSD). Some officers mentioned they depended on alcohol to numb their pain.

Police officers in the South African Police Service are faced with critical incidents which expose them to specific types of trauma, vicarious trauma and stress (Jenkins& Baird, 2002). On-going vulnerability to stress contributes to Psychological related illness and Police suicides indicate South African Police officers distress (Kopel & Friedman, 1999). Paton et al. (2003), quotes suicides are mounting in SAPS. Virtually all of the suicides (95%) service firearms were used and in 17% of cases the officer took someone else's life before committing suicide. Most participants noted that a colleague's death on duty or by suicide is very traumatising, making Police members reflect that suicide is the perfect answer for their problems. Manning (1977) writes that the death of a Police officer carries a symbolic component, dramatically enacted by the Police throughout the period prior to and including the funeral. The loss of one officer can have a shattering effect on well-being of its members. The participants did mention "Nothing is as traumatising as a colleague's death on duty".

Miller (2007) writes that Psychological reactions get the better of Police officers, resulting in numbness, denial, shock and detaching from reality; they just do their jobs without evaluating and appraising the situation, consequently these officers succumb to negative coping mechanisms and lean on substance abuse and intake of alcohol. Slover and Tasci (1999) add

Law enforcement personnel experience vivid sensory memories and reactions of the event during an anniversary. The findings support the above-mentioned theory. The participants who experienced intense Trauma and PTSD did mention they recall the Traumatic event in detail and the anniversaries stirred up their feelings. Participants also added their senses were sensitive and remembered a particular smell or the phone ringing on the scene, flushed their memories back. Reactions symptoms include sounds, smells, images, and tactile sensations, and further they may develop insomnia. There is also the presence of shattered assumptions (Slover & Tasci, 1999) where the Policeman's safety of the world and the faith in one's ability to protect one-self and others are challenged by Traumatic events. Since the ability and desire to protect others is paramount to Police work, the loss of this belief is generally destructive to many aspects of the Police official's life (Slover & Tasci, 1999).

Most of the Police officers (18 out of 26 participants) believe that experiencing stress, depression and trauma is "Unique", which prohibits them from communicating or divulging their stressors, in the fear of being labelled. Studies have indicated that the reactions they experience are normal to the proportion to the duties they discharge and trauma is a normal reaction to an abnormal situation. Trauma debriefing is offered in the South African Police Service. Trauma and Suicide Prevention workshops are facilitated to train the members and their commanders in Trauma. Training the members and commanders in Trauma halted, due to the shortage of manpower and inadequate funds. Employee Health and Wellness (EHW) should consistently market their services and availability of help and how to access. EHW has no control over finance, but can generate ways of reaching, educating and empowering Police members. Station lectures should spare time to address Police members in dealing with Psychological issues. EHW Pamphlets must be easily accessible with the necessary contact details. From the operational aspect, commanders should brief the members before they attend the scene. Junior members should always be accompanied with experienced

members while attending scenes. Shift supervisors or commanders need to talk and diffuse the emotional tension after attending the scene and before the members end their shift. Attending "Multiple Stressors" support group must be reflected in every Police Members' Performance Enhancement Programme (PEP) document, as one of the key potential area of their Policing duty. Prolonged sick leave needs to be followed and essential intervention done in assisting the member.

Police Medical Aid (PolMed) has to take initiative and host wellness events targeting mental health, explaining their services, and informing Police officials about various boards available which are specifically set up for them, and specific funds available in dealing with Psychological related illness. The majority of Police members are unaware of the existing "Depression Board", where they can register and health practitioners monitor their mental health. It is advantageous to host Trauma Conferences or Mental Health wellness conferences to network with external health practitioners to enable them with the insight of Policing environment and Psychological Issues Police members' experience. This facilitates in referring members externally to the appropriate health practitioner, who with the assistance and co-operation of in-house Psychologists can engage with the commanders pro-actively to promote the well-being of the Police members. Thus, the Police members receive holistic therapy, become a productive member of the organisation.

7.4   POLICE ACADEMY TRAINING

The journey in becoming a Police officer embarks from the training academy. The new recruits on completing their training are assigned to field training; where the student constables apply the theory to practice and work in key components of the station, such as Community Service Centre (CSC), Crime Prevention (Patrolling), Detectives, and so on. Student constables attend to scenes of all nature. Consequently, they get the rank of constables and resume their

duties at the post they applied for. Now the constables with their training and field training experience are prepared to handle any challenge. Despite all training and experiencing, attending certain scenes disturb them, specifically cases surrounding children. Irrespective of the exposure to the Traumatic events, the majority of emergency services (Policeman, Paramedics, Security, Fire Fighters, Doctors, Nurses) do not indicate any symptoms of Stress and Trauma, on the contrary they have emerged stronger and healthier (Moran & Colless, 1995). Police officers are those people who joined into the occupation as they believe they are best suited for (Hart & Cotton, 2002). They sometimes witness the death of others and have to draw on particular coping resources in the process (Scotti, Beach, Northrop, Rode, & Forsyth, 1995). Rachlin (1991) observed that many Police recruits are not aware of the extent to which their work involves death exposure, and that their training did not adequately prepare them for death encounters.

Regardless, individual differences exist and not all Police officers experience or feel the same after a Traumatic scene. Police are trained to be Resilient, and not all Police officers experience Trauma and Burnout. Lazarus (1991) links this difference to Personality and Coping Process of individuals such as innate Personality Traits, Social Environment and Physical Environment build their coping skills to handle their job stressors. Cieslak et al. (2008) highlighted that Personality Predispositions could be advantageous in facing the adversities (Martin, 2006). Some individuals are born Resilient, have developed the ability to identify and even predict the intensity, while others are ignorant about it and have to gain these skills through a learning process (Griffith, 2007; Campbell-Sills et al., 2006) Participants echoed that they are not trained to handle these specific cases and therefore they get emotionally involved in cases where children and minors are involved.

The Quantitative aspect of the study disclosed that Police officers with ESTJ Personality Types emerged Resilient in this aspect too, which was supported by the Qualitative data. Besides ENTJ's were more prevalent Personality codes after ESTJ in the South African Police Service. 52.7% of ESTJ types mentioned they were performing their duties, while 53.2% of ESTJ types reflected that "Crime involving children" disturbed them, but they were not traumatised. 15.1% of ISTJ's reflected they were not prepared and did not expect to find bodies of children. The Qualitative study ascertained the fact Personality codes ISTJ, ENTJ, ESFJ and ESTP showed moderate levels of Resilience when dealing sensitive issues as "Child murder or rape" cases.

Regardless the research findings, the researcher agrees with Rachlin (1991) that student constables are unaware the extent their work involves sensitive cases which can make them incapable in performing their duties. Police training incorporates the necessary operational aspect of Policing and builds Policemen to be adept in almost any event along the line of duty. It is observed Police training lacks the emotional component; they are trained to stay calm and not display emotions in times of adversities. It is expected as it helps Police officers to control mobs and perform their jobs effectively without being emotional. The challenge is that Police officers build it as their first nature of responding to crisis and internalise the response while confronting their personal stressors. They adopt a "Cow boys don't cry" mentality.

Communities often report that Police officers are deficient in empathy while processing sensitive cases such as rape and murder. Police officers are not trained to console an emotional parent or relatives. However, as per the undertaken study ESTJ Personality Types who are out going, strike easy to make friends, stated that they are comfortable in comforting community people. INTJ, INTP and INFP found that comforting a stranger was uncomfortable. Therefore, it is suggested training academy should adapt a module on Emotional Intelligence and Positive

Psychology, training them in identifying, processing, controlling their own feelings and emotions and express their own Traumatic feelings without inhibition to potent their mental well-being. Training Modules need to reinforce de-stigmatisation and Resilience building.

7.5 STIGMATISATION: POLICE OFFICERS MENTAL HEALTH AND WELL BEING

50.5% ESTJ Personality Types low on Resilience revealed that they believed they can manage their stressors; an EHW intervention will only escalate their problems due to noncompliance of confidentiality from the Psychologists. 52.7% of ESTJ's expressed they were willing to accept any support that could help them. 473%of ESTJ declined assistance due to stigmatisation. 15.1% of ISTJ personality types, who were on the lower side of Resilience, were receiving support from external health professionals. 18 % of ISTJ Personality Types were reluctant for any nature of intervention. 2.1% of ENTP reflected similar views of stigmatisation as ISTJ and ESTJ. The Qualitative analysis divulged that stigmatisation was the main factor that held Police officers from seeking assistance from health professionals such as Psychologists and Social Workers, in spite of the facilities available at the South African Police Service. Participants expressed that they would be labelled should they seek Psychological assistance and they did not trust Employee Health and Wellness with the issue of confidentiality. Further they felt it could be held against them in their promotion and transfers.

Another issue was of the Police official's firearm. Police members have to hand in their firearms if they are diagnosed with major stress or depression. Police members expressed that losing their firearm is as good as losing their honour. It is a well-known fact that Police work is dangerous, their exposure to stress is ongoing, and that they also have support system at work help them deal with their stressors (Anshel, 2000, Patterson, 2003). Police officers are more prone to Psychological illness than any profession and they are hesitant in seeking help, owing

to several factors as, labelling them as soft, stigma and changed perception about them at work and becomes a victim of mockery (Karaffa & Koch, 2015). Bell, Kulkarni and Dalton (2003) state that organisations provide support in terms of education, support group, counselling, especially at SAPS which provides critical incident debriefing to Police officers in response to the impact of Traumatic cases (Pillay, 2008). The literature has depicted Police officers lacking confidence in service providers, as officers fear that Psychologists are the "Tools of management" that would isolate them in terms of efficacy and productiveness and influence their work, working environment negatively (Mullins, 1994). This was reflected by most of the participants that Psychologists are for the management and their confidentiality will be compromised. Research on 'Counselling in police" indicated that Police officers who interact and have healthy relationship with management and view them as supportive, voluntarily participated in support opportunities available and emerged less stressed than their colleagues (Carlan & Nored, 2008 in Tucker, 2015). Hansson and Markstorm (2014), labelling and distinguishing Police members with mental illness are prevalent in Police culture, leading to additional stress causing low self-esteem and low efficacy, robbing them from their healthy life (Vogel et al, 2004). Supervisors inadvertently discourage members from seeking help distress, making statement such as "You will get stronger, I have seen worse, this is nothing" (this was reflected by more than half of the respondents in the semi-structured interviews).

"The deinstitutionalization of mental health services has led to a significant increase in contacts between the Police and persons with mental illness" (Hansson & Markstorm, 2014). "Police education and training in Psychological issues has become a focal point of discussion: education literates them to make an informed choice in seeking help, adapt to the circumstances and emerge as a well-managed and productive officer. Police officers have a problem committing to an on-going intervention programmes due to duty bound priorities. Pro-active prevention measures in place are beneficial, with general topics of Stress, Suicide and PTSD,

ensuring all Police members irrespective of their ranks attend. Professional attending to Police officers, should take the opportunity of addressing the issues of confidentiality and clear the misconceptions. Education flow should use all communication approaches as flyers, websites, articles, lectures, mental health events can restore confidence, trust and prepare to adopt the techniques of coping (The International Association of Chiefs of Police, 2014). A compromise might be reached in which agencies decide some prevention activities are better than none. In this case, officers might receive an occasional mental health flyer and attend a stress management or suicide prevention training sometime during their careers. Wellness messages in this format tend to be fleeting when the benefits of repeated exposures are not present. A stepped approach to prevention begins with primary wellness initiatives that target all officers in the department. Psychological health topics tend to be more general, such as Stress Management, Alcohol Awareness, Sleep Medicine, Suicide Prevention, and dealing with critical incidents. Moreover, misperceptions can be addressed about counselling by covering the strictness of confidentiality, the most problematic presenting issues, and the efficacy of Psychological treatments. Educational information is introduced in different formats, including educational articles, brochures, or flyers that are sensitive to law enforcement values, wallet cards, online videos, websites, annual mental health screenings, and trainings. These broad-reaching prevention activities can help officers and their families prepare for the impact of the job, learn healthy tools to survive and thrive, and develop trust in mental health resources (The International Association of Chiefs of Police, 2014)".

Study on anti-stigma proved to be successful (Hansson and Markstorm, 2014); attitudes were changed through mental wellness education and sustained at the follow up after 6 months and also improved relations with Police and mental health professionals. "Suicides within the law enforcement community are not random and spontaneous events committed in isolation, but, rather, an intent that is communicated by the individual within his or her Psychosocial

environment. Suicide is neither a disease nor an irrational act but rather a complex problem-solving behaviour therefore, the progressive law enforcement agency will optimally provide training to its members to understand the underlying processes of suicide and the prevention strategies to mitigate and prevent suicidal acts" (IACP, Symposium on law enforcement officer suicide and mental health: Breaking the Silence on Law Enforcement Suicide 2014).

Efforts are made and initiatives taken in SAPS in de-stigmatising by training the trainees at the academy, in Trauma and the essential assistance available in dealing with it. Confidentiality is the main issue contributing to stigma, where Police members believe the information in the session will be parted with the commanders. Employee Health and Wellness members should emphasise the code of ethics stipulated by The Health Profession Council of South Africa.

Due to obligations to the organisation EHW members are coerced into submitting report. Attempts should be made to clarify the issues; that a report will not be submitted to the management without the written consent of the member, onus lies on the member to submit the report to the commander himself, ensuring to protect the confidentiality of the members. Confidentiality is breached in the event the members are suicidal or detrimental to others.

The success of mental wellness programmes depends on Police Management, Mental Wellness Professionals, Commanders, and Supervisors working jointly to overcome the obstacles to maximising mental wellness. Programmes must be of huge magnitude to make impact, which requires attention, dedication at various levels to oversee the long-term commitment to reduce the stigma of seeking help through education and adding on their Performance Enhancement Document and run events and programmes of mental health programs from EHW, PolMed and external health practitioners offering a range of necessary interventions.

Another strategy of approach is to market and aim, stress, trauma and suicide from the perspective of problem disseminating, than from mental health, to make events more embracing, meaningful and useful to the Policemen. A solid mental wellness framework must be designed including Psycho- Social and Physical aspects of trust to seek help and motivate suffering colleagues to get on board. Regular follow-ups are recommended to instil the caring attitude from the management. Further to boost and encourage colleagues, consenting Police officers must facilitate programmes and be part of it to De-Sensitise and De-Stigmatise and reinforce the ideation that "Policemen are cow boys who don't cry but seek assistance in duress and they mutually help in crisis". A policeman assuring another Police officer is viewed as more trustworthy and beneficial.

7.6   SUPPORT: PROTECTIVE FACTORS ENABLING RESILIENCE

The results of the Qualitative study revealed ESTJ's (52.7%) are more Resilient types than others. Irrespective with their high Resilience, 50.5% of ESTJ's were on the lower level of Resilience, who returned to work with support of mental health professionals. Qualitative analysis provided the answers for the disparity of ESTJ; those ESTJ's on lower level of Resilience lacked the family and organisational support, when adequate support was provided through debriefing, counselling and consulting psychiatrists, they recovered and were back on duty; a sign of Resilience. It was established that support factors as family, finance, organisational support, medical benefits, personal and social resources were crucial in re-stabilising the traumatised Police official. It was found through the participant's experience that Resilience is not just being tough, it was being down and returning to work with good mental health with or without support. 4.1% of ESTP had high Resilience and 2.8% low Resilience. Their responses supported the studies that promoting factors enables Resilience.15.1% of ISTJ personality type showed low Resilience. All personality types with low Resilience in the policing environment were looking support from their commanders and

families which they considered were crucial. Financial crisis was one of the common factor that stressed members, specifically with lower ranks.

It emerged in qualitative analysis protective or promotive factors were the main sources of strength of Resilience in dealing with Police trauma. Policemen expressed experiencing trauma, dealing, coping effectively, returning back to work varied depending on personalities and support sources available in assisting the Police officers. They believe personality of a Police officer acts as a catalyst, in identifying one's strengths, seeking support resources and adapting the resources to the desired behaviour modification. The sense of emerging as a survivor than victim made immense difference in their perception of the situation and their risk management.

An excellent overview (Luthar et al., 2000) of the construct of protective suggested that" the term "protective factors" describes processes that alter the effects of adversity on an individual". Personality is the basic disposition of protective factors, including internal and external variables, such as values, temperament, positive attitude, psycho-social interaction, skills specifically from past experiences, using support system to their advantage are the fundamental attributes of protective factors (Magwaza, 1999; Campbell-Sills et al., 2006; Guay et al., 2006; Yehuda et al., 2006).

Resilience was positively correlated with extraversion and conscientiousness and negatively associated with neuroticism by a study conducted (Campbell-Sills et al.,2006) the NEO Five-Factor Inventory (NEO-FFI) on students. Loeckenhoff et al. (2009) reported "extraversion and conscientiousness to be associated with a more favourable trajectory of mental health". Conscientiousness is theorised as an indirect evaluation of regulation of emotions during traumatic situations which decelerates fear and anxiety (Campbell-Sills., et al, 2006).

Volumes of research on PTSD assert that recurring traumatic scenes initiate the development of PTSD (Liberman et al., 2002; Marmar et al., 2006). PTSD (West et al., 2008) prevails largely in policing occupations varying from 7% to 19%, emerging from vulnerability to trauma. Police are considered to have five times more suicidal ideations than the general population. Most Police officers stay psychologically well despite multiple exposure to the traumatising (Bananno et al., 2006).

The term "Resilience" originated in the 1970s through the discipline of ecology by a study conducted by Holling (1973). However, through the advent of positive psychology Resilience has been studied over decades, but currently is receiving paramount attention due to its impact on an individual in generating protective factors in the face of adversity (Renschler et al., 2010; Rose 2009). Most resiliency researchers (Garmezy, 1985; Rutter, Maughan, Mortimore, Ouston, & Smith, 1979) concur that personality constitution is the crucial attribute in determining Resilience. Both Garmezy (1985) and Rutter (1979) have proposed positive temperament or positive personality disposition the first and fundamental attribute to Resilience, the other two being family and external support. The Resilient personalities in this study (ESTJ, ISTJ and ENTJ) displayed the Resilience factors mentioned by Rutter (1979). Participants stated that they were optimistic, hopeful and had good family support that allowed them to ventilate their feelings. They stated they were pro-active, obtained available resources for themselves and their colleagues to help cope with the stressors and re-integrate back to work.

Police members verbalised that they did not receive support and empathy either for their work or for their personal problems. That brought their morale down. Participants were instructed to be strong and continue with their duties. It emerged that the Police managers have not readily perceived the need for management philosophies patterned after the policies of

progressive businesses and corporations, striking as insensitive to the Psychological and Emotional needs of Police members. The Police service is characterised as a Para-military structure, and creates climate which encourages an authoritarian approach to leadership (Gangster, Pagon & Duffy, 1996). The results of research done by Bruns and Shuman (1998) in Arizona, USA, show that law enforcement officers described the management style of their department as being "Benevolent-Authoritative", these officers indicated their preferred style was 'Participative. This suggests that alternative styles of management in Police organisations can enhance mental health and productivity

They felt they were emotionally drained to have experienced trauma, perform their duties and suffer silently and consequently ending in absenteeism. Chauke (2013) writes about 54% of SAPS employees, took sick leave during the financial year 2013 under review. This prompted committee chairman Annelise van Wyk to warn that the high rate of sick leave affected the ability of the SAPS to protect South African streets and serve the people on the ground. "Indeed, despite the pressures, most individuals are able to cope with Resilience. However, some individuals develop Psychiatric symptoms, including those of Post-Traumatic Stress Disorder," he said. Prof. Stein recommended provision of Psychological or Psychiatric services after every stressful encounter and reduced barriers to accessing treatment services. "In institutions, such as the Police, Military, or Prisons, there needs to be balance between expecting Resilience and knowing that some individuals will develop serious Psychiatric problems". Most of the ISTJ's in the study indicated they were receiving Psychiatric assistance and were attending to holistic therapy.

Management need to employ employee conducive measures in assessing the situation and taking mutually beneficial decisions. Police management has to set up a committee liaising EHW, Leave Management, Labour Relations, Communication Office and Unions; where

proper measures are introduced and the Police officers are informed and are part of the entire process. This would gain confidence and co-operation from the concerned Police officers, curtailing sick leave and temporary incapacity leave.

Commanders at all levels and all stations need to be trained through Trauma and Suicide prevention workshops; so that they are empowered and read the early signs of Trauma and Suicide, prompting them to take responsibility for their members mental health. This could prove the major promoting factor that instils confidence in members in trusting the management.

A home visit and hospital visit from the management to ensure the member's health is well received by Police members, as most of the participant's criticised management for not reaching out for them. Easing the Police members into work instead of drowning after a prolonged leave is another caution needs to be exercised. This gives enough time for the member to reassert his / her confidence in their work and Psychological health to execute their duties. Every month members must be motivated to engage in socialising at their work place, that diffuses the stress, enhances the bond between the members and management, can be a potential strong Protective Factor as a strong buddy system is formed.

Employee Health and Wellness (EHW) have a crucial role in developing Protective or Promoting Good Policing environment. Regular team build workshops help identify underlying issues between the management and members or among the members themselves such as Preferential Treatment, Conflict and Racial Tension. Collaboration between management, EHW and Police members will assist achieve the desired outcome. This includes hosting Wellness and Psycho-Educational events to educate and empower Police members. All Police members are motivated to participate irrespective of their ranks, and it can bridge the gap among the members and the management. Attendance of the family members is

advantageous, because their families will know their spouses work environment, socialise with their colleagues and their families creating a pleasant atmosphere within the Policing environment. In most incidents Police members do not discuss their work to save their family from distress. In the event of crisis families can support each other enabling them to be great support. Indeed, members expressed that family is their strength and a coping resource. A family day should be observed every year to boost the morale and solidarity of the families and the Police members.

7.7   LACK OF RESOURCES

The target population in general expressed all the above concerns regarding the inadequate resources and logistics. 52.7% of ESTJ and 18.5% of ISTJ Personality Types with high Resilience expressed that inadequate resources did not bother. The Qualitative data revealed that the above participants felt that successful Policemen will overlook these as challenges but not as problems. 1.9% ENTP Personality Types generally articulated all the above factors add to their stress and disable them doing their duty effectively. ESFP came across as very Resilient, however, since they were under-representation in the group it impedes one from generalising to the Police population.

Those Police members who had the support of family and friends managed with their circumstances quite efficiently. Almost all ESTJ and ISTJ participants replied that they cope with work pressures. Most of the ESTJ's expressed that they were Resilient. The Defence Web editor Leon Engelbrecht (2008) writes, "Dianne Kohler-Barnard, released the results of a survey the Democratic Alliance conducted at a sample number of stations countrywide. The study concludes that too many Police officers are risking their lives to do their job" and the following issues were identified:

"Without the proper equipment and resources at their disposal, we cannot expect members of the South African Police Service (SAPS) to perform their duties at anything like an optimal level," she says. The most common problems found are:

- Staff shortages; due to posts not being advertised, non- trained detectives

- Station management not having completed management training;

- Insufficient weapons such as firearms, batons and pepper spray;

- Insufficient communication equipment such as hand-held and vehicle radios, Not enough vehicles; Un-road worthy Vehicles.

- Shortages of bulletproof vests;

- Lack of secure suspect identification and interview rooms.

- Insufficient office space for staff; Inadequate office equipment

- Insufficient secure storage facilities for dockets" (DA report, 2008).

It is irresponsible and unfair to expect Police officers to go on duty without sufficient bullet proof vests, weapons or radios" (DA report, 2008).

One of the enduring strategies that have long term effects on the belief systems of Police personal is the assimilation into a Police role as a part of becoming successful Policeman (Volanti, 1992). The author further writes that, "Strategies of distancing and strategic problem solving significantly reduced stress". The above study is validated by the Personality Types high in Resilience who reported that they would look for alternative ways of solving the resources issue instead of stressing them.

The SAPS is a huge organisation, requesting and accessing resources needs planning, budget, applying and then waiting for approval, all of which is time constraining. Protocols and chain of command can decelerate the process. Resources such as Cars, Firearms, Bullet Proof Vests, Torches, Communication Equipment, Computers, Stationery, Stations in good

condition, Fans, Furniture etc. are allocated as per the strength of the station. Resources exhaust quickly, specifically cars in rural stations that are exposed to extreme harsh conditions and with excessive wear and tear due to gravel roads. This hampers service delivery. It is advised that high performance cars be allocated to all stations, just not elite units. Participants aggrieved that most of the time the cars are parked in the Police Garage; due to lack of manpower and resources repairing cars and issuing them back is delayed. It is suggested more Police Service Garages should be operational to meet the requirements of the work, so cars are fixed and handed back in time. Commander has to check the cars are in good condition and are garaged properly. Commanders reported that along with logistical issues firearm was also an added concern; firearms get jammed and there was a predicament of Police members being injured on duty. Commanders needs to ensure that members have their firearms with enough magazines, service regularly, and make sure members attend shooting practices regularly.

Allocation of computers is managed by Technology Management Services (TMS). The approval of any technical matters should be granted by national office, which can be time consuming. Members echoed that decentralisation of Technical Management prompts service delivery; therefore Provincial (Head Office: KwaZulu-Natal) office needs to decentralise and enable certain approval and signing authorities in crisis over certain technical matters. This will save futile exercise of stress and time. Protocols should be user friendly with minimal paper work to accelerate the process.

7.8   COPING MECHANISMS

Coping strategy studies are discussed in detail as it entails Personality and Protective Factors, which is the main core of the research. ESTJ, ISTJ, ENTJ and ESTP Personality Types surfaced as coping Personality Types with 52.7%, 18.5%, 9.6% and 4.1% respectively. INFJ and ISFJ displayed poor coping skills with 0.7% and 0.1% respectively. These findings have

been matched to the Qualitative data. The above-mentioned Personality Types adapted to adversities, volunteering to all assistance available. Whereas INFJ and ISFJ combat with their stressors. Some Police officers succeeded while others were on prolonged leave. According to Grossman (1998) the growing concern about the stress experienced by Police officers has prompted a range of studies. An effective and ineffective coping strategy amongst Police officials has become a focus of concern (Volanti, 1992); avoiding the situation and self-help increased the stress. Anshel (2000) mentioned that "Poor coping skills appear to be a significant factor in determining the intensity of stress experienced by Police at work".

Williams (1987) postulated that while there are remarkable similarities between the types of stressors and responses of Police officers and Vietnam veterans, but with one crucial difference "For cops, the war never ends." The Police officer will not however always undergo the high level of sustained stress that the Combat Soldier does (Mccafferty et al., 1990). Volanti (1992) express that many Police officers do cope with the ongoing Traumatic exposure that their occupations demand. Paton et al (2003) states that the people who risk serious injury and death on a daily basis, the capacity to resist the negative effects of Traumatic exposure is invaluable, therefore individual's responses to any event differ enormously. According to Paton (2003), while some people are temporarily overwhelmed by Traumatic experiences and are forced to put a great deal of energy into coping, others seem not be affected at all. This shows Psychological Resilience comes naturally to some individuals.

The above was ascertained in this study. Individual differences existed in experiencing and dealing with Trauma. Qualitative study identified both Resilient, non-Resilient policeman who were able to function with holistic approach of healing. ESTJ type emerged to be more Resilient than other types both in Quantitative and Qualitative studies, which supports inherent Personality disposition in individuals.

Richardson (2002) said that Garmezy (1986) identified Personality, Family and Social Support as the main attributes in aiding coping. Intelligence, good parenting and academic excellence were additional factors identified (Kolvin, Miller, Fleeting and Kolving, 1988, as cited in Masten and Coatsworth, 1995; Masten 2001). Davidson (2000) suggests that Resilient individuals draw coping abilities from prior events and were open for new learning. (Maddi, 2004). He further states hardiness facilitates growth which turned stressful circumstances or disasters into personal development: These authors emphasised on Challenge, Commitment and Control (3 C's), Challenge making one accept life by its nature, learning from failures as well as successes. Commitment, involves the belief that events will be favourable, circumstances will change from bad to good by staying positive, Challenges only makes one stronger and control or manage the situations with their knowledge of past experiences. ESTJ and ISTJ Personality Types reflected the above discussed study by Maddi (2005). They expressed that they know what to expect from the job and they accepted the situation. Some participants added that it was a learning experience attending Trauma Debriefing, and learning the Coping Skills therein had empowered them. They were able to identify and manage the stressors more effectively. Khoshaba and Maddi (1999, 2002) suggest that hardiness is a learnt response and can be trained.

Few ISTJ and ESTJ Personality Type participants displayed low Coherence; they informed that they were not willing to take any assistance due to stigmatisation. They added that they lacked support and did not believe in discussing their problems either with their friends or families. The studies demonstrated that the availability of support, together with the capacity and willingness to seek out help reduce levels of Traumatic stress (Harvey-Lintz, 1997).

The Qualitative data revealed that Resilient participants were hopeful and positive in adverse situations, as they considered themselves serving the community and getting immense joy and happiness in their job. They are optimistic that future hold better opportunities for them. Several studies indicated that Resilient individuals adapt approaches that is joyful, and energetic to livelihood, who always have new ideas marked by high positive emotions, are inquisitive and open to new experiences, and are characterised by high positive attitude (J. Block & Kremen, 1996; Klohnen, 1996).Werner and Smith (1999), writes that Resilient individuals use humour and relaxation techniques as their coping skill with wishful thinking. Therefore, positive attitude has sprung as a crucial characteristic; that has attracted researchers to study for its valued contribution to coping (Tugade & Fredrickson, 2004). Positive emotions block stress influence (Folkman & Moskowitz, 2000). The above authors state that negative emotions restrict the thought process, and denies the person to seek new information. In contrast, positive emotions expand the mind, thought processes, and intellect assisting the person to choose an array of internal and external resources, and build their ability to cope (Tugade & Fredrickson, 2004). There may be individual differences in people's abilities to cognitively represent their emotions and exert effective control over their emotional lives, allowing some to more effectively manage their emotions during stressful situations (Barrett et al., 1993). This explained participants who adapted positive approaches emerged strong in crisis, while as some participants did receive assistance in coping as Trauma Debriefing, Trauma Counselling and Psychiatric help in easing back to work whereas some went on prolonged leave consequently transfer from the unit or medical boards. Salovey (1999) states that Resilient individuals display a high level of Emotional Intelligence, which highlights their capacity to learn from past events and use this information to cope and manage well. Folk and Moskowitz (2000) infer that successful outcomes in Resilient individuals are indeed based on positive emotions (Salovey et al., 1999).

The results of this research concur with the results found in the above-mentioned studies. The researcher suggests that primarily Police officers has to be trained in "Resilience Building Workshop", where emphasis is placed on trauma management, why people differ and the role of Personality and the contributions of Risk and Protective Factors that might mitigate mental wellness. Members are encouraged to know their Personality Profiles or Types that creates self-awareness in terms of understanding their strengths and developmental areas. EHW has to initiate station lecture or workshops and programmes advocating the importance of attending Debriefing, Trauma Counselling and Counselling. Specific emphasis should be placed on confidentiality highlighting that Psychologists are registered and regulated by the Health Professional Council of South Africa (HPCSA), who adhere to the ethics stipulated by the board. Concerns of stigmatisation should be addressed so member's stress is alleviated in accessing the services of EHW. In collaboration with the commanders EHW professionals should pro-actively arrange health and wellness checks on mental health wellness day. This gives an opportunity to those Police officers who are hesitant or nervous in initiating assistance from EHW.

SAPS members are inspired to have an active life off-duty, such as developing hobbies and engaging in activities to help relieve stress and work pressure, in turn contributing to building Resilience and managing the crisis in their lives. Resilient participants specified that they have developed hobbies such as sports, music and other activities to keep their minds off things. Most ESTJ and ISTJ types indicated they were actively involved in community projects, entertainment activities belonged to neighbourhood groups and were ready to assist anyone in need of any kind of help. Resilient individuals often found that helping others was one way to handle extreme stress, worked therapeutically as a recovery tool. Resilient people are loving and caring as they identify family as an important support system. Research has indicated that

they are high achievers and fun loving people, expecting life to be interesting with positive turn of events in life.

The importance and role of Positive Psychology on an individual should be advocated. Education on POB (Positive Organisational Behaviour) is imperative which facilitates the optimal functioning of personnel. Research has shown that emphasising Positive Organisational Behaviour impacts strongly on individual and Group-Related Behaviours in Organisations. Focusing on POB instead of focusing on people's weaknesses encourages managers and leaders to build on peoples' strengths, rather than just focusing on fixing weaknesses. POB not only improves performance and management effectiveness, it results in positive behaviours such as Altruism, Conscientiousness, Civic Virtue, Sportsmanship, and Courtesy. POB encourages principled actions and appropriate whistle-blowing.

On the contrary Police officers with low Resilience quoted that they lacked a support system, they assumed they can cope without any help, resisted any assistance, the hobbies they adapted were reading or spending time alone. This blocked them to any kind of exposure to friends, groups or communities thus making their coping slow and difficult. They enhanced their risk factors by not acknowledging the situation and denying help. Interpersonal activities open communication channels, giving space for the ventilation of their feelings. Prompting officers to think on futuristic plan and goal setting builds hope, attempts to attain the goal, mapping a plan of action could be one of the promoting factors side tracking the Risk Factors. Goal setting enhances problem solving ability. This inspires confidence, learning to take responsibility and lean on their internal locus of control. Taking responsibility counter-acts deficiency of external locus of control. Resilience can be learnt or trained by experience in meeting and overcoming the challenges. Police officers asserted the above. Some officers mentioned that they experience trauma, but with support of EHW services and their past

experience they confronted their stressful triggers. Persuade officers to adapt a healthy life style, willingness to perform physical exercise and confidence in managing incontinence. Workshops on healthy living should be facilitated and pamphlets distributed at the station to create awareness. Arrange regular talks by engaging dieticians and external service providers in roping the members for a good life style. Another area of concern is HIV/AIDS. This programme is well established in SAPS, facilitating various Aids related workshops, HIV/AIDs wellness days, celebrating worlds Aids day etc.

7.9   CONCLUSION

In this chapter the research outcome, integration of Quantitative and Qualitative Methods was conveyed. Crucial themes as challenges were identified and discussed, referring them to research studies. The researcher's arguments, views and suggestions in enhancing productivity through building Resilience were presented. Specific focus was on coping encompassing Risk and Protective Factors with detailed focus on research studies.

CHAPTER 8

RECOMMENDATIONS, LIMITATIONS AND CONCLUSIONS

8.1   INTRODUCTION

In this chapter, the objectives of the study are reconsidered and an overview of the main findings are presented, followed by a discussion on the contributions to Research, Perceived Limitations, Recommendations, Suggestions for Future Research, and Conclusion are outlined.

8.2   SUMMARY OVERVIEW OF THE STUDY

The aim of the study was to determine if relationship between Personality Types and Resilience exists in a Policing environment, specifically targeting Crime Scene Attenders. Most of the existing research has focused on negative aspects such as Depression and PTSD. Few studies have attempted to explore the positive light of Policing environment. The undertaken study explores Personality Types and their relation to Resilience, concentrating on Risk and Protective Factors.

A Mixed Method approach was employed to investigate Personality Types and Resilience. Quantitative sample targeted 623 Police officials, followed by Quantitative sample targeting 26 participants. The Quantitative part of the study established participants' Personality Types and their level of Resilience. The Myers Briggs Type Indicator and Sense of Coherence measures were used to determine the Personality Types and Resilience, respectively. Subsequently, the Qualitative part of the study delivered rich and in-depth data, where the Risk and Protective factors were unearthed, along with their Coping Resources. The second phase revealed the challenges culminating into Risk Factors for some participant and how they handled them.

Quantitative and Qualitative findings mutually supported each other, thus triangulate the findings. There were no significant contradictions between the two forms of data. The research showed that, in general, Police Officers are Resilient. Personality Types are the basis of Resilience, with some types are showing higher levels of Resilience, and reacting to trauma better than other Personality Types. Protective and Risk factors contributed to Resilience. The findings of the study in relation to the research questions set out earlier follow below.

Research Question 1: *To determine the relationship between Personality Types and Resilience*

The findings of this research support the first research question. There is relationship established between Personality Types and Resilience. It emerged that ESTJ personality were the most prevalent Personality Types in sample tested. ESTJ, ENTP and ISTJ emerged as being more resilient than other types in the targeted population of police officers with 52.7%, 9.6% and 18.5% respectively. This was further supported in the Qualitative analysis where ESTJ types displayed resilience despite set back in their lives. ISFJ and INFJ Personality Types emerged as low, 0.1% and 0.7% respectively.

Research Question 2: *To determine the Protective Factors or Resources of a Policeman that aids in their Resilience building.*

The research answers the second research question, individuals have Protective Resources or Factors to manage crisis and maintain equilibrium to return to function as a productive member. Personality is one of the fundamental factors in individuals which contributes to Resilience. ESTJ, ENTJ and ISTJ emerged as more Resilient Personality Types than the other Personality Types in the sample. In this research, it was identified that Resilient Police Officers have more Protective Factors that help them deal the adversities. It was also asserted in the research that being Resilient was not enough, it also accounted on how they

utilised the available resources to cope and turn the negative events into Adaptation, Growth and Development. The Protective factors described by the participants included their Family, an understanding Commander, supportive Colleagues, good Financial Management, a Positive Attitude, Hope, being Happy, having Hobbies, being involved with activities at work and in their communities, and a Healthy Life Style.

Research Question 3: *To determine the Risk and Support Factors that contribute to a Policeman's poor coping skills.*

ISFJ and INTP Personality Types were found to be low on Resilience, and Risk Factors were identified. Risk factors included being Single, having no Family Support, Substance Dependency, Disappointments, Denial in accepting the situation, and not seeking help from EHW or from their Family and Friends. Finance was one of the main stressors, along with poor finance management. Stigma was identified as a crucial factor denying help for the members himself / herself. Lack of help and the members believing that they could cope without support consequently resulted in Sick Leave, temporary Incapacity Leave and eventually Exiting the company through Medical Boards. Lack hobbies had isolated them from mingling with groups or people, making them Shy and Introverted. Poor Problem Solving and Judgement, Low Self-Esteem, and Perceiving every hurdle as a stressor were additional Risk Factors put forth by the participants. Folkman and Lazarus (1980), emphasised problem focused coping strategies are directed at managing and improving an unpleasant experience in reducing the effects thereof by initiating proactive steps stressors, seeking support and planning to solve the problem.

The measurement scales for Quantitative studies; MBTI and SOC were ideal in mapping Personality Types and determining their Resilience with SOC. The Qualitative aspect of the study supported the Quantitative findings. The Mixed-Method approach employed was

beneficial in testing a large sample in Quantitative phase, and then gathering rich and in-depth information within the Qualitative part of the study.

8.3 RECOMMENDATIONS

Recommendations are based on the summation of the Study, Observations, Semi-Structured Interviews, Arguments and Conclusions that the study has been making in the previous chapters. In the future, it would be useful and beneficial for the study of this nature to be adapted to a longitudinal study. This research found that ESTJ Personality Types were more Resilient than other types in the Policing environment. However, a longitudinal study would further determine "Whether ESTJ's are indeed a resilient Personality Type in Policing environment", which would enhance the predictive ability of the study. The study has identified Risk Factors negatively impacting the Productivity and Resilience of the Police members. Accordingly, recommendations have been suggested to enhance performance and promote a healthy organisation.

8.3.1   PROMOTION POLICIES

The findings of the study indicated that Poor Salary and Over Due Promotions which de-motivated the members were Risk Factors impacting Police Officers' work performance, with disappointments influencing their endurance levels. It is suggested that the SAPS should have policies in place to promote Police members after serving five years in the rank (taking into consideration their performance levels). Police members would be more optimistic towards their future, helping them make appropriate plans and improving their financial management skills. This policy prevents members from lodging grievances, which precludes the organisation from engaging in unproductive work such as following protocols, opening disciplinary actions and departmental charges, whereas the same time could be utilised in

effective Policing. It further saves the members from financial crisis and debts. This restores the morale of the employees in the organisation along with discipline and reputation.

8.3.2   TRANSFERS

Transfers seem to be a major stumbling block in the SAPS management. The South African Police Service, being an enormous organisation, battles to deal with transfers timeously. Transfer policies are effective, but individual units fail to implement them uniformly as they depend on race representation and a lack of manpower. As per transfer policy, Police Officers are advised to look for cross transfers with the same rank and race. That makes it extremely difficult, where exasperated Police members often demote their rank in order to take the transfer. Most of the Police Officers have family residing in rural areas, forcing Police members into double expenses. It is advised that transfer cases should be dealt with by Merit, Requirement and the Personal circumstances of the Police member.

8.3.3   TRAINING AND DEVELOPMENT

There is continuous training in Policing issues, but the members lack training in awareness of mental well-being. Programmes as Trauma Debriefing, Suicide Prevention, HIV/AIDS, Parenting skills, and Disability are in place. However, the lack of available funds and shortage of members at the unit / station blocks them from attending these workshops. Some of Police participants mentioned they were not aware of Trauma Debriefing. Members are exposed to the availability of the services through marketing by EHW. However, due to workload and stigmatisation they seek external health professions as Psychiatrists. Often, they are admitted in hospital or depend on medication, with the possibility of side effects impacting their work and booking them off sick. Exposing members to in-house workshops gives knowledge and proper guidance to manage their mental well-being effectively. A holistic therapy is emphasised.

8.4   LIMITATIONS

This study was located in the KZN region however, the usefulness of these findings to other emergency services in South Africa as well as other institutions of similar nature should not be underestimated. White and Indian races were not well represented. Personality Types predicted Resilience in this study, however to ascertain long term predictions focus should be on longitudinal studies. Some suggestions for further research include the following:

- Longitudinal studies would add value to the area of research and would establish long term predictability between Personality Types and Resilience in SAPS.

- To identify the Risk and Promoting Factors which can be generalised to the general population, whereas this study is Police specific.

- Investigate if socio-economic background of the members would impact their Resilience

- Investigating gender differences in Resilience in policing environment.

8.5   CONTRIBUTION TO ACADEMIC KNOWLEDGE

This study has expanded the knowledge of Personality and Resilience in the Policing environment. In addition, the findings of this study can be applied to various Emergency Services, such as Fire Fighters, Health Professionals, Para-Medics, Security Organisations, Metro Police, and other Risk Organisations. Many scholars have forwarded in numerous theories on Resilience and several studies undertaken on MBTI, however no specific attempt was made in utilising MBTI to ascertain the Personality Types and relate it through SOC to understand the level of Resilience on the Police population. It is first of its kind to undertake study of this nature. Adopting mixed-methods has widened the knowledge of Resilience in the Policing environment. The factors impacting the general population and the Police population are not the same. The risk and Protective Factors identified are specific to SAPS, Kwazulu-

Natal Police members attending Crime Scenes. The South African Police culture, due to its diversity, is unique in comparison with other Policing environments of the world. Unfolding the lack of resources and its impact on work and Police members have given an in-depth insight. The participants mentioned how lack of vehicles hampered their service delivery. In rural areas members use their own resources to make calls, because telephone lines were unused due to cable theft or lines disabled due to heavy rains. In certain isolated areas, they have to park their vehicles and walk few kilometres to attend to cases as most roads were not worthy. In Western countries Police members have immediate access to resources, they don't have stress of this nature. The lack of resources was also significant factor contributing to disappointments in conjunction with issues, accelerating the stress levels.

Stigmatisation was another contribution, where members refrain from seeking help in times of crisis. The reasons are attributed to the diversity and culture that plays a vital role in South African Police Service. Participants stated they believed in the Traditional Healers and Medicine than consult a Psychologist. Some participants still believed "Cow boys don't cry" and adhered to it. Other participants were under the impression that consulting a Psychologist or a Psychiatrist is followed by a certain race group. The issue of confidentiality was also the main concern. The Police Officers were at distress that if they have to access Mental Health support their confidentiality will be compromised, also they perceived it will negatively influence their promotions and transfers. They apprehended they will be labelled by their colleagues. This illusion of labelling was apparent with most Police members. In summation, they denied help, considering assistance as stumbling block to their progress.

The study also revealed that there is diversity in coping skills, which is not prevalent in other countries and no other studies have researched on it. African males played Soccer, listened to Music, read Newspaper, while African females listened to Gospel Music. The

White officials have hobbies such as Swimming, Surfing, Riding motor bikes, and Building boats. Indian police officials enjoyed Fishing, Watching movies and were interested in Body Building. They spent time with their family and extended families. That said, all of them mentioned that being spiritual made them calm and happy. Irrespective of their race, all SAPS members used their hobbies as their relaxation and coping mechanisms.

Most of the existing research has focused on the negative issues in Policing, such as Police Brutality, Psychological Illness, Corruption and so on. The academic community is unaware the nature of the work Police Officers perform, as well as the Trauma, Stress, Chain of Command problems and so on that debilitate their work. This study is the first of its nature to focus on the Positive Aspects of Policing: that Police officers are generally Resilient, that they work under pressure with minimum resources available, they are poorly paid, but yet they still serve the community. Members do not know if they will return home alive, but despite this they are lively, happy and not hesitant to attend the call of duty - which could be detrimental to their life. Personality is a determinant of a Resilience or Non-Resilience of a Police Officer, due to circumstances Risk or Protective Factors are developed which could be either detrimental to the members or enhance coping measures respectively.

Identifying Personality Types in ascertaining Police Officer's Resilience using MBTI and SOC measures was unique itself. The scale, MBTI was an appropriate tool to identify the Personality Types, while SOC reflected their Resilience. The findings of Quantitative aspect of the study were supported by the Qualitative outcomes. Personality Types in conjunction with Resilience were probed further to extract Protective and Risk Factors specific to South African Police Service. Therefore, the findings contribute vastly to the existing knowledge in the discipline of Psychology where the study is located, as well as providing insights for adjacent disciplines such as Criminology and Behavioural Medicine.

The above contributions can make a basis for a Manual Training in facilitating *Police Resilience*. It will be ensured that workshops are conducted in SAPS regularly to Educate, Empower, and Build Resilience among Police members. This contribution is rare and first of its kind.

8.6   CONCLUSION

It is inevitable that Police work involves immense stress and trauma, coping and coming to terms with trauma differs with individuals. Research has established that there are individual differences owing to endowed Personality Traits. Studies indicate that some individuals are inherently Resilient, however Resilience can be learnt and built. In this study, the MBTI and SOC instruments were utilised to ascertain the Personality Types and Resilience levels of Police Officers.

The Research Methods used in the study present a greater reliability of the results and thorough investigation of the problem. For that reason, the conclusions of the study may achieve greater challenges. A Mixed-Method approach was used. A Quantitative method was used in the first phase of research - administering MBTI and SOC, while the second phase involved the semi-structured interviews. An integration of the Quantitative and Qualitative findings has been discussed, referring to literature wherever essential. Triangulation was evident with the convergence of the findings of both methods. The findings showed that the ESTJ Personality Types in a Policing environment were more Resilient than other types. Risk and Protective Factors were the contributors to the stressors and coping mechanism of the Police Officers. In addition to their stressful work it was evident that Police Officers had challenges regarding leadership and support from the organisation. Recommendations are indicated in terms of Transfers, Promotions, Training and Development and ways to Mitigate Stigmatisation. The limitations of the study are outlined suggesting a

longitudinal study would be beneficial in the area of research. The chapter is closed with the contribution to Academic Knowledge. The findings of this research can be Generalised and Applied to all Emergency Services in South Africa.

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Appendix A

CONSENT FORM FOR QUANTITATIVE METHOD

I _____ am voluntarily taking part in the research process and hereby take note of the following:

I am being administered MBTI and SOC Scale by a registered Industrial Psychologist Mrs Mangla Kittur, who is compelled by the Act of 56 of 1974 to treat my information confidentially and ethically. Mrs Kittur has explained the purpose of the research and what exactly the questionnaires measure. We are given the autonomy of declining in the participation of research should we feel uncomfortable by the contents of the questionnaires. Mrs Kittur is a PhD student at the University of Kwazulu Natal, and is supervised by Prof J Buitendach. Mrs Kittur highlighted that I may contact her supervisor if I may have any concern regarding my participation or the research itself. The contact number is as below: Prof   J Buitendach – 031 260 2407

I am aware the above questionnaires identify my personality type and level of Resilience, and the data is utilised for the SAPS benefit. The researcher has emphasised on confidentiality and hence I am being a part of this research without any reservation.

Manipulating the tests bears a negative reflection on my personality reports, therefore I am being honest in answering the questionnaires.

I understand the purpose of the study and therefore I give my consent to be tested and am happy to be a part of the research.

Name _____

Date   _____

Cell Num. _____

PersalNum. _____

Signature _____

Appendix B

CONSENT FORM FOR QUALITATIVE METHOD

I give my consent to participate in the research project. I am fully aware the background and purpose of the interview. Mrs. Kittur has imparted the full knowledge of her research and the aim of this study.

Confidentiality – Confidentiality and anonymity will be maintained. If one wants to remain anonymous, he or she need not write name or any particulars in the interview sheet. A code may be assigned for further statistical analysis. This interview will be recorded only with consent; alternatively process notes may be taken for study and reference.

Purpose of the study - This research involves gathering data through an interview. It aims to study the protective resources as a crime scene investigator, when a member confronts adversity at work such as trauma and stress. Organisational stress, crisis, negative publicity and personal problems. The researcher needs to know how a member cope or manage with this crisis what coping mechanisms he/she adapts to overcome the hardship. This study also concentrates on members who lack these personal resources and what kind of intervention or help are they expecting?

Participation – Your participation is voluntary and may choose to withdraw from the process without being discriminated should feel uncomfortable. The data will be collected for analysis and will be published as part of my thesis. Your participation in my research will enrich the information base.

Mrs. Kittur highlighted that I may contact her supervisor if I may have any concern regarding my participation or the research itself. The contact number is as below: Prof J Buitendach – 031 260 2407

DECLARATION

I agree to participate in Mrs. M Kittur's study, I hereby give researcher my consent:

For the interview: Signature:_____Date_____

Consent for audio recording: Signature:_____Date_____

Appendix C

<u>**Qualitative Method: Semi Structured Interviews**</u>

1 How long have you been at the Police Force?

2 For how many years you are working as a crime scene investigators?

3 What nature of crime scenes do you attend to?

4 Did the crime scenes had any effect like stress or trauma on you or your colleagues emotionally?

5 How did you overcome the situation?

6 Is there any kind of intervention taken by the commander/management?

7 Do you take initiative in getting the necessary support available at SAPS or external health professionals.

8 What support structure do you have, as wife, family members, friends and colleagues?

9 Do you sometimes / always depend on alcohol or medication or book off sick to heal yourself.

10 Do you talk about work stress issues to your friends and family.

11 How do you handle disappointments like promotions and transfers.

12 What suggestions or advice do you have for the members who are silently suffering due to stigmatization.

13 What are your hobbies, or what do you do for relaxation.

14 Where do you see yourself five years from now.

Sense of Coherence – Orientation to Life Questionnaire – 29 items

Source: Antonovsky, Aaron Unraveling the Mystery of Health. How People Manage Stress and StayWell. San Francisco 1987.
C = comprehensibility Ma = manageability Me = meaning
R = before calculating the total score this should be reversed.

1. When you talk to people, do you have the feeling that they don't understand you? C)
R 1 2 3 4 5 6 7
Never Always have this feeling

2. In the past, when you had to do something which depended upon cooperation with others, did you have the feeling that it: (Ma)
1 2 3 4 5 6 7
Surely wouldn't Surely would get done
get done

3. Think of the people with whom you come into contact daily, aside from the ones to whom you feel closest. How well do you know most of them? (C)
1 2 3 4 5 6 7
You feel that You know them very well
they're strangers

4. Do you have the feeling that you don't really care about what goes on around you? (Me)
R 1 2 3 4 5 6 7
Very seldom Very often
or never

5. Has it happened in the past that you were surprised by the behaviour of people whom you
R thought you knew well? (C)
1 2 3 4 5 6 7
Never happened Always happened

6. Has it happened that people whom you counted on disappointed you? (Ma)
R 1 2 3 4 5 6 7
Never happened Always happened

7. Life is: (Me)
R 1 2 3 4 5 6 7
Full of interest Completely routine

8. Until now your life has had: (Me)
1 2 3 4 5 6 7
No clear goals Very clear goals and purpose
or purpose at all

9. Do you have the feeling that you're being treated unfairly? (Ma)
1 2 3 4 5 6 7
Very often Very seldom or never

10. In the past ten years your life has been: (C)
1 2 3 4 5 6 7
Full of changes Completely consistent and clear
without your knowing
what will happen next

11. Most of the things you do in the future will probably be: (Me)
R 1 2 3 4 5 6 7
Completely Deadly boring
fascinating

12. Do you have the feeling that you are in an unfamiliar situation and don't know what to do? (C)
1 2 3 4 5 6 7
Very often Very seldom or never

13. What best describes how you see life: (Ma)
R 1 2 3 4 5 6 7

One can always There is no solution to painful
find a solution to thins in life
painful things in life
14. When you think about your life, you very often: (Me)
R 1 2 3 4 5 6 7
Feel how good Ask yourself why you exist at all
it is to be alive
15. When you face a difficult problem, the choice of a solution is: (C)
1 2 3 4 5 6 7
Always confusing Always completely clear
and hard to find
16. Doing the things you do every day is: (Me)
R 1 2 3 4 5 6 7
A source of deep A source of pain and boredom
pleasure and
satisfaction
17. Your life in the future will probably be: (C)
1 2 3 4 5 6 7
Full of changes Completely consistent and clear
without knowing
what will happen next
18. When something unpleasant happened in the past your tendency was: (Ma)
1 2 3 4 5 6 7
"To eat yourself up" To say "ok that's that, I have to live
about it with it" and go on
19. Do you have very mixed-up feelings and ideas? (C)
1 2 3 4 5 6 7
Very often Very seldom or never
20. When you do something that gives you a good feeling: (Ma)
R 1 2 3 4 5 6 7
It's certain that It's certain that something will
you'll go on happen to spoil the feeling
feeling good
21. Does it happen that you have feelings inside you would rather not feel? (C)
1 2 3 4 5 6 7
Very often Very seldom or never
22. You anticipate that your personal life in the future will be: (Me)
1 2 3 4 5 6 7
Totally without Full of meaning and purpose
meaning or purpose
23. Do you think that there will always be people whom you'll be able to count on in the
R future? (Ma)
1 2 3 4 5 6 7
You're certain You doubt there will be
there will be
24. Does it happen that you have the feeling that you don't know exactly what's about to
happen? (C)
1 2 3 4 5 6 7
Very often Very seldom or never
25. Many people – even those with a strong character – sometimes feel like sad sacks
R (losers) in certain situations. How often have you felt this way in the past? (Ma)
1 2 3 4 5 6 7
Never Very often
26. When something happened, have you generally found that: (C)
1 2 3 4 5 6 7
You overestimated You saw things in the right
or underestimated proportion
its importance
27. When you think of the difficulties you are likely to face in important aspects of your life,
R do you have the feeling that: (Ma)

1 2 3 4 5 6 7
You will always You won't succeed in overcoming
succeed in overcoming the difficulties
the difficulties
28. How often do you have the feeling that there's little meaning in the things you do in your daily life? (Me)
1 2 3 4 5 6 7
Very often Very seldom or never
29. How often do you have feelings that you're not sure you can keep under control? (Ma)
1 2 3 4 5 6 7
Very often Very seldom or never

Appendix E

JOHANNESBURG OFFICE
15 hunter avenue | ferndale | randburg | johannesburg | 2194
p.o. box 2560 | pinegowrie | 2123 | johannesburg | south africa
+27 11 781 3705/6/7 (tel) | +27 11 781 3703 (fax)
info@jvrafrica.co.za (email)

CAPE TOWN OFFICE
3rd floor | imperial bank terraces | tyger waterfront | carl cronje drive | bellville
p.o. box 5534 | tygervalley | 7536 | cape town | south africa
+27 861 333 916 (tel) | +27 861 004 225 (fax)
capeinfo@jvrafrica.co.za (email)

FREE STATE OFFICE
31 wessels street | eureka | bethlehem | 9700 | south africa
+27 58 303 3843 (tel) | freestate-info@jvrafrica.co.za (email)

Co.Reg.No. 2001/015618/07   VAT Reg.No. 4300195064

7 July 2014

To whom it may concern:

RE: Inclusion of psychological test material in Mangala Kittur's proposal (Student number 214584706)

This letter refers to the Ethics Committee's request that sample material or items of questionnaires used in the student's study entitled "Personality types and Resilience in Crime scene Investigators" be included in the documentation submitted to the Ethics Committee. The Myers-Briggs Type Indicator (MBTI®) instrument has been classified as a psychological test by the Psychometric Committee of the Professional Board for Psychology at the Health Professions Council of South Africa (Form 207).

According to the Health Professions Act no. 56 of 1974, the control over psychological tests is deemed an act pertaining specially to the profession of psychology (Government Notice R. 993, section 2), and it would thus constitute an offence to make such an assessment publicly available if this was not under the control of a psychologist at all times.

It is the responsibility of JvR Psychometrics (Pty) Ltd [JvR], as distributors of this assessment in Sub-Saharan Africa, and representatives of the international copyright holders, to protect the integrity of the MBTI® instrument. This instrument is a copyrighted assessment, and may not be published in full or in part by any means without written permission from the copyright holder. In as such that the MBTI Form M is sold commercially, permission to include a copy of these assessments in the proposal, final thesis or dissertation will not be granted.

If you have any queries regarding the above matter, please feel free to contact me.
Yours sincerely,

Dr. Nicola **Taylor** PhD (Psych)
DIRECTOR: RESEARCH
Tel: +27-11-781-3705
Fax: +27-11-781-3703
e-mail: nicola@jvrafrica.co.za

Appendix F – Ethical Clearance

03 August 2015

Mrs Mangala Kittur (214584706)
School of Applied Human Sciences – Psychology
Howard College Campus

Dear Mrs Kittur,

Protocol reference number: HSS/0095/015D
Project title: Personality Types and Resilience of Crime Scene Investigators in Kwazulu Natal, South African police Service: A mixed method approach

Full Approval – Expedited Application
With regards to your response received on 08 July 2015 to our letter of 22 May 2015, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol have been granted **FULL APPROVAL.**
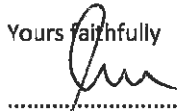
Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

....
Dr Shenuka Singh (Chair)

/ms

    Cc Supervisor: Professor JH Buitendach
    Cc Academic Leader Research: Dr Jéan Steyn
    Cc School Administrator: Ms Ayanda Ntuli

Appendix G – SAPS Gatekeeper's Letter

SUID-AFRIKAANSE POLISIEDIENS

SOUTH AFRICAN POLICE SERVICE

Privaatsak/Private Bag   X94

Reference Nr Verwysing	3/34/2
Navrae Enquiries	Lt-Col GJ Joubert
Telefoon Telephone	012-393 3118
Faksnommer Fax number	012-393 3178

STRATEGIC MANAGEMENT COMPONENT

HEAD OFFICE

PRETORIA

A.   The Provincial Commissioner   (Attention: Col van der Linde)
      KWAZULU-NATAL

B.   The Divisional Commissioner   (Attention: Maj M Rababalela)
      FORENSIC SERVICES

RE: RESEARCH REQUEST: PERSONALITY TYPES AND RESILIENCE OF CRIME INVESTIGATORS IN THE SAPS, KWAZULU-NATAL: A MIXED METHOD APPROACH: PHD: UNIVERSITY OF KWAZULU-NATAL; RESEARCHER: M KITTUR

A-B   1.   The research request of Capt Mangala Kittur, pertaining to the above mentioned topic, refers.

      2.   The aim of the research is to understand police resilience in conjunction with their personality types. The researcher's study will attempt to prove that personality is a great contributor to an individual's resilience (See proposal attached).

      3.   The target population for the study is crime scene investigators of South African Police Service, KwaZulu-Natal. The researcher is requesting permission to conduct semi-structured interviews with some of these members. Questionnaires will also be distributed to collect data from members.

      4.   The proposal was perused according to National Instruction 1 of 2006 and it is recommended that permission be granted for the research, subject to the final approval and further arrangements by the offices of the Divisional Commissioner: Forensic Service and the Provincial Commissioner: Kwazulu-Natal, and that the undertaking be obtained from the   researcher prior to the commencement of the research that –

      4.1. the research will be at her exclusive cost;

      4.2   she will conduct the research without any disruption of the duties of members of the Service and where it is necessary for the research goals, research procedure or research instruments to disrupt the duties of a member, prior arrangements must be made with the commander of such member;

RE: RESEARCH REQUEST: PERSONALITY TYPES AND RESILIENCE OF CRIME INVESTIGATORS IN THE SAPS, KWAZULU-NATAL: A MIXED METHOD APPROACH: PHD: UNIVERSITY OF KWAZULU-NATAL; RESEARCHER: M KITTUR

4.3   the information will at all times be treated as strictly confidential, and

4.4.   The researcher will provide an annotated copy of the research work to the Service.

With kind regards,

**_____MAJOR GENERAL
HEAD STRATEGIC MANAGEMENT
M MENZIWA**

Date: 2015 -06- 02