

**COPING, STRESS AND SUICIDE IDEATION IN THE SOUTH
AFRICAN POLICE SERVICE IN THE GAUTENG PROVINCE**

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FOR THE READER'S ATTENTION

The reader is reminded of the following:

- The references as well as the editorial style as prescribed by the Publication Manual (4th edition) of the American Psychological Association (APA) were followed in this dissertation. This practice is in line with the policy of the Programme in Industrial Psychology of the PU for CHE to use APA style in all scientific documents as from January 1999.
- The thesis is submitted in the form of research articles. The editorial style specified by the South African Journal of Industrial Psychology (which agrees largely with the APA style) is used, but the APA guidelines were followed in constructing tables.

PREFACE

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ABSTRACT

1.1 Title: Coping, stress and suicide ideation in the South African Police Service in the Gauteng Province.

1.2 Key Terms: Coping, stress, suicide, suicide ideation, police, police official, law enforcement.

Suicidal behaviour is one of the most tragic events in human life causing serious emotional, spiritual, medical, social and psychological distress for individuals, family and friends. In addition, it imposes a great economic problem for the individual, family, and society. In the South African Police Service an alarming rate of 4 per 10 000 suicides has been indicated in previous years. Due to the escalation of suicide rates it is regarded as a major public health concern.

Several studies have been done regarding suicide and law enforcement agencies but few regarding suicide ideation in law enforcement agencies. The objective of this study was to investigate the relationship among coping, stress and suicide ideation of police officials in the Gauteng Province within the SAPS.

A cross-sectional survey design was used. A random, stratified sample was taken from police officials in the Gauteng Province ($n = 266$). The Adult Suicide Ideation Questionnaire, Police Stress Inventory, the COPE Questionnaire and a biographical questionnaire were administered.

The results of this study indicated that the factors that predict suicide ideation best are the following: a previous suicide attempt, passive coping styles, to be charged in terms of the disciplinary code, medical conditions and gender. The results also indicated that 9,02% of the sample showed significant levels of suicide ideation.

Recommendations for future research were made.

OPSOMMING

Onderwerp: Coping, stres en selfmoord-denkbeeldvorming in die Suid-Afrikaanse Polisie diens in die Gauteng Provinsie

Sleuteltermes: Coping, stres, selfmoord, selfmoord-denkbeeldvorming, polisie

Selfmoordgedrag is een van die mees tragiese gebeutenisse in 'n mens se lewe wat ernstige emosionele, geestelike, mediese, sosiale en psigologiese nood vir individue, familie en vriende veroorsaak. Dit veroorsaak ook groot ekonomiese probleme vir individue, familie en vriende. In die Suid-Afrikaanse Polisie Diens is 'n onrusbarende selfmoordkoers van 4 per 10 000 al in vorige jare gerapporteer. Vanweë die eskalering van die selfmoordkoers word selfmoord beskou as 'n enorme publieke gesondheids dilemma.

Menige studies is al gedoen rakende selfmoord in wetstoepassende agentskappe, maar min oor selfmoord-denkbeeldvorming. Die doelwit van hierdie studie was om die verhouding tussen coping, stres en selfmoord-denkbeeldvorming in die SAPD in die Gauteng Provinsie te ondersoek.

Dwarsdeursnit opname-ontwerp is gebruik. 'n Ewekansige, gestratifiseerde steekproef ($n = 266$) is van polisiebeamptes in die Gauteng Provinsie geneem. Die Volwasse Selfmoord denkbeeld-vormingsvraelys, Polisiestres Inventaris, COPE-vraelys en 'n biografiese vraelys is administreer.

Die resultate van die studie het aangedui dat die faktore wat selfmoord-denkbeeldvorming die beste voorspel die volgende is: 'n vorige selfmoordpoging, passiewe coping-strategieë, om volgens die dissiplinêre kode aangekla te word, mediese toestand en geslag. Die resultate het ook aangetoon dat 9,02% van die steekproef betekenisvolle vlakke van selfmoord-denkbeeldvorming getoon.

Aanbevelings vir toekomstige navorsing was gemaak.

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CHAPTER 1

INTRODUCTION

This dissertation deals with suicide ideation, stress and coping in the South African Police Service in the Gauteng Province of South Africa. In Chapter 1 the motivation for the research is discussed in terms of the problem statement and aims of the research. Thereafter the research method and division of chapters are discussed.

PROBLEM STATEMENT

According to a report from the World Health Organisation in 2000, approximately 10 to 20 times more people will attempt suicide worldwide (Schlebusch, 2000). The WHO figures show that globally an increase in suicide rates, from 10,1 per 100 000 to 16 per 100 000 can be observed between 1950 and 1995 (an increase of almost 60% in 45 years). China and India account for one fourth of all world suicides (Schlebusch, 2000). According to Deonarain and Pillay (2000), suicide is the ninth leading cause of death in the United States.

Studies done by The Durban Parasuicide Study (DPS), reflect suicide rates in the general South African population of up to 19 per 100 000. These figures are probably still unrepresentative, because they are largely based on academic hospital statistics and pre-Apartheid research (Schlebusch, 2000). In some groups the figures are higher and reflect rates of 4 per 10 000, such as the South African Police Services (Schlebusch, 2000). Stress-related psychological problems are also extremely prevalent in South Africa. According to Schlebusch (2000), additional factors that combine to elevate stress levels are the influences of first world forces in an internationally, less isolated post-Apartheid South Africa, violence and socio-economic difficulties, including high levels of unemployment. Attention has recently been focused on suicide in stress-related working contexts (Anshel, 2000; Nel, 1994; Rothmann & Agathagelou, 2000; Rothmann & Strijdom, 2002).

International and national research articulates that police work entails a certain amount of risk and difficulty (Chandler, 1995; Kurke, 1995; Nel, 1994; Van der Westhuizen, 2000; Violanti, 1996, 1997). In comparison with other occupations, police work has been described as

particularly stressful (Anderson, Litzenberger & Plecas, 2002; Anshel, 2000; Burke, 1998; Liberman et al., 2002; Lennings, 1997; South African Police Service, 2001a; Violanti 1992). Violanti (1997) states that internationally, there is an elevated rate of suicide within law enforcement agencies.

At a proceeding on suicidology, Schlebusch (2000), defined suicidal behaviour as signifying "...a wide range of self-destructive or self-damaging acts in which people engage either predeterminedly or impulsively with varying degrees of motive, lethal intent and awareness of the possible outcome and consequences" Violanti (1997) defines suicide as a complex phenomenon that involves the interaction of many risk factors. Factors such as gender, age, race, personality, life experiences, prior socialization, and psychological disposition all contribute in varying degrees to completed suicide. Suicidal behaviour varies from ideation (suicidal thoughts) to intent (inflicting behaviour), and then from attempt to completion. Understanding this, it implies that there is a stepwise hierarchy of actions with an underlying gradient of severity (Vilhjalmsson, Kristjandottir & Sveinbjarnardottir, 1998).

Suicidal behaviour is one of the most tragic events in human life causing serious emotional, spiritual, medical, social and psychological distress for individuals, family and friends. In addition, it imposes a great economic problem for the individual, family, and society. It is regarded as a major public health concern (Cassimjee & Pillay, 2000). Naidoo (2000) states that suicide reflects a failure of social control over the behaviour of the person and is often considered as rage against society, directed toward oneself.

The South African Police Service (SAPS) has gone through a number of changes since the historic change of Government in April 1994. Some of these changes were the transformation of the top structure of the SAPS, the integration of former liberation movements and former homeland agencies and the institution of new policies such as community policing (Government Gazette, 1994; South African Police Service, 1994, 1995; Van der Westhuizen, 2000). The SAPS is currently focussing more on service delivery in the community. According to Van der Westhuizen (2000), the transition from a police force with an emphasis on authoritarian decision-making to a police service with an emphasis on community policing and participatory decision-making can be seen as one of the most important challenges the organisation has to face.

Young (1998) found that an inability to deal with emotional uncertainty in the context of the recent political changes greatly contributed to apathy, depression and demotivation amongst police officials. This has a direct influence on productivity and efficiency. Nel (1994) found that the effect of the above changes on members was resistance against the transition process, uncertainty, negativism, low motivation and low productivity.

Mental health problems within the SAPS is reflected in the high turnover of personnel, an increase in medical boardings, as well as a high suicide rate compared to the rest of the South African population. Nel and Steyn, (1997) mention that symptoms like lack of patience, tension, aggression, depression, alcohol abuse, moodiness, emotional numbness, loss of motivation and interest are apparent and affect the ability of police officials to function in the family, social and professional contexts.

According to Rossouw (1998, 1999, 2000) the highest suicide rate in the SAPS is amongst African members (the suicide rate is also increasing amongst Indian members), members doing visible policing duties, non-commissioned and unmarried officers and those between the ages of 30 to 35 years. The service pistol is used in 80% of all completed suicides.

Nel and Steyn (1997) argue that the mental health of the SAPS cannot be addressed in isolation from the broader South African context. Police officials reflect a broader South African society historically characterised by problematic inter-group relations. Although society expects police officials to manage crime impartially, the attitudes, values and behaviour of police officials mirror the broader South African community (Nel, 1994; South African Police Service, 1995; Van der Westhuizen, 2000).

Some researchers have suggested that suicide and suicidal ideation is limited to those who are significantly depressed or anxious about terminal illness and death and dying issues (Schlebusch, 2000). Cassimjee and Pillay (2000) emphasised that the relationship between suicide and depression has been well established through various studies that show depression to be untreated in 50-70% of suicide victims. Others, such as Bosch (2000), mention psychological pain, certain personal characteristics, problem-solving strategies, hopelessness, helplessness and suicidal ideation as significant predictors of suicide.

Vilhjalmsson et al., (1998) argued that studies of suicide ideation showed various risk factors such as low self-esteem and limited problem-solving capabilities. Those who are depressed, dissatisfied, pessimistic and hopeless, abuse alcohol or drugs, or engage in illegal activities are also more prone to suicidal ideation. Life stress in general, and family stress in particular is associated with suicide ideation. A lack of social interaction and support has also been implicated. Noor Mahomed, Selmer and Lasich, (2000) mention three primary risk indicators of suicidal intent, namely, communication of the intent, previous attempts and antecedent circumstances such as drastic financial changes, change in the family situation, occurrence of physical illness and substance abuse.

According to Kurke (1995), various studies observed that stress related to police work breaks down into organisational, operational and situational components. Organisational stressors focus on work-related conditions such as shift work and lack of supervisory support. Operational stress includes the life-threatening nature of police work (boredom, tensions between police and community, threats of civil liability and lack of support at home, being shot and shooting a citizen, working in a disaster situation and other critical incidents) (Kurke, 1995). Violanti (1997) proposed authoritarian structure, lack of participation in decisions and administrative support, a punishment-centred philosophy, and unfair discipline as factors contributing to organisational stress in police work.

According to Kurke (1995), organisational stressors and extra-organisational stressors are mutually interactive and bring about the psychological and physiological condition called stress. Exposure to distress without the use of multiple resources for coping may increase the potential for suicide (DSM-IV, American Psychiatric Association, 1994).

Several studies have found that police officers possess maladaptive avoidance coping behaviours (Anderson et al., 2002). Anshel (2000) expressed concern about the tendency of using alcohol as a way of coping with stress in the police services. Anderson et al., (2002) have shown that high levels of divorce and suicide have been related to a failure to cope adequately.

Rothmann and Strijdom (2002) found that a weak sense of coherence relates to suicide ideation, low generalised self-efficacy, an external locus of control and low job-satisfaction amongst police officers. According to Rothmann and Van Rensburg (2001) police officers who

consume more than 14 alcoholic drinks per week (compared to those who have fewer drinks) had a weaker sense of coherence, lower self-efficacy, a higher external locus of control and more dysfunctional coping strategies, less job-satisfaction and higher suicide ideation.

Noor Mahomed et al. (2000) stated that consistent with suicide literature, more females report suicidal ideation and more males attempt suicide (Canetto, 2000). Deonarain and Pillay (2000) stated that in retrospective studies on suicidal behaviour, prior suicide attempts are cited as the best single predictor of completed suicide. They have mentioned that in various local and international studies regarding suicide a major precipitating factor for parasuicide attempts was interpersonal conflict. They found that disrupted family environment, indicated separation, divorce, widowhood, or legal troubles, also have been associated with suicide.

The objective of this research is thus to determine the relationship between coping, stress and suicide ideation of police officials as it manifests itself in Gauteng Province. If it is established that suicide ideation is related to these variables, programmes such as recruitment, selection, induction, training and development and performance management should be reconsidered. This will facilitate the development of psychological strengths to reduce suicide ideation in the South African Police Services in Gauteng Province and ensure organisational effectiveness.

Stress and coping among police officers

According to Rossouw (1999, 2000) factors that lead to suicides in the SAPS are, besides the stressful working environment, relationship problems, financial problems, alcohol abuse, health problems and criminal cases against members. Violanti (1997) stated that various researchers have indicated that problems with interpersonal relationships may increase the potential for suicide.

“Stress may be viewed as the embodiment of conflict resulting from demands for performance of bodily and social (including occupational) functions imposed by any constellation of environmental and psychological factors that either stimulate or inhibit one’s ability to satisfactorily perform physiological, psychological, or social (including occupational) functions” (Kurke, 1995:392). According to Anderson et al. (2002) stress is defined as the response of an individual to the perceived imbalance between the demands of the situation, and the resources one has at his/her disposal to respond successfully.

Some of the work stressors that confront police officers are boredom, lack of respect from members of the public, excessive paperwork, contacts with the public that are sometimes negative and confrontational, shift work, threats of violence, and the militaristic nature of the bureaucratic structure of policing. Because of these stressful aspects of policing a variety of symptoms and reactions may occur. Symptoms such as deteriorating work performance, negative psychological states (depression, anger and burnout) and psychosomatic and physical conditions (Burke, 1998). Other research with police members indicated increased rates of illness, post-traumatic stress, burnout, alcohol abuse and suicides, decreased levels of job satisfaction and job performance as prevalent in their lives (Anshel 2000; Nel 1994; Rothmann & Agathagelou, 2000; Rothmann & Strijdom, 2002).

Police officers are being subjected to an inordinate amount of stress. It is a well-known fact that the quality of performance will increase in response to certain stressors up to a point, after which degeneration of performance will occur (Kurke, 1995). Anshel (2000) theorized that stress could lead to absenteeism, burnout, job dissatisfaction, early retirement, long-term disability, poor work performance, and premature death. Lennings (1997) argued that exposure to violent and emotional unsettling situations are an important stressor to police.

Violanti (1996) theorised that traumatic events most often reported by police include infrequent occurring duties related to violent death, injury or the non-accidental death of a child. The effects of trauma on police officials are of increasing concern. Liberman et al. (2002) found that a major source of police stress is duty-related critical incidents. Duty-related critical incidents as described by the DSM-IV criterion for Post-Traumatic Stress Disorder (American Psychiatric Association, 1994) are those “the person experienced, witnessed, or was confronted with . . . that involved actual or threatened death or serious injury or a threat to the physical integrity of self or others”. A second major category of stressors is the routine aspects of the work environment. A number of researchers have indicated that the routine administrative, bureaucratic and organisational aspects of police work are at least as stressful as the inherent dangers of police work (Anderson et al., 2002). In a study done by Liberman et al. (2002) it was found that routine occupational stressors are more stressful to police officers than exposure to danger and critical incidents (Lennings, 1997).

Anshel (2000) found that officers who maintained heightened cynicism, pessimism, neuroticism, perfectionism, and reduced hardiness were more susceptible to high levels of perceived stress. Suicide may also be an attempt by officers to restore feelings of strength, courage and mastery over the environment following a perceived loss of coping abilities (Violanti, 1997).

Kurke (1995) believed that the individual's ability to cope with stress is influential in determining its physiological, psychological and behavioural outcomes and consequences of those outcomes. He also considered stress in terms of the ability of an individual to cope with the world, and categorised it in three types: emotional, behavioural and physical stress. He pointed out that it is the degree of change from a person's own emotional, behavioural and physical conditions, the duration, frequency and intensity of those changes that show difficulty in coping with stressors. Anderson et al. (2002) states that many variables, including personal attributes, cognitive appraisal, coping strategy and social support, may modify stress reactivity in an individual.

Anderson et al. (2002) define coping as the conscious use of cognitive or behavioural strategies to reduce perceived stress. Lennings (1997) theorized that two coping strategies have been identified in literature, namely emotion-focused and problem-focused strategies. The emotion-focused category represents less successful coping strategies than problem-focused. Lennings (1997) found that emotion-focused strategies seemed favoured as coping responses and were most related to good outcomes on the stress measures including drinking, divorce and suicide ideation among police officers. Police secrecy, contempt for the public and the wilful disobedience of organisational regulations have been found important, but negative coping methods used by police officers. Stevens (1998) found that coping abilities break down with increased exposure to pain, death or suffering and consequently individuals become psychologically debilitated.

Violanti (1997) proposed that through psychological and physiological mechanisms, police officers become ingrained in the police role and isolated from other life roles. Subsequently psychological depression, social isolation and constrictive thinking may result. This constrictive cognitive style and decision-making process lead the police officer to constantly approach stressful situations from a police role rather than from the role of a spouse, parent, friend or significant other.

The following research questions can be derived from the problem statement:

- How is suicide and suicide ideation conceptualised from the literature?
- What is stress and which situational factors contribute to stress and suicide ideation in the South African Police Service?
- How are coping and its relationship to suicide ideation and stress conceptualised from the literature?
- What is the relationship between suicide ideation, stress and coping in the SAPS in Gauteng Province?
- Could coping strategies and stressors predict suicide ideation of police officials in the SAPS in Gauteng Province?
- Could recommendations be made to prevent and manage stress and suicide ideation of police officers in the SAPS in Gauteng Province?

AIM OF THE RESEARCH

The research aims are divided into a general aim and specific objectives.

General aim

The general aim of this research is to establish the relationship between coping, stress and suicide ideation of police officials in the South African Police Service in Gauteng Province.

Specific objectives

The specific research objectives are as follows:

- To conceptualise suicide and suicide ideation from the literature.
- To conceptualise stress and to evaluate the situational factors that contribute to stress and suicide ideation in the SAPS.
- To conceptualise coping and its relationship to suicide ideation and stress from the literature.

- To determine the relationship between coping, stress and suicide ideation of police officials in the SAPS in Gauteng Province.
- To determine whether coping strategies and stressors can predict suicide ideation of police officials in the SAPS in Gauteng Province?
- To make recommendations to prevent and manage stress and suicide ideation of police officials in the SAPS in Gauteng Province?

RESEARCH METHOD

The research method consists of a literature review and an empirical study.

Literature review

The literature review focuses on suicide ideation, coping and stress in the SAPS. An overview is given on how suicide ideation, stress and coping is conceptualised in the literature and what the influence of these constructs are in the SAPS, as well as the relationship between suicide ideation, coping and stress.

Empirical study

The empirical study consists of the research design, study population, measuring battery and the statistical analysis.

Research design

A survey design will be utilised to obtain the research objectives. The specific design is a cross-sectional design, whereby a sample is drawn from a population at one time (Shaughnessy & Zechmeister, 1997). Information collected is used to describe the population at that time. This design can also be used to assess interrelationships among variables within a population. According to Shaughnessy and Zechmeister (1997) this design is best suited to addressing the descriptive and predictive functions associated with correlational research.

Study population

Police officials from Gauteng Province will be included in this study. A stratified random sample ($n=266$) of uniformed police members from the job level of constable to that of senior superintendent in Gauteng Province will be taken for this study.

Measuring battery

Four questionnaires will be used in the empirical study, namely the Adult Suicide Ideation Questionnaire (ASIQ) (Reynolds, 1991a), the Coping Orientations to Problems Experience Questionnaire (COPE) (Carver, Sheier & Weintraub, 1989), the Police Stress Inventory (PSI) (Pienaar & Rothmann, 2003a) and a biographical questionnaire.

- The *Adult Suicide Ideation Questionnaire* (ASIQ) (Reynolds, 1991a) will be used to measure participants' current level of suicide ideation, that is to assess the degree to which individuals have been thinking about killing themselves over the past month. Each of the items measures a specific suicidal behaviour or thought. Reynolds (1991a) reported that the internal consistency (coefficient alpha) of the ASIQ is 0,96, while Osman et al. (1999) found an alpha coefficient of 0,98. The test-retest reliability of the ASIQ varies between 0,86 and 0,95 (Reynolds, 1991b). Reynolds (1991a) provided evidence for the content, construct and criterion-related validity of the ASIQ. Osman et al. (1999) found that the ASIQ differentiated significantly between suicide attempt and psychiatric control groups. Rothman and Van Rensburg (2001), found that the internal consistency of the ASIQ is acceptable at 0,51 (0,15 r 0,50, Clarke & Watson, 1994). According to Rothman and Strijdom (2002), the internal consistencies of the ASIQ are 0,98 and 0,95 for whites and blacks respectively. These internal consistencies could be regarded acceptable according to Nunnally and Bernstein (1994).
- The *Coping Orientations to Problems Experience Questionnaire* (COPE) (Carver et al., 1989) is designed to measure both situational and dispositional coping strategies. The COPE is a multi-dimensional 53-item coping questionnaire that indicates the different ways in which people cope in different situations (Carver et al., 1989). Response choices were from 1 (I usually don't do this at all) to 4 (I usually do this a lot). Although this

questionnaire originally measures 13 different coping strategies, Pienaar and Rothmann (2003b) subjected the COPE to a principal components factor analysis with a varimax rotation. Three internally consistent factors were extracted, namely Problem-focused coping (16 items), Passive coping (13 items), and Seeking Emotional Support (7 items). The alpha coefficients of the three scales are 0,93, 0,86, and 0,87 respectively. All these values are acceptable (alpha coefficient $\geq 0,70$, Nunnally & Bernstein, 1994), and thus indicate the internal consistency of the factors of the PSI. Test-retest reliability varies from 0,46 to 0,86 and from 0,42 to 0,89

- The *Police Stress Inventory* (PSI) is used to measure participants' job stress and consists of 88 items. Pienaar and Rothmann (2003a) stated that a number of research studies have been published regarding stressors specific to the policing environment which were used in the construction of the *Police Stress Inventory* (PSI). The PSI focuses on common work situations that often result in psychological strain. Pienaar and Rothmann subjected the PSI to a factor analysis on a sample of 2 500 police members and extracted three factors, namely Job Demands (17 items), Lack of Resources (14 items), and Police Stressors (8 items). The alpha coefficient of the three scales was 0,92, 0,92 and 0,89 respectively. All values are acceptable (alpha coefficient $\geq 0,70$, Nunnally & Bernstein, 1994), and thus indicate the internal consistency of the factors of the PSI. The questionnaire is divided into 2 parts. Part A, consisting of 39 stressful job-related events, focuses mainly on the amount of stress. Respondents will be asked to rate themselves on a nine-point scale (1=low to 9=high). Part B consists of the same 39 stressful job-related events as used in part A, but in this case the participants were asked to evaluate the frequency of the stressful event in the last six months on a nine-point scale.
- A *Biographical Questionnaire* will be used to gather information about the demographic characteristics of the participants. This questionnaire will give participants the option of supplying their name and service number. Other information that will be gathered includes: station, age, sex, years of service, years in current position (to assess advancement), educational qualifications, marital status, satisfaction with relationship with significant other, language, history of disciplinary action, self-rated performance, self-rated job satisfaction, medical conditions, use of prescription and over-the-counter medicine, reasons

for medication, number of alcoholic drinks per week, smoking behaviour, number of cigarettes per day, other drug use, exercise behaviour and previous suicide attempt.

Statistical analysis

The statistical analysis will be carried out with the help of the SAS-program (SAS Institute, 2000). Cronbach alpha coefficients, inter-item correlation coefficients and factor analysis will be utilised to assess the reliability and validity of the measuring instruments (Clark & Watson, 1995). Descriptive statistics (e.g. means, standard deviations, skewness and kurtosis) and inferential statistics will be used to analyse the data.

Analysis of variance (ANOVA) will be used to determine differences between the sub-groups in the sample. A cut-off point of 0,50 (medium effect, Cohen, 1988) is set for the practical significance of differences between means.

Pearson product-moment correlation coefficients will be used to specify the relationships between the variables. A cut-off point of 0,30 (medium effect, Cohen, 1988) will be set for the practical significance of correlation coefficients. A stepwise multiple regression analysis will be used to determine the proportion of variance in the dependent variable (suicide ideation) that is predicted by the independent variables.

RESEARCH PROCEDURE

The measuring battery will be compiled. Included will be a letter requesting participation and motivation for the research. With regard to the research, ethical aspects will be discussed with the participants. The test battery will be administered in small groups at the work premises on suitable dates.

DIVISION OF CHAPTERS

Chapter 1: Introductions, problem statement and research objectives

Chapter 2: Research article.

Chapter 3: Conclusion, limitations and recommendations.

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CHAPTER 2

RESEARCH ARTICLE

**COPING, STRESS AND SUICIDE IDEATION IN THE SOUTH AFRICAN
POLICE SERVICE IN THE GAUTENG PROVINCE***

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ABSTRACT

Suicide is a global tendency. The rates are alarmingly high, specifically in the South African Police Services (SAPS). Several studies have been done regarding suicide and law enforcement agencies but few regarding suicide ideation in law enforcement agencies. The objective of this study was to investigate the relationship between coping, stress and suicide ideation within the SAPS. A cross-sectional survey design was used. A random, stratified test population was taken from police officials in Gauteng Province ($n = 266$). The Adult Suicide Ideation Questionnaire, Police Stress Inventory, the COPE Questionnaire and a biographical questionnaire were administered. The results indicated that the factors that predict suicide ideation the best are the following: a previous suicide attempt, passive coping styles, to be charged in terms of the disciplinary code, medical conditions and gender. The results also indicated that 9,02% of the sample showed significant levels of suicide ideation.

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OPSOMMING

Selfmoord is 'n wêreldwye tendens. Die selfmoordkoers is onrusbarend hoog veral in die Suid-Afrikaanse Polisie Diens (SAPD). Menige studies is al gedoen rakende selfmoord in wetstoepassende agentskappe, maar min oor selfmoord-denkbeeldvorming. Die doelwit van hierdie studie was om die verhouding tussen coping, stres en selfmoord-denkbeeldvorming in die SAPD te ondersoek. 'n Dwarsdeursnit opname-ontwerp is gebruik. 'n Ewekansige, gestratifiseerde steekproef ($n = 266$) is van polisiebeamptes in Gauteng Provinsie geneem. Die Volwasse Selfmoord-denkbeeld-vormingsvraelys, Polisiestres Inventaris, COPE-vraelys en 'n biografiese vraelys is gebruik. Die resultate van die studie het aangedui dat die faktore wat selfmoord-denkbeeldvorming die beste voorspel die volgende is: 'n vorige selfmoordpoging, passiewe coping-strategieë, om volgens die dissiplinêre kode aangekla te word, mediese toestand en geslag. Die resultate het ook aangetoon dat 9,02% van die steekproef betekenisvolle vlakke van selfmoord-denkbeeldvorming getoon, het.

According to a report from the World Health Organisation in 2000, approximately 10 to 20 times more people will attempt suicide worldwide in the future (Schlebusch, 2000). The WHO figures show that globally an increase in suicide rates, from 10,1 per 100 000 to 16 per 100 000 can be observed between 1950 and 1995 (an increase of almost 60% in 45 years). China and India account for one fourth of all world suicides (Schlebusch, 2000). According to Deonarain and Pillay (2000), suicide is the ninth leading cause of death in the United States. According to Sullivan (2001) 86 Americans commit suicide each day. In 1997 the Canadian suicide rate was 12.3 per 100 000 but it increased to 30 per 100 000 among young men aged 20-29 and elderly men aged 75 and over (Weir, 2001). Suicide is obviously a phenomenon with international importance.

Studies done by The Durban Parasuicide Study (DPS), reflect suicide rates in the general South African population of up to 19 per 100 000. Currently the ratio of fatal to non-fatal suicides is thought to be 20:1 or higher in South Africa. Fatal suicides reveal prevalence rates higher than that of the WHO's 16 per 100 000. Of all deaths in South Africa, 8% are suicide related. The suicide rate is higher among Black males (43,3%) than Caucasians (38,4%), Coloureds (15,9%) and Asians (2%). The average age of fatal suicides is 36,3 years and represents a shift from the elderly to younger people, especially Black youths. In non-fatal suicidal behaviour, the main age is 20 – 29 years (Schlebusch, 2003). These figures are probably still unrepresentative, because they are largely based on academic hospital statistics and pre-Apartheid research (Schlebusch, 2000). In some groups the figures are higher and reflects rates of 4 per 10 000, such as the South African Police Service (Schlebusch, 2000).

Stress-related psychological problems are also extremely prevalent in South Africa. According to Schlebusch (2000), additional factors that combine to elevate stress levels are the influences of first world forces in an internationally less isolated, post-Apartheid South Africa, violence and socio-economic difficulties including high levels of unemployment. According to recent research findings, Schlebusch (2003) states that the following are important contributors to higher stress levels and, ultimately, suicidal behaviour, in South Africa: chronic and acute stress, acculturation, socio-economic

pressures, high crime and violence rates, a history of human rights violations and transformation. Attention has recently been focused on suicide in stress-related working contexts (Anshel, 2000; Nel, 1994; Rothmann & Agathagelou, 2000; Rothmann & Strijdom, 2002).

At a proceeding on suicidology, Schlebusch (2000), defined suicidal behaviour as signifying "...a wide range of self-destructive or self-damaging acts in which people engage either predeterminedly or impulsively with varying degrees of motive, lethal intent and awareness of the possible outcome and consequences". Violanti (1997) defines suicide as a complex phenomenon that involves the interaction of many risk factors. Factors such as gender, age, race, personality, life experiences, prior socialization, and psychological disposition all contribute in varying degrees to completed suicide. Suicidal behaviour varies from ideation (suicidal thoughts) to intent (inflicting behaviour), and then from attempt to completion. Understanding this, it implies that there is a stepwise hierarchy of actions with an underlying gradient of severity (Vilhjalmsson, Kristjandottir & Sveinbjarnardottir, 1998). Reynolds (1991b:290) defines suicidal ideation as "thoughts and ideas about death, suicide, serious self-injurious behaviours, and thoughts related to the planning, conduct and outcome of suicidal behaviour". He also states that suicidal behaviour may be categorised as including suicide completion, overt intention, suicide attempt, and suicide ideation.

Suicidal behaviour is one of the most tragic events in human life causing serious emotional, spiritual, medical, social and psychological distress for individuals, family and friends. In addition, it poses a great economic problem for the individual, family, and society. It is regarded as a major public health concern (Cassimjee & Pillay, 2000; Hem, Berg & Ekeberg, 2001; Hirsch & Ellis, 1995; Sullivan, 2001; Weir, 2001). Naidoo (2000) states that suicide reflects a failure of social control over the behaviour of the person and is often considered as rage against society, directed toward oneself.

International and national research articulates that police work entails a certain amount of risk and difficulty (Chandler, 1995; Kurke, 1995; Nel, 1994; Van der Westhuizen, 2000;

Violanti, 1997). In comparison with other occupations, police work has been described as particularly stressful (Anderson, Litzenger & Plecas, 2002; Anshel, 2000; Burke, 1998; Lennings, 1997; Liberman et al., 2002; Hem et al., 2001; Schmidtke, Fricke, & Lester, 1999; South African Police Service, 2001a; Violanti 1992). It is also stated that there is an elevated rate of suicide within law enforcement internationally, when compared to the general population (Hem et al., 2001; Janik & Kravitz, 1994; Violanti, 1997; Violanti, Vena, Marshall & Petralia, 1996).

The South African Police Service (SAPS) has gone through a number of changes since the historic change of Government in April 1994. Some of these changes were the transformation of the top structure of the SAPS, the integration of former liberation movements and former homeland agencies and the institution of new policies such as community policing and affirmative action (Government Gazette, 1994; South African Police Service, 1994; 1995; Van der Westhuizen, 2000). The SAPS is currently focussing more on service delivery in the community. According to Van der Westhuizen (2000) the transition from a police force with an emphasis on authoritarian decision-making to a police service with an emphasis on community policing and participatory decision-making, is one of the most important challenges the organisation has to face.

Young (1998) found that an inability to deal with emotional uncertainty in the context of recent political changes greatly contributed to apathy, depression and demotivation amongst police officials. This has a direct influence on productivity and efficiency. Nel (1994) found that the effect of the above changes on members was resistance against the transition process, uncertainty, negativism, low motivation and low productivity.

Nel and Steyn (1997) found that mental health problems within the SAPS are reflected in the high turnover of personnel, an increase in medical boardings, as well as a high suicide rate compared to the rest of the South African population. These authors mention that symptoms like lack of patience, tension, aggression, depression, alcohol abuse, moodiness, emotional numbness, loss of motivation and interest are apparent and affect the ability of police officials to function in the family, social and professional worlds.

According to a study done in the South African Police Services regarding the effects of trauma it was found that exposure to traumatic events in Gauteng Province was alarmingly high. In Gauteng, 44% of members in the SAPS are at risk of being psychiatrically diagnosed with post-traumatic stress disorder (South African Police Service, 2001b).

In a report written and released by the Human Sciences Research Council (1998) regarding the Gauteng Province, the following facts have emerged:

- In 1991 Gauteng was home to more than 6 million people, making it the second most populous province after KwaZulu-Natal.
- The province had approximately 500 000 foreign citizens during 1991 which represents almost 8% of the total provincial population at the time. Most of these foreign citizens were from other African and European countries.
- Gauteng is the most multilingual province in the country - 28 home languages were recorded.
- In 1994 Gauteng already contributed approximately 28% of economic output in South Africa.
- Almost 36% of total personal income in South Africa is earned in Gauteng. Gauteng has the highest *per capita* income, but almost a quarter of its households are living in poverty.
- Gauteng has the highest rate of serious crime in the country.

Khupiso (1998) reported that the suicide rate in the East Rand of Gauteng is alarmingly high (34 people committed suicide from January 1998 to June 1998) and six people a month take their own lives in Tembisa, which has the highest suicide rate in Gauteng.

According to Rossouw (1998, 1999, 2000) the highest suicide rate in the SAPS is amongst African members (the suicide rate is also increasing amongst Indian members), members performing visible policing duties, non-commissioned and unmarried officers and those between the ages of 30 to 35 years. The service pistol is used in 80% of all

completed suicides. Schmidtke et al. (1999) concur with this finding, showing that the service weapon is the most common method of suicide in more than 80% of police suicides. Violanti (1995) stated that the availability of firearms is a possible forerunner to police suicides. In the general population of South Africa, hanging (36,2%) is more frequently used than shooting (35%) (Schlebusch, 2003).

Nel and Steyn (1997) argue that the mental health of the SAPS cannot be addressed in isolation from the broader South African context. Police officials reflect a broader South African society historically characterised by problematic inter-group relations. Although society expects police officials to manage crime impartially, the attitudes, values and behaviour of police officials mirror the broader South African community (Nel, 1994; South African Police Service, 1995; Van der Westhuizen, 2000).

“Stress may be viewed as the embodiment of conflict resulting from demands for performance of bodily and social (including occupational) functions imposed by any constellation of environmental and psychological factors that either stimulate or inhibit one’s ability to satisfactorily perform physiological, psychological, or social (including occupational) functions” (Kurke, 1995, p. 392). According to Anderson et al. (2002) stress is defined as the response of an individual to the perceived imbalance between the demands of the situation, and the resources one has at one’s disposal to respond successfully.

According to Kurke (1995), various studies observed that stress related to police work breaks down into organisational, operational and situational components. Organisational stressors focus on work-related conditions such as shift work and lack of supervisory support. Operational stress includes the life-threatening nature of police work e.g. boredom, tensions between police and community, threats of civil liability and lack of support at home, being shot and shooting a citizen, working in a disaster situation and other critical incidents (Kurke, 1995). Violanti (1997) proposed authoritarian structure, lack of participation in decisions and administrative support, a punishment-centred

philosophy, and unfair discipline as factors contributing to organisational stress in police work.

According to Kurke (1995), organisational stressors and extra-organisational stressors are mutually interactive and bring about the psychological and physiological condition called stress. Exposure to distress without the use of multiple resources for coping may increase the potential for suicide (American Psychiatric Association, 1994).

Anderson et al. (2002) define coping as the conscious use of cognitive or behavioural strategies to reduce perceived stress. According to Lennings (1997) two coping strategies have been identified in the literature, namely emotion-focused and problem-focused strategies. The emotion-focused category represents less successful coping strategies than the problem-focused. Lennings (1997) found that emotion-focused strategies seemed favoured as coping responses and were most related to high outcomes on the stress measures including drinking, divorce and suicide ideation among police officers. Police secrecy, contempt for the public and the wilful disobedience of organisational regulations has been found important, but negative coping methods used by police officers. Stevens (1998) found that coping abilities break down with increased exposure to pain, death or suffering and consequently individuals become psychologically debilitated.

Several studies have found that police officers possess maladaptive and avoidance coping behaviours (Anderson et al., 2002). Anshel (2000) expressed concern about the tendency of using alcohol as a way of coping with stress in the police services. Anderson et al. (2002) have shown that high levels of divorce and suicide have been related to a failure to cope adequately.

Rothmann and Strijdom (2002) found that a weak sense of coherence relates to suicide ideation, low generalised self-efficacy, an external locus of control and low job satisfaction amongst police officers. According to Rothmann and Van Rensburg (2001), police officers who consume more than 14 alcoholic drinks per week (compared to those who have fewer drinks) had a weaker sense of coherence, lower self-efficacy, a higher

external locus of control and more dysfunctional coping strategies, less job-satisfaction and higher suicide ideation.

The objective of this research is thus to determine the relationship between coping, stress and suicide ideation of police officials as it manifests itself in Gauteng Province. If it is established that suicide ideation is related to these variables, programmes such as recruitment, selection, induction, training and development and performance management should be reconsidered. This will facilitate the development of psychological strengths to reduce suicide ideation in the South African Police Services in Gauteng Province and ensure organisational effectiveness.

Suicide ideation, coping and stress

Noor Mahomed, Selmer and Lasich (2000) stated that consistent with suicide literature, more females report suicidal ideation and more males attempt suicide (Canetto, 2000). Deonarain and Pillay (2000) stated that in retrospective studies on suicidal behaviour, prior suicide attempts are cited as the best single predictor of completed suicide. They mention that in various local and international studies regarding suicide a major precipitating factor for para-suicide attempts was interpersonal conflict. They found that disrupted family environment, indicated separation, divorce, widowhood, or legal troubles, also have been associated with suicide.

According to Rossouw (1999, 2000) factors that lead to suicides in the SAPS are, besides the stressful working environment, relationship problems, financial problems, alcohol abuse, health problems and criminal cases against members. Various researchers have indicated that problems with interpersonal relationships may increase the potential for suicide (Violanti, 1997). Janik and Kravitz (1994) found that police officials are less capable of getting emotionally involved with their families. In a study done by Weyrauch, Roy-Burne, Katon, and Wilson (2001) it was found that in 77% of the sample acute interpersonal conflict preceded the suicide attempt by 1 to 7 days.

Burke (1998) found that some of the work stressors that confront police officers are boredom, lack of respect from members of the public, excessive paperwork, contacts with the public that are sometimes negative and confrontational, shift work, threats of violence, and the militaristic nature of the bureaucratic structure of policing. Because of these stressful aspects of policing a variety of symptoms and reactions may occur. Symptoms such as deteriorating work performance, negative psychological states (depression, anger and burnout) and psychosomatic and physical conditions (Burke, 1998) may transpire. Other research with police members indicated increased rates of illness, post-traumatic stress, burnout, alcohol abuse and suicides, decreased levels of job satisfaction and job performance (Anshel 2000; Nel 1994; Rothmann & Agathagelou, 2000; Rothmann & Strijdom, 2002).

Police officers are being subjected to an inordinate amount of stress. It is a well-known fact that the quality of performance will increase in response to certain stressors up to a point, after which degeneration of performance will occur (Kurke, 1995). Brown, Cooper and Kirkcaldy, (1996) established that job stress relates to job dissatisfaction and mental and physical ill-health. According to Anshel (2000), Anderson et al. (2002) and Violanti (1997), stress could lead to absenteeism, burnout, job dissatisfaction, early retirement, long-term disability, poor work performance, and premature death. Lennings (1997) argued that exposure to violent and emotionally unsettling situations is an important stressor to police.

Violanti (1996) theorised that traumatic events most often reported by police include infrequent occurring duties related to violent death, injury or the non-accidental death of a child. The effects of trauma on police officials are of increasing concern. Liberman et al. (2002) found that a major source of police stress is duty-related critical incidents. Duty-related critical incidents as described by the DSM-IV criterion for PTSD (American Psychiatric Association, 1994) are those “the person experienced, witnessed, or was confronted with . . . that involved actual or threatened death or serious injury or a threat to the physical integrity of self or others”. Mazza (2000) found that Post-Traumatic Stress Disorder (PTSD) symptomatology is related to adolescent suicidal behaviour. This

confirms a study done by Stephens (1998) that found that an increase in work-related traumatic experiences is associated with higher PTSD symptoms (distressing psychological and physical symptoms) and is more likely to be part of police work (Hem et al., 2001; Schmidtke et al., 1999).

A second major category of stressors is the routine aspects of the work environment. A number of researchers have indicated that the routine administrative, bureaucratic and organisational aspects of police work are at least as stressful as the inherent dangers of police work. They also found that officers reporting exposure to more routine work stressors also reported experiencing more stress symptoms in response to a traumatic incident. This suggests that exposure to routine occupational stress may be a risk factor for traumatic stress symptoms (Anderson et al., 2002). Janik and Kravitz, (1994) argued that suicidal behaviour is stimulated by occupational (police) stress. It has been shown that routine occupational stressors are more stressful to police officers than exposure to danger and critical incidents (Brown, Cooper & Kirkcaldy, 1996; Lennings, 1997; Liberman et al., 2002).

According to Violanti (1997) officers lack important coping resources such as mental flexibility and other life skills. Lennings (1997) states that some police appear to lack appropriate problem identification and decision-making skills, thus aiming towards poor coping responses. The ability to generate solutions to a problem (Vilhjalmsson et al., 1998) and new ideas is diminished in suicidal patients (Bartfai, Winborg, Nordström & Asberg, 1990; Orbach, Bar-Joseph & Dror, 1990). Suicidal ideators and attempters tend to escape and avoid direct confrontation, use denial, and their solutions tend to be irrelevant to the nature of the problem (Orbach et al., 1990).

Anderson et al. (2002) state that many variables, including personal attributes, cognitive appraisal, coping strategy and social support, may modify stress reactivity in an individual. Rudd (1990) argues that social support is an important factor to consider when one wants to clarify the relationship between life stress, psychological impairment and

suicidal ideation. Evidence suggests that social support “buffers” the effects of significant life events and the level of stress experienced (Janik & Kravitz, 1994).

Vilhjalmsson et al. (1998) argued that studies of suicide ideation showed various risk factors such as low self-esteem and limited problem-solving capabilities. Those who are depressed, dissatisfied, pessimistic and hopeless, abuse alcohol or drugs or engage in illegal activities are more prone to suicidal ideation. Life stress in general, and family stress in particular, is associated with suicide ideation. A lack of social interaction and support has also been implicated. Noor Mahomed et al. (2000) mention three primary risk indicators of suicidal intent, namely, communication of the intent, previous attempts and antecedent circumstances such as drastic financial changes, change in the family situation, occurrence of physical illness and substance abuse. Weir (2001) stated that mental illness, substance abuse, stressful life events, terminal illness and a family history of suicide are risk factors. Bosch (2000) mentions psychological pain, certain personal characteristics, problem-solving strategies, hopelessness, helplessness and suicidal ideation as significant predictors of suicide. Weyrauch et al. (2001) noted that negative life stress has been found to predict despair and suicide attempts.

METHOD

Research design

A survey design was used to obtain the research objectives. The specific design is a cross-sectional design, whereby a sample is drawn from a population at one time (Shaughnessy & Zechmeister, 1997). Information collected is used to describe the population at that time. This design can also be used to assess interrelationships among variables within a population. According to Shaughnessy and Zechmeister (1997) this design is best suited to addressing the descriptive and predictive functions associated with correlational research.

Sample

The study population ($n = 266$) includes uniformed police members in Gauteng Province. The following formula proposed by Kerlinger and Lee (2000) was used to determine the sample size for this study:

$$n' = \frac{n}{1 + \frac{n}{N}}$$

and

$$n = z^2 \times \frac{SD^2}{d^2}$$

where n' = estimated sample size; n = the estimated sample size using the formula; N = the size of the population; z = standard score corresponding to the specified probability of risk; SD = the standard deviation of the population, and d = the specified deviation (Kerlinger & Lee, 2000).

The values of z , SD and d have been determined in previous studies of suicide ideation in the SAPS (Rothmann & Strijdom, 2002; Rothmann & Van Rensburg, 2001). The stations were divided into small (less than 25 staff members), medium (between 25 and 100 staff members) and large (more than 100 staff members) stations. Student and civilian members were not included in this study. All the police members at randomly identified small and medium stations in Gauteng Province were asked to complete the questionnaire. Stratified random samples according to race and gender were taken in the large stations. Table 1 presents the characteristics of the participants.

Table 1

Characteristics of the Study Population (n = 266)

Item	Category	Frequency	Percentage
Race	White	108	40,60
	Black	152	57,14
	Coloured	5	1,88
	Indian	1	0,38
Rank	Constable	14	5,26
	Sergeant	47	17,67
	Inspector	67	25,19
	Captain	127	47,74
	Superintendent	10	3,76
	Senior Superintendent	1	0,38
	Area	East Rand	50
Soweto	35	13,16	
Pretoria	80	30,08	
Johannesburg	37	13,91	
Vaal Rand	52	19,55	
North Rand	12	4,51	
Size of station	Small	47	17,67
	Medium	116	43,61
	Large	103	38,72
Education	Grade 10	19	7,14
	Grade 11	14	5,26
	Grade 12	150	56,39
	Technical college diploma	9	3,38
	Technikon diploma	59	22,18
	University degree	4	1,50
	Postgraduate degree	11	4,14
Gender	Male	211	79,32
	Female	55	20,68
Status	Single	42	15,79
	Married	151	56,77
	Divorced	60	22,56
	Separated	9	3,38
	Remarried	4	1,50

Table 1

Characteristics of the Study Population (continued)

Item	Category	Frequency	Percentage
Language	Afrikaans	102	40,32
	English	16	6,32
	Sepedi	37	14,62
	Sesotho	32	12,65
	Setswana	12	4,74
	IsiSwati	2	0,79
	Tshivenda	3	1,19
	IsiNdebele	6	2,37
	IsiXhosa	9	3,56
	IsiZulu	27	10,67
	Other	7	2,77
Previously charged in terms of disciplinary code	Yes	63	24,14
	No	198	75,86
Suffering from a medical condition	Yes	27	10,19
	No	238	89,81
Alcohol	0 – 4 drinks per week	146	64,60
	5 – 7 drinks per week	38	16,81
	8 – 14 drinks per week	16	7,08
	15 or more drinks per week	20	8,85
Smoker	Yes	102	39,23
	No	158	60,77
Previous suicide attempt	Yes	16	6,11
	No	246	93,89

It can be seen from Table 1 that the sample mainly consisted of Black (57,14%) and White participants (40,60%). Captains made up the largest proportion of the rank groups (47,74%). Officials in this sample were primarily male, mostly married, and indicated Afrikaans as their home language. More than half of the population have a Grade 12 qualification. Regarding health behaviours, some 39,23% of the officials indicated that they smoke, 16,81% indicated that they have 5 – 7 drinks per week, 10,19% answered positively when asked whether they were suffering currently from a medical condition that could affect their job performance. A total of 6,11% of officers had a previous suicide attempt. A total of 36 (13,5%) of the officials indicated that they currently use

medication for headaches and 29 (10,9%) indicated that they currently use medication for stress. Almost a quarter (24,14%) of the study population indicated that they have previously been charged in terms of the disciplinary code.

The mean age of participants was 34,25 years with a standard deviation of 6,19. The average amount of years officers had been in the police service ranged from 12,31 to 17 years. Average years in the current position were 3,77. On a 5-point scale, officers self-rated their marital satisfaction at a 4,19 average, job satisfaction at 3,69, and their current job performance at 4,29.

Measuring instruments

Four questionnaires were used in the empirical study, namely the *Adult Suicide Ideation Questionnaire* (ASIQ) (Reynolds, 1991a), the *Coping Orientations to Problems Experience Questionnaire* (COPE) (Carver, Sheier & Weintraub, 1989), the *Police Stress Inventory* (PSI) (Pienaar & Rothmann, 2003a) and a *Biographical Questionnaire*.

- The *Adult Suicide Ideation Questionnaire* (ASIQ) (Reynolds, 1991a) was used to measure participants' current level of suicide ideation, that is to assess the degree to which individuals have been thinking about killing themselves over the past month. Each of the items measures a specific suicidal behaviour or thought. Reynolds (1991a) reported that the internal consistency (coefficient alpha) of the ASIQ is 0,96, while Osman et al. (1999) found an alpha coefficient of 0,98. The test-retest reliability of the ASIQ varies between 0,86 and 0,95 (Reynolds, 1991b). Reynolds (1991a) provided evidence for the content, construct and criterion-related validity of the ASIQ. Osman et al. (1999) found that the ASIQ differentiated significantly between suicide attempt and psychiatric control groups. Rothmann and Van Rensburg (2001) found that the internal consistency of the ASIQ is acceptable at 0,51 (0,15 r 0,50, Clark & Watson, 1994). In recent South African research, alpha values of 0,98 for White and 0,95 for Black police members have been found for this instrument in the South African Police Service in the North West Province (Rothmann & Strijdom,

2002; Rothmann & Van Rensburg, 2001). Pienaar (2002) found an alpha value of 0,97 in a national sample of police officers. These internal consistencies could be regarded acceptable according to Nunnally and Bernstein (1994).

- The *Coping Orientations to Problems Experience Questionnaire* (COPE) (Carver et al., 1989) was designed to measure both situational and dispositional coping strategies. The COPE is a multi-dimensional 53-item coping questionnaire that indicates the different ways in which people cope in different situations (Carver et al., 1989). Response choices were from 1 (I usually don't do this at all) to 4 (I usually do this a lot). Although this questionnaire originally measures 13 different coping strategies, Pienaar and Rothmann (2003b) subjected the COPE to a principal components factor analysis with a varimax rotation. Four internally consistent factors were extracted, namely Problem-focused coping (16 items), Passive coping (13 items), Seeking Emotional Support (7 items) and Turning to Religion (4 items). The alpha coefficients of the three scales are 0,93, 0,86, 0,87 and 0,83 respectively. All these values are acceptable ($\alpha \geq 0,70$) (Nunnally & Bernstein, 1994), and thus indicate the internal consistency of the factors of the PSI. Test-retest reliability varies from 0,46 to 0,86 and from 0,42 to 0,89.
- The *Police Stress Inventory* (PSI) was used to measure participants' job stress and consists of 88 items. Pienaar and Rothmann (2003a) stated that a number of research studies have been published regarding stressors specific to the policing environment which were used in the construction of the *Police Stress Inventory (PSI)*. The PSI focuses on common work situations that often result in psychological strain. The instrument was subjected to a factor analysis on a sample of 2 500 police members and three factors were extracted, namely Job Demands (17 items), Lack of Job Resources (14 items), and Inherent Police Stressors (8 items). The alpha coefficients of the three scales were 0,92, 0,92 and 0,89 respectively. All values are acceptable ($\alpha \geq 0,70$, Nunnally & Bernstein, 1994), and thus indicate the internal consistency of the factors of the PSI. The questionnaire is divided into 2 parts. Part A, consisting of stressful job-related events, focuses mainly on the amount of stress experienced.

Respondents are asked to rate their personal experience of the intensity on a nine-point scale (1=low to 9=high). Part B consists of the same stressful job-related events as used in part A, but in this case the participants are asked to evaluate the frequency of the stressful event in the last six months on a nine-point scale.

- A *Biographical Questionnaire* was used to gather information about the demographic characteristics of the participants. This questionnaire gave participants the option of supplying their name and service number. Other information gathered included: station, age, gender, years of service, years in current position (to assess advancement), educational qualifications, marital status, satisfaction with relationship with significant other, language, history of disciplinary action, self-rated performance, self-rated job satisfaction, medical conditions, use of prescription and over-the-counter medicine, reasons for medication, number of alcoholic drinks per week, smoking behaviour, number of cigarettes per day, other drug use, exercise behaviour, previous suicide attempt and perceptions of social support.

Statistical analysis

The statistical analysis was carried out with the help of the SAS-program (SAS Institute, 2000). Cronbach alpha coefficients, inter-item correlation coefficients and confirmatory factor analysis was used to assess the reliability and validity of the measuring instruments (Clark & Watson, 1995). Descriptive statistics (e.g. means, standard deviations, skewness and kurtosis) and inferential statistics were used to analyse the data.

Analysis of variance (ANOVA) was used to determine differences between the sub-groups in the sample. A cut-off point of 0.50 (medium effect, Cohen, 1988) was set for the practical significance of differences between means.

The following formula was used to determine the practical significance of means of more than two groups (Steyn, 1999).

$$d = \frac{Mean_A - Mean_B}{\text{Root MSE}}$$

where

Mean_A = Mean of the first group

Mean_B = Mean of the second group

Root MSE = Root Mean Square Error

A cut-off point of 0,50 (medium effect, Cohen, 1988) was set for the practical significance of differences between means.

Pearson product-moment correlation coefficients were used to specify the relationships between the variables. In the case where the distribution of scores was skewed, Spearman correlation coefficients were computed. A cut-off point of 0,30 (medium effect, Cohen, 1988) was set for the practical significance of correlation coefficients.

A discriminant analysis was carried out to determine which combination of independent variables could be used to classify police members into groups who obtained low versus high suicide ideation scores. The resulting discriminant function separates the members of the groups maximally. The assumption of discriminant analysis is that the independent variables are continuous but that the dependent variable is categorical (Kerlinger & Lee, 2000). A stepwise multiple regression analysis was used to determine the proportion of variance in the dependent variable (suicide ideation) that is explained by the independent variables.

RESULTS

Table 2 shows the descriptive statistics, Cronbach alpha coefficients and inter-item correlation coefficients of the ASIQ, PSI and COPE.

Table 2

Descriptive Statistics, Inter-Item Correlation Coefficients and Cronbach Alpha Coefficients of the Measuring Instruments (n = 266)

Item	Mean	SD	Skewness	Kurtosis	r - Mean	α
COPE						
Active Coping	72,38	13,00	-0,84	0,87	0,28	0,90
Passive Coping	26,30	7,17	0,30	-0,45	0,24	0,80
Seeking Emotional Support	19,65	5,54	-0,43	-0,61	0,48	0,86
Turning to Religion	12,39	3,04	-0,72	-0,10	0,46	0,77
Police Stress Inventory						
Job Demands	80,85	26,98	-0,22	-0,14	0,37	0,90
Lack of Job Resources	79,64	24,19	-0,43	-0,30	0,42	0,86
Inherent Police Stressors	44,18	15,52	-0,44	-0,48	0,45	0,86
ASIQ total	11,81	21,14	2,66*	6,92*	0,58	0,96

* High Skewness and Kurtosis

Table 2 shows that acceptable Cronbach alpha coefficients ($\alpha > 0,70$) were obtained on all dimensions of the COPE, PSI and ASIQ (Nunnally & Bernstein, 1994). The mean inter-item correlations of most of the scales are also acceptable ($0,15 \leq r \leq 0,50$, Clark & Watson, 1995), except for suicide (0,58) that is somewhat high. The confirmatory factor analysis resulted in acceptable loadings on the various factors, which confirm their construct validity. It is evident from Table 2 that most of the measuring instruments are relatively normally distributed with normal skewness and kurtosis, except for the ASIQ, that shows relatively high skewness and kurtosis.

The product correlation coefficients between the ASIQ, PSI and COPE are reported in Table 3. In the case of the correlation between the ASIQ and the other measuring instruments, Spearman correlation coefficients were computed because of the skewed

distribution of suicide ideation scores. The scores on the other measuring instruments are normally distributed and Pearson correlation coefficients were computed for them.

Table 3
Correlation Coefficients between Measuring Instruments

Item	PFC	PC	SES	TTR	JD	LOR	IPS
Problem-focused Coping	-	-	-	-	-	-	-
Passive Coping	0,12*	-	-	-	-	-	-
Seeking Emotional Support	0,55 ⁺⁺	0,08*	-	-	-	-	-
Turning to Religion	0,49*	0,12*	0,30*	-	-	-	-
Job Demands	0,03	0,19*	-0,08*	0,06*	-	-	-
Lack of Job Resources	0,13*	-0,01	-0,08*	0,07*	0,74 ⁺⁺	-	-
Inherent Police Stressors	0,10*	0,08*	-0,06*	0,13*	0,64 ⁺⁺	0,63 ⁺⁺	-
ASIQ	-0,01	0,28*	-0,19*	-0,13*	0,11*	0,08*	0,07*

PFC = Problem-focused Coping; PC = Passive Coping; SES = Seeking Emotional Support; TTR = Turning to Religion; JD = Job Demands; LOR = Lack of Job Resources; IPS = Inherent Police Stressors; ASIQ = ASIQ Total.

* Statistically significant correlation: $p \leq 0,05$

+ Practically significant correlation (medium effect): $r \geq 0,30$

++ Practically significant correlation (large effect): $r \geq 0,50$

Table 3 shows statistically significant correlations between Problem-focused Coping and Seeking Emotional Support (practically significant, large effect) and Turning to Religion (practically significant, medium effect). Problem-focused Coping also shows statistically significant correlations with Passive Coping, Lack of Job Resources and Inherent Police Stressors. Passive coping shows statistically significant correlations with Seeking Emotional Support, Job Demands, Inherent Police Stressors and the ASIQ. Seeking Emotional Support shows statistically significant correlations with Job Demands, Lack of Job Resources, Inherent Police Stressors and a negative correlation with the ASIQ. Turning to Religion shows a practically significant correlation (medium effect) with Seeking Emotional Support and statistically significant correlations with Job Demands, Lack of Resources, Inherent Police Stressors and the ASIQ. The table also reflects a practically significant correlation (large effect) between Job Demands on the one hand and Lack of Job Resources and Inherent Police Stressors on the other hand. Job Demands

shows a statistically significant correlation with the ASIQ. Lack of Job Resources shows a practically significant correlation (large effect) with Inherent Police Stressors and a statistically significant correlation with the ASIQ. There is a statistically significant correlation between Inherent Police Stressors and the ASIQ.

The product correlation coefficients between the ASIQ, PSI, COPE and biographical information are reported in Table 4. In the case of the correlation between the ASIQ and the other measuring instruments, Spearman correlation coefficients were computed because of the skewed distribution of suicide ideation scores. The rest of the measuring instruments are normally distributed and Pearson correlation coefficients were computed for them.

Table 4

Correlations between Biographical Information and the Measuring Instruments

Item	Age	YSAPS	Race	Rank	Gender
Job Demands	0,04	0,08*	-0,12*	0,10*	0,06*
Lack of Job Resources	-0,04	0,04	-0,23*	0,07*	0,05
Inherent Police Stressors	-0,06*	0,00	-0,16*	0,00	0,10*
Problem-focused Coping	0,04	0,01	0,10*	0,00	-0,07*
Passive Coping	0,09*	0,08*	0,14*	0,03	0,00
Seeking Emotional Support	0,15*	0,01	0,37*	-0,08*	-0,03
Turning to Religion	0,09*	0,04	0,09*	0,04	0,12*
ASIQ	-0,04	-0,01	-0,08*	0,09*	0,10*

YSAPS= Years in the SAPS

*Statistically significant correlation: $p \leq 0,05$

+ Practically significant correlation (medium effect): $r \geq 0,30$

Table 4 shows statistically significant correlations between Age and Inherent Police Stressors, Passive Coping, Seeking Emotional Support and Turning to Religion. Years in the SAPS show a statistically significant correlation with Job Demands and Passive Coping. Race shows statistically significant correlations with Job Demands, Lack of Job Resources, Inherent Police Stressors, Problem-focussed Coping, Passive Coping, Turning

to Religion and the ASIQ. Statistically significant correlations are shown between Rank, Job Demands, Lack of Resources, Seeking Emotional Support and the ASIQ. Gender shows a statistically significant correlation with Job Demands, Inherent Police Stressors, Problem-focussed Coping, Turning to Religion and the ASIQ. The only practically significant correlation (medium effect) exists between Race and Seeking Emotional Support.

Table 5 gives the intensity, frequency and severity of items of the Police Stress Inventory.

Table 5

The Intensity, Frequency and Severity of Items of the Police Stress Inventory

Items	Intensity	Frequency	Severity
Frequent changes from exciting activities to boredom	4,56	4,35	19,83
Deadlines that have to be met	4,65	4,92	22,87
Being assigned more responsibility	4,72	4,86	22,94
Having to make critical and immediate decisions	4,65	4,27	19,85
Having to deal with crisis situations	4,77	4,79	22,84
Lack of personal time (for example: for lunch)	4,39	4,35	19,09
Being given new duties, or duties not previously performed	4,46	4,13	18,41
Having to work shift work	4,28	3,34	14,3
More paperwork than you can handle	5,25	5,54	29,08
Attending to incidences of domestic violence	4,94	3,77	18,62
Having to do someone else's work	5,10	4,89	24,9
Having to work overtime	4,50	4,65	20,93
Being frequently interrupted	5,22	5,28	27,56
Having to perform tasks that are not part of your job description	5,04	5,03	25,35
Noisy work area	4,71	4,27	20,11
Reorganisation and transformation within the organisation	4,55	3,90	17,74
Lack of officers to handle specific tasks	5,78	5,40	31,21
Inadequate or poor quality equipment	6,16	5,48	33,75
Lack of recognition for work well done	5,84	5,10	29,78
Other officers not doing their job	6,31	6,02	37,98
Supervisor's support is lacking	5,70	4,54	25,87
Negative attitudes experienced towards the organisation	5,17	4,37	22,59
Lacking opportunities for advancement	5,67	4,39	24,89
Other officers poorly motivated	5,90	5,59	32,98
Inadequate salary	6,44	5,86	37,74
Supervision is poor or inadequate	5,15*	4,00	20,6
Staff shortages	6,21	6,01	37,32
No participation in policy-making decisions	5,26	4,11	21,61
Strong competition for advancement	5,03	4,20	21,12
Difficult relationship with supervisor	4,96	3,47	17,21
Seeing criminals go free	6,83	5,11	34,9
Having to deal with the media	3,92*	2,19	8,58
Fellow officer killed in the line of duty	6,80	2,88	19,58
Killing someone in the line of duty	5,53	2,05	11,34
Forced arrest or being physically attacked	5,46	2,93	15,99
Having to handle a large crowd/mass demonstration	4,82	2,60	12,53
Delivering a death message or bad news to someone	4,83	2,45	11,83
Racial conflict	5,95	3,65	21,72

Table 5 shows a high intensity regarding the following items: Inadequate or poor quality equipment, Other officers not doing their job, Inadequate salary, Staff shortages, Seeing criminals go free and Fellow officer killed in the line of duty. The following items, as shown in Table 5, show a high frequency: Other officers not doing their job and Staff shortages. The results indicate a high severity regarding Lack of officers to handle specific tasks, Inadequate or poor quality equipment, Other officers not doing their job, Other officers poorly motivated, Inadequate salary, Staff shortages, and Seeing criminals go free.

Next a stepwise discriminant analysis was performed in order to determine which variables discriminate between police members with a high and those with a low level of suicide ideation. The resulting linear discriminant function for members with low and high suicide ideation is given in Table 6.

Table 6

The Linear Discriminant Function for Police Members with High and Low Suicide Ideation

Variable	High Suicide Ideation	Low Suicide Ideation
Constant	-95,07	-110,30
Race	4,66	4,71
Rank	2,64	2,36
Size of Station	4,65	5,07
Years in the SAPS	0,15	0,25
Years in the current position	0,90	0,85
Gender	11,19	12,70
Marital Status	2,56	2,27
Having Previously been Charged	6,78	8,72
Self-rated Job Satisfaction	2,47	2,43
Medical Condition	13,62	14,81
Alcohol	2,68	3,06
Previous Suicide Attempt	33,18	37,71
Job Demands	0,03	0,03
Lack of Job Resources	0,09	0,08
Inherent Police stressors	0,09	0,10

Variable	High Suicide Ideation	Low Suicide Ideation
Problem-focused Coping	0,20	0,23
Passive Coping	0,28	0,13
Seeking Emotional Support	-0,03	0,04

By applying the stepwise discriminant analysis, it was found that all the above listed variables should be retained for the discriminant analysis. Table 7 summarises the frequencies and percentages of police members that can be classified belonging to the high or low suicide ideation groups (based on these variables).

Table 7

Classification of Membership of High/Low Suicide Ideation Groups

Group	High Suicide Ideation	Low Suicide Ideation	Total
High Suicide Ideation	15 (75,00%)	5 (25,00%)	20 (100%)
Low Suicide Ideation	29 (14,95%)	165 (85,05%)	194 (100%)

Table 7 shows that the combination of variables of police members classifies 75% of the high suicide ideation cases and 85,05% of the low suicide ideation cases correctly. A total of 25% of the high and 14,95% of the low suicide ideation cases are classified incorrectly.

Finally a stepwise discriminant analysis was conducted. The variables that best predict suicide ideation of police members are given in Table 8.

Table 8

Variables that Predict Suicide Ideation in Police Members

Variables	Partial R-Square	F-Value
Previous Suicide Attempt	0,09	21,68
Having Previously been Charged	0,06	14,16
Passive Coping	0,05	11,07
Seeking Emotional Support	0,02	5,24
Medical Condition	0,00	1,78
Gender	0,00	1,45

Table 8 shows that the following variables can be used to predict suicide ideation of police members in Gauteng Province, namely a previous suicide attempt, having previously been charged in terms of the disciplinary code, utilising passive coping strategies and the use of seeking emotional support as coping strategy, the presence of a medical condition and gender.

One-way analysis of variance (ANOVA) with the Tukey Studentized Range test was carried out to determine whether a significant difference exists between the ASIQ scores of those suffering from a medical condition and those who do not. The results are given in Table 9.

Table 9

Analysis of Variance for Differences in ASIQ scores for Officers suffering from a Medical Condition

Item	Yes	No	ASIQ Mean	R-Square	Root MSE	F-Value
Do you suffer from a medical condition that could affect your current work performance in the SAPS?	10,19%	89,81%	11,77	0,035*	20,83	9,54

*Statistically significant difference: $p \leq 0,01$

Table 9 shows that a statistically significant difference exists between the means of those who suffer from a medical condition and those who do not, regarding the ASIQ.

DISCUSSION

The inter-item correlation coefficients and Cronbach alpha coefficients confirmed the construct validity and internal consistency for all of the instruments used.

Compared with a cut-off raw score of 31 (the 97th percentile on a norm table for community adults in the United States of America, Reynolds, 1991a), 29 (9,02%) of the police officials in this sample have significant suicide ideation levels. Pienaar (2002) reported that Gauteng, Free State and the North West province have the highest suicide ideation levels among police officials. The current results also indicate that a higher percentage of police officers in Gauteng Province scored above the cut-off score compared to the national percentage of 8,64% (Pienaar, 2002).

Rudd (1990) suggested that social support “buffers” the effects of significant life events and the level of stress experienced. Results show that a relationship exists between using religion and seeking emotional support as coping strategies and problem-focussed coping. This is understandable because the SAPS employ personnel trained in the various religious congregations known as “Chaplains” to take care of the spiritual well-being of police officials. For the current sample it is therefore hypothesised that religion and emotional support serve an active coping role, protecting police officers. Seeking emotional support also has a negative correlation with suicide ideation indicating that police officials cope with suicidal feelings by reaching out for emotional support. Storm and Rothmann (2002) indicated that the utilisation of emotional support by the police official from friends or relatives decreased the officers’ level of exhaustion.

From the results of this study suicide ideation is related to organisational stressors (job demands and stressors present in a policing context) and passive coping strategies. Although none of the stress factors were relevant in predicting current levels of suicide ideation, the relationship can be hypothesised based on correlations. Passive coping showed statistically significant correlations with job demands and inherent police stressors and the ASIQ. This suggests that a passive coping strategy among police

personnel might be exacerbated by not having equipment and logistic support to do their work, or by being exposed to traumatic incidents, for example violence. This creates an attitude of passivity and avoidance of responsibility that may lead to feelings of being overwhelmed by demands of the job and ultimately leads to thoughts of suicide. A police officer already utilising passive coping strategies might also experience job demands and inherent police stressors as more intense, which could increase thoughts of suicide.

From the results it is evident that the police stressors with the highest severity are organisational in nature. This includes items relating to a lack of officers to handle specific tasks, inadequate or poor quality equipment, other officers not doing their job, the poor motivation of fellow officers, an inadequate salary and staff shortages. These findings are supported by findings of Anderson et al. (2002) that suggested that exposure to routine occupational stress may be a risk factor for traumatic stress symptoms. Janik and Kravitz (1994) concluded that suicidal behaviour is stimulated by occupational police stress.

In a study done by Liberman et al. (2002), they found that routine occupational stressors are more stressful to police officers than exposure to danger and critical incidents (Brown et al., 1997; Lennings, 1997). Only one item from the category of inherent police stressors, namely seeing criminals go free, had a high severity. Rossouw (1999, 2000, 2001) concluded that one of the factors leading to police suicides in the SAPS is the unfairness of the justice system. Criminals get caught but are soon released into the community due to technical reasons and incorrect procedures that are followed.

The discriminant analysis resulted in an acceptable classification of police officials who measure high and low on suicide ideation. The linear discriminant function for police officials with low or high suicide ideation classified 75% of the high suicide ideation cases and 85,05% of the low suicide ideation cases correctly. From the results the following variables (in order of importance) were established to be the best predictors of suicide ideation among police officials in Gauteng Province:

- A previous suicide attempt
- Having previously been charged in terms of the disciplinary code
- Using passive coping strategies
- Using seeking emotional support as a coping strategy
- Suffering form a medical condition
- Gender

The results indicate that a previous suicide attempt or attempts predict about 9% of the variance in a police officer's suicide ideation level. Several studies have shown that a previous suicide attempt is the best predictor of suicide ideation (Negin 2001; Pienaar, 2002; Reynolds, 1991b). Vilhjalmsson et al. (1998) found that a majority of suicide attempters (over 60%) have had a previous suicide attempt at least once before.

The second important variable to predict suicide ideation was whether the officer had previously been charged in terms of the disciplinary code. These findings are consistent with research done by Janik and Kravitz (1994), which stated that marital problems and suspension from duty were strongly associated with reports of suicide attempts. Cusick, Chang, Woodson and Helmer (1999) stated that criminal behaviour increases the risk of suicide. A study by Van der Bank (2002) found that police members in the South African Police Services experience the disciplinary process as traumatising. Feelings reported when a member was suspended due to the disciplinary code were depression, anxiety, negativity and suicide ideation. Van der Bank (2002) found the following to be some of the causes of the trauma members experience regarding the disciplinary process:

- When a member is charged in terms of the disciplinary code, they will not be taken into account for promotion until the process has been completed, regardless of innocence or guilt.
- The processes are unnecessarily prolonged.
- Being discriminated against (racism, nepotism, unjust treatment, not every member that contravenes the disciplinary code is charged).
- There is no distinction between serious and trivial cases.

- There is no counselling or support for members during or after the process.
- Members are charged in two ways – before a civilian court and by the organisation.
- The various role players in the process are not consistent.

A significant relationship between suicide ideation and passive coping is evident in the research findings. Violanti (1992) defined maladaptive coping mechanisms as either by means of avoidance or self-control. Orbach et al. (1990) found that suicide attempters and ideators used avoidance as a general coping style. They also depend on others to give them solutions and tended to show more passivity. Lennings (1997) found that emotion-focussed coping is favoured among police members and by using avoidance they attempt to control their emotional reactions. The SAPS officer who thus avoids dealing with stressors, practices rigid self-control, or focuses on emotional reactions to problems might be more inclined to show high levels of suicide ideation.

From the results of the ANOVA it is clear that a relationship exists between suicide ideation and suffering from a medical condition. Schlebusch (2003) stressed the fact that there is a correlation between life-threatening diseases and suicide. Rothman and van Rensburg (2001) found a correlation between police officials suffering from a medical condition and suicide ideation. A study done by South African Police Service's psychologists in Gauteng province found that 44% of members in the SAPS are at risk of being psychiatrically diagnosed with post-traumatic stress disorder, which is naturally coupled with certain medical conditions (South African Police Service, 2001b). Rossouw (1999, 2000) also states that health factors are a contributing factor in suicide behaviour in the SAPS. Lennings (1997) states that police have higher rates of heart disease, ulcers, suicide and divorce than the general population. Suicidal behaviour has been significantly linked to physical health in a number of studies (Goodwin, Marusic & Hoven, 2003; Schlebusch, 2003; Szantos et al., 2002; Vilhjalmsson et al. 1998).

Current results indicate that gender is predictive of current levels of suicide ideation. Noor Mahomed et al. (2000) stated that more females report suicidal ideation and more males attempt suicide. According to Schlebusch (2003), more males, especially black

males, commit suicide than females. This is consistent with research findings in the South African Police Services that indicate a higher rate of completed suicides among (black) males than females (Rossouw, 2001).

Some limitations of this study are that this research design does not allow one to determine the direction of the relationship between variables (Kerlinger & Lee, 2000). Coping and stress were the only two variables that were researched regarding suicide ideation although there are many other important variables as well that could be investigated, like personality types, Post-Traumatic Stress Disorder (PTSD), depression, as well as the differences among the various race groups. Finally, due to the sensitive nature of the questionnaires, which could be answered anonymously, only a few police officials gave their personal information (name, surname and contact number). This made it difficult to contact an official who scored high on the ASIQ and who was in need of assistance. This is an important ethical principle that must be considered in future studies.

RECOMMENDATIONS

The successful prevention of suicides requires a broad and comprehensive strategy addressing a range of mental health and behavioural issues. Current scientific information about the efficacy of suicide prevention strategies is insufficient, thus one strategy is not recommended over another (O'Carroll & Potter, 1994). Due to the complex nature of suicide it would be best if a prevention strategy included various interventions simultaneously.

The results of this study indicated that previous suicide attempts, the disciplinary code (the process before, during and after the member has been charged), passive coping strategies (avoidance of the problem, alcohol and drug abuse, etc.), the use of seeking emotional support as coping strategy, the presence of a medical condition and gender could be used to address suicide behaviour. A health problem is also an important variable that needs to be addressed.

It is proposed that an in-depth investigation into the how and why of the disciplinary process of the SAPS be initiated in order to make recommendations to the improvement of the process. Special attention should be given to the effects of the procedure before, during and after a police official is charged. Training programmes regarding the disciplinary code should be implemented to sensitise commanders and supervisors of the effects on a police official being charged (Van der Bank, 2002). Confidential counselling for charged members should be made available.

It is essential that the focus of these preventative programmes be proactive as opposed to reactive. It is recommended that suitable pre-medical assessments, including physical, mental and family history, be conducted for all new recruits and high-risk units. Current police members should be assessed on a yearly basis. Negative pent-up energy should be channelled in a constructive, focused manner. This is where the Sport Division in the SAPS has a vital role to play. All employees should be encouraged to participate in a mental and physical wellness program.

From the results of this study it is concluded that the following organisational stressors have the biggest impact on police officials: inadequate salary, other officers not doing their job, staff shortages, inadequate or poor quality equipment, other officers poorly motivated and a lack of officers to handle specific tasks. A logical conclusion would be that salaries at the lower echelons should be raised and adequate resources should be effectively allocated to raise service delivery.

It is suggested that a police official support team be established in every police station or area in the province consisting of police officials trained in listening skills, grief counselling, dependency, stress management, debriefing, post-shooting trauma, suicide prevention and intervention and peer support techniques. Police officials would be able to identify with one another and form a “connected” group in a peer setting.

It is important that the Helping Professions become more visible to the police member. More regular visitations to stations and area offices are suggested. Lectures regarding

stress, conflict and suicide prevention (warning signs, method, intervention and helping skills) can be given at the various police offices. Awareness regarding firearms and the commander's influence and role in the lives of his officials should be emphasised (during a suicide prevention awareness workshop a police commander wrote that he had no idea that his behaviour had such an influence on his members) (South African Police Services, 2001c).

Police training in general should be advanced and reviewed every two years. The impact of the current suicide prevention awareness workshops should be reviewed and improved. The suicide prevention project should investigate other means, international and national, of addressing suicide in the police services. This project has to be linked with other projects and programmes currently being implemented in the SAPS such as stress management, debriefing, life skills and colleague sensitivity to have the necessary impact. This new project/programme must be presented as a comprehensive life skills "package" for each and every police official to attend and gain skills.

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CHAPTER 3

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

Chapter 3 includes conclusions reached, based on the findings of the empirical study. In addition, limitations of the research are discussed. Furthermore, recommendations are made for the SAPS in Gauteng Province and in terms of related research.

3.1 CONCLUSIONS

The findings, as they relate to the objectives set for this research, can be summarised as follows:

- The first objective was to conceptualise suicide and suicide ideation from the literature.

Suicidal behaviour, in this study is defined as "...a wide range of self-destructive or self-damaging acts in which people engage either predeterminedly or impulsively with varying degrees of motive, lethal intent and awareness of the possible outcome and consequences" (Schlebusch, 2000). Suicide is a complex phenomenon that involves the interaction of many risk factors. Factors such as gender, age, race, personality, life experiences, prior socialization, and psychological disposition all contribute in varying degrees to completed suicide (Violanti, 1997). Significant predictors of suicide include psychological pain, depression, certain personal characteristics, problem-solving strategies, despair, helplessness and suicidal ideation (Bosch, 2000). Prior suicide attempts are cited as the best single predictor of completed suicide (Deonarain and Pillay, 2000) and problems with interpersonal relationships may increase the potential for suicide (Violanti, 1997).

Suicidal behaviour varies from ideation (suicidal thoughts) to intent (inflicting behaviour), and then from attempt to completion. It implies that there is a stepwise hierarchy of actions with an underlying gradient of severity (Vilhjalmsson, Kristjandottir, and Sveinbjarnardottir, 1998). Suicidal behavior may be categorized as including suicide completion, overt intention, suicide attempt, and suicide ideation (Reynolds, 1991b).

Suicidal behaviour causes serious emotional, spiritual, medical, social and psychological distress to individuals, family and friends. It poses a great economic problem for the individual, family, and society. Worldwide an increase in the suicide rate is reported, as well as a specific increase in the suicide rate of law enforcement agencies when compared to the general population (Hem et al., 2001; Janik & Kravitz, 1994; Violanti, 1997; Violanti et al., 1996). Due to this trend, suicide is regarded as a major public health concern (Cassimjee & Pillay, 2000; Hem et al., 2001; Hirsch & Ellis, 1995; Sullivan, 2001; Weir, 2001).

- To conceptualise stress and to evaluate the situational factors that contribute to stress and suicide ideation in the SAPS.

In this article, stress is defined as the response of an individual to the perceived imbalance between the demands of the situation, and the resources one has at one's disposal to respond successfully (Anderson et al., 2002).

Kurke (1995) stresses that the individual's ability to cope with stress is influential in determining its physiological, psychological and behavioural outcomes and consequences of those outcomes. Stress is also considered in terms of the ability of an individual to cope with the world. It is categorised it in three types: emotional, behavioural and physical stress. It is pointed out that it is the degree of change from a person's own emotional, behavioural and physical conditions, the duration, frequency and intensity of those changes that cause difficulty in coping with stressors. Many variables, including personal attributes, cognitive appraisal, coping strategy and social support, may modify stress reactivity in an individual (Anderson et al., 2002).

Police officers are being subjected to an inordinate amount of stress. Some of the work stressors that confront police officers are boredom, lack of respect from members of the public, excessive paperwork, contacts with the public that are sometimes negative and confrontational, shift work, threats of violence, and the militaristic nature of the bureaucratic structure of policing (Kurke, 1995). Because of these stressful aspects of policing a variety of symptoms and reactions may occur. Such symptoms are deteriorating work performance, negative psychological states (depression, anger and burnout), psychosomatic and physical conditions (Burke, 1998) alcohol abuse and suicides, decreased levels of job satisfaction and job performance (Anshel 2000; Nel 1994; Rothmann & Agathagelou, 2000; Rothman & Strijdom,

2002). The literature emphasizes the fact that organisational factors and or stressors are more stressful to police officers than exposure to danger and critical incidents (Brown et al., 1996; Lennings, 1997; Liberman et al., 2002).

From the results of this study it becomes clear that suicide ideation is related to organisational stressors (job demands and stressors present in a policing context) and passive coping strategies. Passive coping showed statistically significant correlations with job demands and inherent police stressors and the ASIQ. This suggests that a passive coping strategy among police personnel might be exacerbated by not having equipment and logistic support to do their work, or by being exposed to traumatic incidents, for example violence. This creates an attitude of passivity and avoidance of responsibility that may lead to feelings of being overwhelmed by demands of the job and ultimately leads to thoughts of suicide. A police officer already utilising passive coping strategies might also experience job demands and inherent police stressors as more intense, which could increase thoughts of suicide.

From the results it is evident that the police stressors with the highest severity are organisational in nature. This includes items relating to a lack of officers to handle specific tasks, inadequate or poor quality equipment, other officers not doing their job, the poor motivation of fellow officers, an inadequate salary and staff shortages. These findings are supported by findings in the literature that suggested that exposure to routine occupational stress may be a risk factor for traumatic stress symptoms. Literature indicated that suicidal behaviour is stimulated by occupational police stress that verifies the findings of this research.

- To conceptualise coping from the literature and its relationship to suicide ideation and stress.

Coping is defined as the conscious use of cognitive or behavioural strategies to reduce perceived stress (Kurke, 1995). According to Lennings (1997) two coping strategies have been identified in the literature, namely emotion-focused and problem-focused strategies. The emotion-focused (passive) strategy represents less successful coping strategies than a problem-focused strategy.

The significant relationship between suicide ideation and passive coping is evident in the research findings. From literature it is evident that passive coping strategies (avoidance coping)

proves to be a stronger predictor of suicide ideation than problem-focussed coping strategies. Maladaptive coping mechanisms are defined as either by means of avoidance or self-control. It was found that suicide attempters and ideators used avoidance as a general coping style (Violanti, 1992). They also depend on others to give them solutions and tend to show more passivity (Orbach et al., 1990). The literature emphasises that emotion-focused strategies seem to be favoured as coping responses (by police officials) and are most related to high outcomes on the stress measures including drinking, divorce and suicide ideation (Lennings, 1997).

The ability to generate solutions to a problem and new ideas is diminished in suicidal patients (Bartfai et al., 1990; Orbach et al., 1990). Furthermore, suicidal ideators and attempters tend to escape and avoid direct confrontation, use denial and their solutions tend to be irrelevant to the nature of the problem (Orbach et al., 1990). It is also evident from literature that suicide may be an attempt by officers to restore feelings of strength, courage and mastery over the environment following a perceived loss of coping abilities (Violanti, 1997).

- To determine the relationship between coping, stress and suicide ideation of police officials in the SAPS in Gauteng Province.

The significant correlation between suicide ideation and passive coping are evident in the research findings and from literature it is clear that passive coping strategies (avoidance coping) proves to be a stronger predictor of suicide ideation than problem-focussed coping strategies.

Judging by the results of this study suicide ideation is related to organisational stressors and passive coping strategies. Passive coping shows statistically significant correlations with job demands and inherent police stressors and the ASIQ. It is also evident that the police stressors with the highest severity are organisational in nature.

- To determine whether coping strategies and stressors can predict suicide ideation of police officials in the SAPS in Gauteng Province

Compared with a cut-off raw score of 31 (the 97th percentile on a norm table for community adults in the United States of America), 29 (9,02%) of the police officials in this sample have

significant suicide ideation levels. In a study regarding police suicide ideation, nationally, it was reported that Gauteng, Free State and the North West province have the highest suicide ideation levels among police officials. The current results also indicate that a higher percentage of police officers in Gauteng Province scored above the cut-off score compared to the national percentage of 8,64%.

Although none of the stress factors are relevant in predicting current levels of suicide ideation, the relationship can be hypothesised based on correlations. Passive coping shows statistically significant correlations with job demands and inherent police stressors and the ASIQ. This suggests that a passive coping strategy among police personnel might be exacerbated by not having equipment and logistic support to do their work, or by being exposed to traumatic incidents, for example violence. This creates an attitude of passivity and avoidance of responsibility that may lead to feelings of being overwhelmed by demands of the job and may ultimately lead to thoughts of suicide. A police officer already utilising passive coping strategies might also experience job demands and inherent police stressors as more intense, which could increase thoughts of suicide.

The discriminant analysis resulted in an acceptable classification of police officials who measure high and low on suicide ideation. The linear discriminant function for police officials with low or high suicide ideation classified 75% of the high suicide ideation cases and 85,05% of the low suicide ideation cases correctly. From the results the following variables (in order of importance) are established to be the best predictors of suicide ideation among police officials in Gauteng Province:

- A previous suicide attempt
- Having previously been charged in terms of the disciplinary code
- Using passive coping strategies
- Using seeking emotional support as a coping strategy
- Suffering form a medical condition
- Gender

3.2. LIMITATIONS

The following limitation of the research should be taken into account:

- The research design does not allow one to determine the direction of the relationship between variables (Kerlinger and Lee, 2000).
- Coping and stress were the only two variables that were researched regarding suicide ideation although there are many other important variables as well that could be investigated, like personality types, Post Traumatic Stress Disorder (PTSD), depression, as well as the differences between the various race groups.
- Due to the sensitive nature of the questionnaires, which could be answered anonymously, only a few police officials gave their personal information (name, surname and contact number). This made it difficult to contact an official who scored high on the ASIQ and who was in need of assistance. This is an important ethical principle that must be considered in future studies.

3.3 RECOMMENDATIONS

3.3.1 Recommendations for the SAPS

The following recommendations, based on the findings, should be considered and implemented:

- It is proposed that an in-depth investigation into the how and why of the disciplinary process of the SAPS be initiated in order to make recommendations to the improvement of the process. Special attention should be given to the effects of the procedure before, during and after a police official is charged.
- Training programmes regarding the disciplinary code should be implemented to sensitise commanders and supervisors of the effects on a police official being charged.

- It is recommended that suitable pre-medical assessments, including physical, mental and family history, be conducted for all new recruits and high-risk units. Current police members should be assessed on a yearly basis. Negative pent-up energy should be channelled in a constructive, focused manner. This is where the Sports Division in the SAPS has a vital role to play. All employees should be encouraged to participate in a mental and physical wellness program.
- Salaries at the lower echelons should be raised and adequate resources should be effectively allocated to improve service delivery.
- It is suggested that a police official support team be established in every police station or area in the province consisting of police officials trained in listening skills, grief, dependency, stress management, debriefing, post-shooting trauma, suicide prevention and intervention and peer support techniques. This initiative can effectively be linked to work done by the current Field Training Officer (FTO).
- More regular visitations to stations and area offices are suggested.
- Lectures regarding stress, conflict and suicide prevention (warning signs, method, intervention and helping skills) can be given at the various police offices.
- Awareness regarding firearms and the commander's influence and role in the lives of his officials should be emphasised. This activity could effectively be linked with an incentive programme for police offices/stations with the most effective service delivery standards in each province/area in order to give some meaning in the lives of our police officials.
- Police training in general should be advanced and reviewed every two years. It is also suggested that interventions must focus on the interpersonal and management skills of senior and middle managers.
- The impact of the current suicide prevention awareness workshops should be reviewed and improved.

- The suicide prevention project should investigate other means, international and national, of addressing suicide in the police services taking into account current research.
- The suicide prevention project has to be linked with other projects and programmes currently being implemented in the SAPS such as stress management, debriefing, life skills and colleague sensitivity to have the necessary impact. This new project/programme must be presented as a comprehensive life skills “package” for each and every police official to attend and gain skills.
- Management should take into serious consideration that police officials hand in their service weapon after duty. It has been proved by various research that the means (service weapon) of suicide must be limited in order to reduce the suicide rate.

3.3.2 Recommendations for future research

The following recommendations for future research have been made based on the findings:

- The sample could in future be larger.
- Future research could attempt to establish the relationship between many other important variables like personality types, Post-Traumatic Stress Disorder (PTSD), depression, as well as the differences between the various race groups and suicide ideation.
- Future research could attempt to determine and clarify the effect of sensitive research topics, like suicide, on the families of the police officials.
- Future research could determine a more effective way of handling research regarding topics like suicide in order to protect the respondent’s privacy as well as to be able to assist him/her should it be needed.

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