COPING, STRESS AND SUICIDE IDEATION
IN THE
SOUTH AFRICAN POLICE SERVICE
IN THE
NORTHERN CAPE

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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.
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ABSTRACT

Subject: Coping, stress and suicide ideation in the South African Police Service in the Northern Cape.

Key terms: Coping, stress, suicide ideation, suicide, police.

Suicide is a complex phenomenon, which can be prevented if intensive and continuous research is being done to determine tendencies and to compile profiles of high-risk cases. Suicide prevention is currently a high priority in the South African Police Service (SAPS). In the Northern Cape various potential stressors, such as a high crime level, lack of resources and vast distances to travel are some of the challenges members of the police service face. Increased rates of post-traumatic stress, alcohol abuse, depression and suicides are found in research with police members. Research that was done in the SAPS shows that the number of suicide among police officers increased from 11 suicides per 10 000 during 1999 to 13 suicides per 10 000 during 2000. The numbers of suicides in the SAPS in the Northern Cape are of the highest of all the Provinces. Suicide ideation can be considered an early marker for more serious suicidal behaviour. However, there is a lack of empirical research systematically investigating suicide ideation and possible correlates thereof in the SAPS in the Northern Cape.

This research investigated the relationship between suicide ideation, stress and coping within SAPS in the Northern Cape. The aim of this research was to determine the level of suicide ideation and possible correlates thereof. Further aims included predicting suicide ideation by means of stress and coping variables.

The research method for this article consists out of a brief literature review and an empirical study. A cross sectional survey design was used. A random sample (n=274) was taken of members from police stations in the Northern Cape. The Adult Suicide Ideation Questionnaire (ASIQ), Police Stress Inventory (PSI), COPE Questionnaire and a biographical questionnaire were administered. Descriptive and inferential statistics were used to analyse the data.
Results indicated that 3.28% of the sample showed serious levels of suicide ideation. It was shown that previous suicide attempts, medical status, passive coping, problem-focussed coping, police stressors and job demands could be used to predict suicide ideation.
OPSOMMING

Onderwerp: Coping, stres en selfmoord-denkbeeldvorming in die Suid-Afrikaanse Polisiediens

Sleutel terme: Coping, stres, selfmoord-denkbeeldvorming, selfmoord, polisie.

Selfmoord is 'n komplekse verskynsel wat voorkom kan word indien intensiewe en voortdurende navorsing geskied ten einde neigings vas te stel en profiele van høe risiko gevalle saam te stel. Selfmoord-voorkoming geniet tans hoë prioriteit in die Suid-Afrikaanse Polisiediens. In die Noord-Kaap stel potensiële stressore soos die hoë misdaad vlakke, tekort aan hulpbronne en groot afstande wat gereis moet word voortdurend uitdagings aan lede van die SAPD. Navorsing in die SAPD toon verhoogde vlakke van post-traumatisie stres, alkohol misbruik, depressie en selfmoord onder polisielede. Navorsing wat in die SAPD gedoen is toon dat daar 'n toename in selfmoorde onder polisielede is van 11 selfmoorde per 10 000 gedurende 1999 tot 13 selfmoorde per 10 000 in 2000. Die aantal selfmoorde in die SAPD in die Noord-Kaap is van die hoogste van al die provinsies. Nietemin bestaan daar egter 'n tekort aan empiriese navorsing wat selfmoord-denkbeeldvorming en moontlike korrelate daarvan sistematies ondersoek in die Suid Afrikaanse Polisiediens in die Noord-Kaap.

Hierdie navorsing het die verband tussen coping, stres, selfmoord-denkbeeldvorming binne die SAPD in die Noord-Kaap ondersoek. Die doelstelling van die navorsing was om die vlak van selfmoord-denkbeeldvorming en moontlike korrelate daarvan vas te stel. Verdere doelstellings het ingesluit die voorspelling van selfmoord-denkbeeldvorming deur middel van stres-en copingveranderlikes.

Die navorsingsmetode vir die artikel bestaan uit 'n bondige literatuuroorsig en 'n empiriese ondersoek. 'n Dwars-deursnee opname ontwerp is gebruik. 'n Ewekansige steekproef (n=274) van lede van polisie stasies in die Noord-Kaap is gecen. Die Volwasse-selfmoord-denkbeeldvormingsvraelys (ASIQ), Polisiestres-opname (PSI), COPE, 'n meetinstrument van sosiale ondersteuning en 'n biografieële vraelys is afgeneem. Beskrywende en inferensiele statistiek is gebruik om die data te analiseer.
Resultate het getoon dat 3.28% van die steekproef ernstige vlakke van selfmoord-denkebeeldvorming getoon het. Daar is getoon dat vorige selfmoord pogings, mediese status, passiewe coping, problem-gefokusde coping, polisie stressors en beroeps eise almal gebruik kan word in die voorspelling van selfmoord-denkebeeldvorming.
CHAPTER 1
INTRODUCTION

This dissertation deals with suicide ideation, stress and coping in the South African Police Service in the Northern Cape. 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.

1. PROBLEM STATEMENT

Worldwide there is an increase in the suicide rate among police members (Janik & Kravitz, 1994; Violanti, 1995). According to Constant (2002); Schmidtko, Fricke and Lester (1999) and Violanti (1995), police officers have one of the highest suicide rates of all professions. According to Thomas, Baker, Jane and Baker (1996) the suicide rate among police officers is three times higher than that of the general population. Research within the South African Police Service (SAPS) reflects that suicide is also a phenomenon of concern (Rossouw, 2000).

Research that was done in the SAPS shows that the number of suicides among police officials increased from 11 suicides per 10 000 during 1999 to 13 suicides per 10 000 during 2000 (Rossouw, 2000). During 1999 the highest number of suicides was committed in Mpumalanga, with 33 out of every 10 000 police officials committing suicide. Other high risk areas seem to be the Free State, Northwest, Northern Cape and Eastern Cape (Rossouw, 2000). Some of the reasons cited for the increase in the suicide rate are depression, relationship or marital problems, financial problems and disciplinary actions against the member (Rossouw, 1999, 2000).

The Northern Cape is one of the Provinces with the highest suicide rate among police members. According to statistics compiled by the National Suicide Prevention Committee (Rossouw, 2000), during the 3 years from 1998, the Northern Cape was one of the high-risk areas. The Northern Cape is the largest South African province in surface, yet it has the least dense population. Some of the stations are more than a thousand kilometres from the Provincial Headquarters. A station like Van Zyls Rus has only three to five police officials (an allocation of police officers is done based on the population size). According to Sachs, Yan,
Swann and Allen (2001), suicide rates are generally higher in areas of low population density and among those with little social report. Lacks of social interaction and support from relatives and friends have been implicated in suicide rates.

Table 1 gives the suicide rate of police members in the Northern Cape from 1998 to 2000.

**Table 1**

*The Suicide Rate of SAPS Members in the Northern Cape (Suicides per 10 000)*

<table>
<thead>
<tr>
<th>Province</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern Cape</td>
<td>20</td>
<td>15</td>
<td>16</td>
</tr>
</tbody>
</table>

From Table 1 it can be seen that the Northern Cape consistently scores above the national average quoted. According to Rossouw (2000) the SAPS member most likely to commit suicide is a Black male sergeant or inspector, between the age of 28 and 35 years, who is a member of visible policing. The time of the suicide is between 18h00-24h00, with the service weapon being used. In more than 10% of the suicide cases an argument preceded the suicide incident. Rossouw (2000) further states that the most frequent method used for committing suicide is the service weapon whereas more than 80% of the suicide cases during 2000 were committed by using a service weapon.

According to Reynolds (1991a) suicide ideation can be described as relatively mild, general thoughts about death and the wish that one were dead, or as serious ideation, like specific plans and means of taking one's life. Vilhjalmsson, Kristjansdottir and Sveinbjarnardottir (1998), described suicide as a process of different stages, starting with thoughts of death and suicide, and ending in self-inflicted death. A previous suicide attempt is still the best predictor of a completed suicide (Gliatto & Rai, 1999, Preuss et al. 2003).

According to Sachs et al. (2001) suicidal behaviour can be defined in terms of suicide, suicide attempts or suicidal ideation. Suicide has been associated with some of the most common psychiatric disorders, e.g. major depression and alcohol abuse. According to Canapary, Bongar and Cleary (2002) one crucial commonality among suicide completers is the presence of a psychiatric disorder. Some psychological autopsy studies that have been done indicated that more than 90% of completed suicides are associated with psychiatric disorders, including substance abuse (Gliatto & Rai, 1999). The proportion of suicide related to the use of alcohol
is conservatively reported to be between 19% and 27%, according to Clark and Fawcett (1992), in Canapary et al., 2002.

According to Crank and Caldero (1991) police stress can be conceptualised as any condition which has adverse consequences for a police officer's well-being and has been linked to negative emotional outcomes such as divorce, suicide and alcoholism.

Two major categories of stress have been identified in police work. The first one concerns the nature of police work, or the operational factors that are specific to this line of work. Examples of this include exposure to danger, facing the unknown, court appearances, shift work and poor equipment. The second category refers to the organisational structure of police work, e.g. managerial styles, communication system, lack of administrative and supervisor support, lack of confidence in management and inadequate career advancement (Biggam, Power, Macdonald, Carcary & Moodie, 1997; Kop, & Euwema, 2001). Staff shortages, inadequate resources, time pressure and work overload can also be included in this category (Kop, Euwena & Schaufeli, 1999). Research that was done on the sources of stress indicated that the organization was the overwhelming source of stress among police members (Crank & Caldero, 1991; Hart, Wearing & Headey, 1995; Kop & Euwema, 2001).

According to Burgers (1994), Nel and Burgers (1996) and Rossouw (2000) studies have revealed several factors related to police suicide in the SAPS. The work environment, regular availability of firearms, the continuous exposure to death and injury when on duty, social strain resulting from shift work and the inconsistencies within the criminal justice system are a few factors. The perception among police officials that they labour under a negative public image has also been cited to explain the high rate of self-inflicted death among police officials. According to Violanti (1997), officers are continuously isolated from society by their jobs, and such isolation increases the potential for suicide.

The cycle of violence places police officials in constant contact with victims, while often becoming victims themselves (Burgers, 1994). Overexposure to violence and trauma in South Africa is a real possibility according to Nel and Burgers (1996). If one looks at the Report of the Crime Information Analysis Centre (Crime Information Analysis Centre, 2001), South Africa measures unacceptably high with regard to violent crimes, for example murder, rape, robbery and assault. This is in comparison to 90 other Interpol member countries.

Following a police suicide, members of the Helping Professions within the SAPS have to complete questionnaires regarding the victim. The following factors within the work
environment are frequently mentioned: depression, lack of promotion and criminal offences committed by the member. Factors outside the work environment are marital, relationship, financial and health problems, as well as alcohol abuse and divorce (Rossouw, 2000). According to Rossouw (2000), the high stress that police experience in their work, together with domestic and personal problems, appear to be the primary contributing factors when police officials lose the ability to cope in normal ways and turn to an ultimate solution such as suicide to relieve the pressures of the demands. Police officers going through a divorce are 5 times more likely to commit suicide than a colleague in a stable marriage (Russell, 1997).

Police officials generally do not easily complain about or discuss psychological issues or emotional reactions, because of the strong sense of cohesion and the propensity to oppose outside influences, which may disturb cohesion (Brown, Fielding & Grover, 1999; Nel & Burgers, 1996). The expression of personal feelings is extremely limited in the police culture, and it is expected from police officers to maintain a poised presence in the face of human tragedy (Burgers, 1994; Knoetze & De Bruin, 2001; Nel & Burgers, 1996). Chandler and Jones (1979), Kop and Euwema (2001), also mention the well-known "John Wayne Syndrome" operating in police services (i.e. the macho cop).

Coping is defined as the cognitive and behavioural efforts used to master, tolerate and reduce demands that tax or exceed a person's resources (Horesh et al., 1996). Poor coping skills play a significant role in determining the intensity and frequency of stress as experienced in police work (Anshel, 2000).

Patterson (2000) differentiates between two coping strategies, namely emotion-focused and problem-focused coping. Emotion-focused coping strategies refer to what the individual was thinking during the stressful event and describes thoughts to regulate emotional responses which can arise as a result of exposure to a stressful event. Problem-focused coping strategies refer to actions taken during the stressful event aimed at changing the circumstances of the stressful event through problem solving and seeking social support.

The alarming rise in suicide statistics from 1994 to 1998 together with the dramatic increase in cases of medical boarding because of psychological reasons, high divorce statistics, and the incidence of both alcohol and drug abuse, is evidence that the SAPS is in great distress (Gulle, Tredoux & Foster, 1998). Suicide is a serious problem that is not often talked about in police circles, especially because of the stereotypical view of the public, as well as senior officers,
that police members are hardy individuals who possess somewhat superhuman coping skills (Biggam et al., 1997).

In a study done by Rothmann and Van Rensburg (2001), 10.58% of the police members in the North West showed significant suicide ideation levels. They also found that suicide ideation was higher in the case of police members who were working in police stations than in the case of those who were in training. The above statistics ask for serious intervention from the SAPS. No study of police suicide ideation in the Northern Cape has been undertaken, yet this is one of the Provinces that shows the highest suicide rate. It is therefore necessary to study suicide ideation of police members in the Northern Cape and possible correlates thereof.

The objective of this study is to highlight factors specifically contributing to the suicide ideation of police members in the Northern Cape, which would make comparison with previous studies possible. Since coping strategies and stress will also be studied, this information could yield valuable information for the SAPS in planning interventions for the prevention of police suicides and stress management, as well as human resource development efforts in general.

2. SUICIDE IDEATION, COPING AND STRESS IN THE POLICE ENVIRONMENT

According to Anshel (2000) and Biggam et al. (1997), law enforcement can be recognized as one of the most stressful occupations worldwide. The police officer is usually the one who is first at a scene when babies are killed, wives are battered, addicts die of an overdose or when accidents kill or maim citizens (Lewis, 2002). It is not only the gruesome scenes they have to attend to, but they must also endure unlawfulness, often dangerous actions by citizens, as well as abusive treatment in the workplace, together with a lack of social support (Anshel, 2000). Police stress is not always unique or obvious, but what is unique about this occupation is the combination of stressors in one job (Constant, 2002).

The weakening effect of stress is often too slow to see, neither a person nor his friends are aware of the damage that is being done. Police officers are repeatedly exposed to stressors, which drain their strength. Debilitation from this daily stress accumulates and makes officers more vulnerable to traumatic incidents and normal pressures of life (Constant, 2002). According to Dugdale (1999) the stress of daily life, coupled with stresses from tragic events, can push a police officer to attempt to end his life.
Constant (2002) states that chronic stress has at least two effects on people. Firstly, prolonged stress causes people to regress, their psychological growth reverses and they become more immature. Secondly, chronic stress numbs people's sensitivity. This mechanism is called a coping mechanism. A coping mechanism serves as an internal source of emotional strength and mediates a person's reaction to any perceived stress, whether internal or external.

In a study by Burke (1994) it was found that emotional and physical well-being correlates with the coping mechanisms that people use. Police officers are more likely to withdraw and isolate themselves and have more psychosomatic symptoms and negative feelings. Typically, they use smoking, alcohol and drugs as coping mechanisms (Anshel, 2000).

According to Horesh et al. (1996) it was reported that individuals who attempt suicide have more difficulties in coping with interpersonal problems than do non-suicidal psychiatric patients or members of the general population. Suicidal patients are less able to consider alternatives or to think flexibly, and may persist in ineffective problem solving even after more effective strategies have been presented. Botsis et al., (1994), in Horesh et al., 1999 show that suicidal patients use almost all coping styles less frequently than non-suicidal patients. It was shown that the risk for suicide could be predicted by coping style.

Blame, suppression and substitution are three coping styles that have been positively correlated with the risk of suicide. The common denominator of all three coping styles is a basic avoidance or a bypassing of the real problem (Vilhjalmsson et al., 1998).

Other maladaptive coping strategies that are frequently used by police officers are the use of alcohol and drugs. Police officers use alcohol to help reduce stress, but the consumption of alcohol as a means to cope with stress has been associated with alcoholism, obesity, poor marital relations, inconsistent mood states and poor emotional regulation, low self-esteem, depression, poor sleep, heightened chronic fatigue, poor coping skills and reduced quality of work performance (Anshel, 2000).

According to research, police members seem unlikely to seek social support, because of the police culture (Burgers, 1994). Police officers are trained to take control, and are controlling individuals (Turvey, 1995). Violanti (1995) states, "When officers lose the ability to cope in normal ways, they may turn to the ultimate solution to relieve the pressure of stress".

A study that was done on adults regarding suicide ideation, found that people who are in highly stressful domestic, financial and particularly legal circumstances, who experience
extensive physical health problems and who perceive their lives as stressful, are most likely to contemplate suicide (Vilhjalmsson et al., 1998).

From the problem statement above, the following research questions emerge:

- What are the levels of suicide ideation in the Northern Cape?
- What are the most important stressors in the SAPS in the Northern Cape?
- What are the relationships between stress, coping strategies and suicide ideation in the SAPS in the Northern Cape?
- Can suicide ideation of police members in Northern Cape be predicted by making use of coping, stress and biographical variables?
- What recommendations for the prevention and/or management of suicide ideation in the SAPS in the Northern Cape can be made?

3. **RESEARCH OBJECTIVES**

The research aims are divided into general and specific objectives.

3.1 **General objective**

The general objective of this research is to study suicide ideation, stress and coping in the SAPS in the Northern Cape.

3.2 **Specific objectives**

The specific research objectives are as follows:

- To determine the level of suicide ideation in the Northern Cape.
- To highlight the most important stressors in the SAPS in the Northern Cape.
- To establish the relationships between stress, coping strategies and suicide ideation in the SAPS in the Northern Cape.
- To predict suicide ideation of police members in Northern Cape by making use of coping, stress and biographical variables.
- To make recommendations for the prevention and/or management of suicide ideation in the SAPS in the Northern Cape.
4. RESEARCH METHOD

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

4.1 Literature review

The literature review focuses on suicide ideation, stress and coping. An overview is given of how suicide ideation, stress and coping is conceptualised in the literature and what the relationships between these variables are.

4.2 Empirical Study

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

4.2.1 Research Design

A survey design is utilised to obtain the research objectives. The specific design is a cross-sectional design, whereby a sample is drawn from a population at a specific time (Shaughnessy & Zechmeister, 1997). Information collected is used to describe the population at a specific point in time. This design is used to assess interrelationships among variables within a population. According to Shaughnessy and Zechmeister (1997) this design is ideal to address the descriptive and predictive functions associated with correlation research.

4.2.2 Study population

A simple random sample \( n = 274 \) was taken from the total population of \( N=2500 \) police members in the Northern Cape. 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

\[
n = \frac{z^2 \times SD^2}{d^2}
\]
where

\[ n' = \text{estimated sample size} \]

\[ n = \text{the estimated sample size using the formula} \]

\[ N = \text{the size of the population} \]

\[ z = \text{standard score corresponding to the specified probability of risk} \]

\[ SD = \text{the standard deviation of the population, and} \]

\[ d = \text{the specified deviation.} \]

The values for \( z, SD \) and \( d \) have been determined in previous studies of suicide ideation in the SAPS (Rothmann & Strijdom, 2002; Rothmann & Van Rensburg, 2001). Stations were divided into small (fewer than 25 staff members), medium (25 - 100 staff members) and large stations (more than 100 staff members). All the police members at randomly identified small and medium sized stations in the Northern Cape were asked to complete the questionnaire. Stratified random samples according to race and sex were taken in the large stations. Civilian members were not included in this study.

4.2.3 Measuring Battery

Four questionnaires will be used in the empirical study, namely the Adult Suicide Ideation Questionnaire (ASIQ) (Reynolds, 1991a), the Cope Questionnaire (COPE) (Carver, Scheier & Weintraub, 1989), the Police Stress Inventory (PSI) (Pienaar and 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. Each of the items measures a specific suicidal behaviour or thought. Reynolds (1999a) reported that the internal consistency (coefficient alpha) of the ASIQ is 0.96, while Osman, Kopper, Lineham, Barries, Gutierrez and Bogge (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, 1995). According to Rothmann and Strijdom (2002), the internal consistencies of the ASIQ are 0.98 and 0.95 for white and black police members respectively. These internal consistencies could be regarded as acceptable according to Nunnally and Bernstein (1994).

- The Police Stress Inventory (PSI) will be used to measure participants' job stress. Pienaar and Rothmann (2003a) constructed the PSI for police officers in the SAPS based on the findings of several investigations regarding stressors specific to the policing environment. They subjected the PSI to a principal components factor analysis with a varimax rotation. Three internally consistent factors were extracted, namely Job Demands (17 items), Lack of 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 these values are acceptable (α > 0.70, Nunnally & Bernstein, 1994), and thus indicate the internal consistency of the factors of the PSI.

- The COPE Questionnaire (COPE) will be used to measure participants' coping strategies. The COPE is a multidimensional 53-item coping questionnaire that indicates the different ways that people use to cope in different circumstances (Carver et al., 1989). Although the original questionnaire measures 14 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, Passive Coping and Seeking Emotional Support. The alpha coefficients of the three scales are 0.93, 0.86 and 0.87 respectively. All these values are acceptable (α > 0.70, Nunnally & Bernstein, 1994), and thus indicate the internal consistency of the factors of the COPE. Test-retest reliability varies from 0.46 to 0.86 and from 0.42 to 0.89 (applied after two weeks).

- A questionnaire was developed to gather information about the demographic characteristics of the participants. This questionnaire gave participants the option of supplying their name and personnel number. Other information that was gathered included: 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, amount of cigarettes per day, other drug use, exercise behaviour and previous suicide attempt.

4.2.4 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 will be 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 was used to analyse the data.

Pearson product-moment correlation coefficient was used to specify the relationships between the variables. In the case where the distribution of scores was skewed, Spearman correlation coefficients will be computed. A cut-off point of 0.30 (medium effect, Cohen, 1988) is set for the practical significance of correlation coefficients.

A discriminant analysis was carried out to determine what combination of independent variables could be used to classify police members into groups who obtain 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 variables are categorical (Kerlinger & Lee, 2000). A stepwise multiple regression analysis will be used to determine the proportion of variance in the dependent variable (suicide ideation) that is explained by the independent variables.

5. DIVISION OF CHAPTERS

The chapters are presented as follows in this mini-dissertation:

Chapter 1: Introduction
Chapter 2: Research article
Chapter 3: Conclusions, limitations and recommendations
6. CHAPTER SUMMARY

In this chapter the problem statement and the motivation of the study was discussed. The purpose of the research is formulated, the methodology of the research is outlined and the methods used for the statistical analysis are described.

Chapter 2 consists of the research article.
REFERENCES


CHAPTER 2

RESEARCH ARTICLE
SUICIDE IDEATION, COPING AND STRESS
IN THE
SOUTH AFRICAN POLICE SERVICE IN THE NORTHERN CAPE*

M. DE WET

Psychological Services, SAPS, Kimberley

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ABSTRACT

The general objective of this research was to determine the relationship between coping and stress on the one hand and suicide ideation among police members of the South African Police Service (SAPS) in the Northern Cape on the other hand. A cross-sectional survey design was used. The study population (n=274) consisted of uniformed police members in the Northern Cape of South-Africa. The Adult Suicide Ideation Questionnaire, Police Stress Inventory, COPE Questionnaire and a Biographical Questionnaire were used as measuring instruments. Results of a stepwise discriminant analysis showed that a previous suicide attempt, medical status, passive coping, problem-focused coping, police stressors and job demands can be used to predict suicide ideation in the SAPS. The discriminant analysis

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showed furthermore that these variables correctly classified 66,67% of the respondents with a high score in respect of suicide ideation.

**OPSOMMING**

Die algemene doelstelling van hierdie navorsing was om die verband tussen coping-strategieé en stres aan die een kant, en selfmoord-denkbeeldvorming binne die Suid-Afrikaanse Polisie Diens(SAPD) in die Noord Kaap aan die ander kant te ondersoek. ’n Dwarsdeursnee opname-ontwerp is gebruik. Die studiepopulasie (n=274) het uit uniform-draende lede van die Suid-Afrikaanse Polisiediens in Noord-Kaap Provinsie van Suid Afrika bestaan. Die Volwasse Selfmoord-denkbeeldvormingsvraelys, Polisiestres Opname, COPE- vraelys en ’n biografiese vraelys is as meetinstrumente gebruik. Resultate van die stapsgewyse diskriminant-analise het getoon dat vorige selfmoordpogings, mediese toestand, passiewe coping, probleem-gefokusde coping, polisiestressore en werksvereistes kan gebruik word om selfmoord-denkbeeldvorming in die SAPD te voorspel. Die diskriminantontleding het verder aangedui dat hierdie veranderlikes 66,67% van deelnemers met ’n hoë telling in selfmoord-denkbeeld-vorming korrek voorspel.
Worldwide there is an increase in the suicide rate among police members (Janik & Kravitz, 1994; Violanti, 1995). According to Constant (2002), Schmidtke, Fricke and Lester (1999), and Violanti (1995), police officers have one of the highest suicide rates of all professions. According to Thomas, Baker, Jane and Baker (1996) the suicide rate among police officers is three times higher than that of the general population. Research within the South African Police Service (SAPS) reflects that suicide is a phenomenon of concern as well (Rossouw, 2000).

According to Sachs, Yan, Swann and Allen (2001) suicidal behaviour can be defined as suicide, suicide attempts or suicidal ideation. Suicide can be associated with some of the most common psychiatric disorders, e.g. major depression and alcohol abuse. According to Canapary, Bongar and Cleary (2002) one crucial commonality among suicide completers is the presence of a psychiatric disorder.

According to Reynolds (1991a) suicide ideation can be described as relatively mild, general thought about death and the wish that one was dead, or as serious ideation, like specific plans and means of taking one’s life. Vilhjalmsson, Kristjansdottir and Sveinbjarnardottir (1998), described suicide as a process of different stages, starting with thoughts of death and suicide, and ending in self-inflicted death. A previous suicide attempt is still the best predictor of a completed suicide (Gliatto & Rai, 1999, Preuss et al. 2003).

Research that was done in the South African Police Service shows that the number of suicides among police officials increased from 11 suicides per 10 000 during 1999 to 13 suicides per 10 000 during 2000 (Rossouw, 2000) although it has stabilized since then. During 1999 the highest number of suicides was committed in Mpumalanga, with 33 out of every 10 000 police officials committing suicide. Other high risk areas seem to be the Free State, Northwest, Northern Cape and Eastern Cape (Rossouw, 2000). Some of the reasons cited for the increase in the suicide rate are depression, relationship or marital problems, financial problems and disciplinary actions against the member (Rossouw, 1999, 2000).

The rate of suicides per 10 000 members in the SAPS for the different provinces of South Africa is given below.
Table 1
The Suicide Rate of SAPS Members from 1998-2000 (Suicide per 10 000)

<table>
<thead>
<tr>
<th>Province</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Office</td>
<td>12</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Western Cape</td>
<td>5</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>20</td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td>Eastern Cape</td>
<td>9</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>Free State</td>
<td>12</td>
<td>16</td>
<td>21</td>
</tr>
<tr>
<td>Kwazulu Natal</td>
<td>11</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>17</td>
<td>33</td>
<td>11</td>
</tr>
<tr>
<td>Northern Province</td>
<td>5</td>
<td>5</td>
<td>16</td>
</tr>
<tr>
<td>North West</td>
<td>15</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>Gauteng</td>
<td>16</td>
<td>16</td>
<td>8</td>
</tr>
</tbody>
</table>

Table 1 shows that the number of suicides in the SAPS stays constantly high in provinces like the Northern Cape, Free State, Mpumalanga, North West and Eastern Cape. These provinces present the high-risk areas.

According to Rossouw (2000) the SAPS member most likely to commit suicide is a black male sergeant or inspector, between the age of 28 and 35 years, who is a member of visible policing. The time of the suicide is between 18h00-24h00, with the service weapon being used. In more than 10% of the suicide cases an argument preceded the suicide incident. Rossouw (2000) further states that the most frequent method used for committing suicide is the service weapon, it happened in more than 80% of the suicide cases during 2000. During the past six years there was a tendency to commit suicide over the weekend, but in 2000 this changed to midweek days.

According to Crank and Caldero (1991) police stress can be conceptualised as any condition which has adverse consequences for a police officer's well-being and has been linked to negative emotional outcomes such as divorce, suicide and alcoholism. Two major categories of stress have been identified in police work. The first one concerns the nature of police work,
or the operational factors that are specific to this line of work. Examples of this include exposure to danger, facing the unknown, court appearances, shift work and poor equipment.

The second category identified in police stress research refers to the organisational structure of police work, e.g. managerial styles, communication system, lack of administrative and supervisor support, lack of confidence in management and inadequate career advancement (Biggam, Power, Macdonald, Carcary & Moodie, 1997; Kop, & Euwema, 2001). Staff shortages, inadequate resources, time pressure and work overload can also be included in this category (Kop, Euwema & Schaufeli, 1999). Research that was done on the sources of stress indicated that the organization was the overwhelming source of stress among police members (Crank & Caldero, 1991; Hart, Wearing & Headey, 1995; Kop & Euwema, 2001).

According to Burgers (1994), Nel and Burgers (1996) and Rossouw (2000) studies have revealed several factors related to police suicide in the SAPS. The work environment, regular availability of firearms, the continuous exposure to death and injury when on duty, social strain resulting from shift work and the inconsistencies within the criminal justice system are a few mentioned factors. The perception among police officials that they labour under a negative public image has also been given to explain the high rate of self-inflicted death among police officials. According to Violanti (1997), officers are continuously isolated from society by their jobs, and such isolation increases the potential for suicide.

This cycle of violence places police officials in constant contact with victims, while often becoming victims themselves (Burgers, 1994). Overexposure to violence and trauma in South Africa is a real possibility according to Nel and Burgers (1996). If one looks at the Report of the Crime Information Analysis Centre (Crime Information Analysis Centre, 2001) South Africa measures unacceptably high with regard to violent crimes, for instance murder, rape, robbery and assault. This is in comparison to 90 other Interpol member countries.

According to Rossouw (2000), the high stress that police experience in their work, together with domestic and personal problems, appear to be the primary contributing factors when police officials lose the ability to cope in normal ways and turn to an ultimate solution such as suicide to relieve the pressures of stress. Police officers going through a divorce are five times more likely to commit suicide than a colleague in a stable marriage (Russell, 1997).

Police officials generally do not easily complain about or discuss psychological issues or emotional reactions because of the strong sense of cohesion and the propensity to oppose outside influences, which may disturb togetherness (Brown, Fielding & Grover, 1999; Nel &
The expression of personal feelings is extremely limited in the police culture. It is expected from them to maintain a poised presence in the face of human tragedy (Burgers, 1994; Knoetze & De Bruin, 2001 & Nel & Burgers, 1996). Chandler and Jones (1979) and Kop and Euwema (2001), also mention the well-known "John Wayne Syndrome" operating in police services (i.e. the macho cop).

Coping is defined as the cognitive and behavioural efforts used to master, tolerate and reduce demands that tax or exceed a person's resources (Horesh, et al., 1996). Poor coping skills play a significant role in determining the intensity and frequency of stress as experienced in police work (Anshel, 2000).

Patterson (2000) differentiates between two coping strategies, namely emotion-focused and problem-focused coping. Emotion-focused coping strategies refer to what the individual was thinking during the stressful event and describes thoughts to regulate emotional responses which can arise as a result of exposure to a stressful event. Problem-focused coping strategies refer to actions taken during the stressful event aimed at changing the circumstances of the stressful event through problem solving and seeking social support.

The Northern Cape is one of the provinces with the highest suicide rate among police members. According to statistics of the National Suicide Prevention Committee (Rossouw, 2000), during the last 3 years from 1998, the Northern Cape was one of the high-risk areas. The Northern Cape is the largest South African province regarding surface, yet it has the least dense population. Some of the stations are more than a thousand kilometres from the Provincial Headquarters. A station like Van Zyls Rus has only three to five police officials. According to Sachs et al. (2001), suicide rates are generally higher in areas of low population density and among those with little social support. Lack of social interaction and support from relatives and friends have been implicated in suicide ideation.

According to the Workbook compiled by the Suicide Prevention Committee of the SAPS, (SAPS, 2000), suicide is not chosen, it happens when pain exceeds resources for coping with pain. The person is not a decision-maker, but a victim and the act is not so much a means of control, as the result of severe stress and psychological pain (Copshock, 2002).

Following a police suicide, members of the Helping Professions within the SAPS have to complete questionnaires regarding the victim. The following factors within the work environment are frequently mentioned: depression, lack of promotion and criminal offence
committed by the member. Factors outside the work environment are marital, relationship, financial and health problems, as well as alcohol abuse and divorce (Rossouw, 2000).

The alarming rise in suicide statistics from 1994 to 1998 together with the dramatic increase of medical boardings because of psychological reasons, high divorce statistics, and the incidence of both alcohol and drug abuse, is evidence that the SAPS is in great distress (Gulle, Tredoux & Foster, 1998). Suicide is a serious problem that is not often talked about in police circles, especially because of the stereotypical view of the public, as well as senior officers, that police members are hardy individuals who possess somewhat superhuman coping skills (Biggam et al., 1997).

In a study done by Rothmann and Van Rensburg (2001), 10.58% of the police members in the North West showed significant suicide ideation levels. They also found that suicide ideation was higher in the case of police members who were working in police stations than in the case of those who were in training. The above statistics ask for serious intervention from the SAPS. No study of police suicide ideation in the Northern Cape has been undertaken, yet this is one of the provinces that shows the highest suicide rate. It is also postulated that the province presents a unique setting because of the low population density and general isolation of people, which could contribute to lacking social support systems. It is therefore necessary to study suicide ideation of police members and possible correlates thereof.

The objective of this research is thus to highlight factors specifically contributing to the suicidal ideation of police members in the Northern Cape, and to make comparison with previous studies possible. Since coping strategies and stress will also be studied, this information could yield valuable information for the SAPS in planning interventions for the prevention of police suicide, stress management, as well as human resource development efforts in general.
SUICIDE IDEATION, COPING AND STRESS IN THE POLICE CONTEXT

According to Anshel (2000) and Biggam et al. (1997), law enforcement can be recognized as one of the most stressful occupations worldwide. The police officer is usually the one who is first at a scene when babies are killed, wives are battered; addicts die of an overdose or when accidents kill or maim citizens (Lewis, 2002). It is not only the gruesome scenes they have to attend to, but they must also endure unlawfulness, often dangerous actions by citizens, as well as abusive treatment in the workplace, together with a lack of social support (Anshel, 2000). Police stress is not always unique or obvious, but what is unique about this occupation are all the different stressors in one job (Constant, 2002).

The weakening effect of stress is often too slow to see, neither a person nor his friends are aware of the damage that is being done. Police officers are repeatedly exposed to stressors, which drain their strength. Debilitation from this daily stress accumulates and makes officers more vulnerable to traumatic incidents and normal pressures of life (Constant, 2002). According to Dugdale (1999) the stress of daily life, coupled with stress from tragic events, can push a police officer to end his life.

According to Constant (2002), chronic stress has at least two effects on people. Firstly, prolonged stress causes people to regress, their psychological growth reverses and they become more immature. Secondly, chronic stress numbs people's sensitivity; this mechanism is called a coping mechanism. A coping mechanism serves as an internal source of emotional strength and mediates a person’s reaction to any perceived stress, whether internal or external. Coping is defined as the cognitive and behavioural efforts used to master, tolerate and reduce demands that tax or exceed a person’s resources (Horesh et al., 1996). Poor coping skills play a significant role in determining the intensity and frequency of stress as experienced in police work (Anshel, 2000).

In a study by Burke (1994) it was found that emotional and physical well being correlates with the coping mechanism that people use. Police officers are more likely to withdraw and isolate themselves, have more psychosomatic symptoms and negative feelings. Maladaptive coping strategies that are frequently used by police officers are the use of alcohol and drugs (Anshel, 2000). Police officers use alcohol to help reduce stress, but the consumption of alcohol as a means to cope with stress has been associated with alcoholism, obesity, poor marital relations, inconsistent mood states and poor emotional regulation, low self-esteem,
depression, poor sleep, heightened chronic fatigue, poor coping skills and reduced quality of work performance (Anshel, 2000).

Some psychological autopsy studies that have been done indicated that more than 90% of completed suicides are associated with psychiatric disorders, including substance abuse (Gliatto & Rai, 1999). The proportion of suicide related to the use of alcohol is conservatively reported to be between 19% and 27%, according to Clark and Fawcett (1992), in Canapary et al., 2002.

According to Horesh et al. (1996) individuals who attempt suicide have experienced more difficulties in coping with interpersonal problems than do non-suicidal psychiatric patients or members of the general population. Suicidal patients are less able to consider alternatives or to think flexibly, and may persist with ineffective problem solving even after more effective strategies have been presented. Botsis et al. (1994), in Horesh et al., 1999) also show that suicidal patients use almost all coping styles less frequently than non-suicidal patients. It was shown that the risk for suicide could be predicted by coping style.

A study that was done on adults regarding suicide ideation, found that people who are in highly stressful domestic, financial and particularly legal circumstances, who experience extensive physical health problems and who perceive their lives as stressful, are more likely to contemplate suicide. Blame, suppression and substitution are three coping styles that have been positively correlated with the risk of suicide. The common denominator of all three coping styles is basic avoidance or a bypassing of the real problem (Vilhjalmsson et al. 1998).

Looking at research, police members seem unlikely to seek social support, because of the police culture. Police officers are trained to take control, and are controlling individuals (Turvey, 1995). Violanti (1995) states, "When officers lose the ability to cope in normal ways, they may turn to the ultimate solution to relieve the pressure of stress".
METHOD

Research Design

A survey design was utilised to obtain the research objectives. The specific design is a cross-sectional design, whereby a sample is drawn from a population at a specific time (Shaughnessy & Zechmeister, 1997). Information collected is used to describe the population at a specific point in time. This design is used to assess interrelationships among variables within a population. According to Shaughnessy and Zechmeister (1997) this design is ideal to address the descriptive and predictive functions associated with correlation research.

Study population

A simple random sample \((n=274)\) was taken from the total population \((N=2500)\) of police members in the Northern Cape. 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

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

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.

The values for \(z\), \(SD\) and \(d\) have been determined in previous studies of suicide ideation in the SAPS (Rothmann & Van Rensburg, 2001; Rothmann & Strijdom, 2002). Stations were divided into small (fewer than 25 staff members), medium (25 – 100 staff members) and large stations (more than 100 staff members). All the police members at randomly identified small
and medium sized stations in the Northern Cape were asked to complete the questionnaire. Stratified random samples according to race and sex were taken in the large stations. Civilian members were not included in this study. Table 2 presents some of the characteristics of the participants.

**Table 2**

*Characteristics of the Study Population (n=274)*

<table>
<thead>
<tr>
<th>Item</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Race</strong></td>
<td>White</td>
<td>99</td>
<td>36,13</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>111</td>
<td>40,15</td>
</tr>
<tr>
<td></td>
<td>Coloured</td>
<td>64</td>
<td>23,36</td>
</tr>
<tr>
<td><strong>Rank</strong></td>
<td>Constable</td>
<td>18</td>
<td>6,57</td>
</tr>
<tr>
<td></td>
<td>Sergeant</td>
<td>49</td>
<td>17,88</td>
</tr>
<tr>
<td></td>
<td>Inspector</td>
<td>176</td>
<td>64,23</td>
</tr>
<tr>
<td></td>
<td>Captain</td>
<td>24</td>
<td>8,76</td>
</tr>
<tr>
<td></td>
<td>Superintendent</td>
<td>5</td>
<td>1,82</td>
</tr>
<tr>
<td></td>
<td>Senior superintendent</td>
<td>2</td>
<td>0,73</td>
</tr>
<tr>
<td><strong>Size of station</strong></td>
<td>Small</td>
<td>91</td>
<td>33,21</td>
</tr>
<tr>
<td></td>
<td>Medium</td>
<td>48</td>
<td>17,52</td>
</tr>
<tr>
<td></td>
<td>Large</td>
<td>135</td>
<td>49,27</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td>Grade 10</td>
<td>27</td>
<td>9,85</td>
</tr>
<tr>
<td></td>
<td>Grade 11</td>
<td>14</td>
<td>5,11</td>
</tr>
<tr>
<td></td>
<td>Grade 12</td>
<td>172</td>
<td>62,77</td>
</tr>
<tr>
<td></td>
<td>Technical college diploma</td>
<td>2</td>
<td>0,73</td>
</tr>
<tr>
<td></td>
<td>Technikon diploma</td>
<td>50</td>
<td>18,25</td>
</tr>
<tr>
<td></td>
<td>University degree</td>
<td>6</td>
<td>2,19</td>
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<tr>
<td></td>
<td>Postgraduate degree</td>
<td>3</td>
<td>1,09</td>
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<tr>
<td>Item</td>
<td>Category</td>
<td>Frequency</td>
<td>Percentage</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------------------</td>
<td>-----------</td>
<td>------------</td>
</tr>
<tr>
<td>Sex</td>
<td>Male</td>
<td>215</td>
<td>78,47</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>59</td>
<td>21,53</td>
</tr>
<tr>
<td>Status</td>
<td>Single</td>
<td>60</td>
<td>21,90</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>138</td>
<td>50,36</td>
</tr>
<tr>
<td></td>
<td>Divorced</td>
<td>67</td>
<td>24,45</td>
</tr>
<tr>
<td></td>
<td>Separated</td>
<td>7</td>
<td>2,55</td>
</tr>
<tr>
<td></td>
<td>Remarried</td>
<td>2</td>
<td>0,73</td>
</tr>
<tr>
<td>Language</td>
<td>Afrikaans</td>
<td>153</td>
<td>56,25</td>
</tr>
<tr>
<td></td>
<td>English</td>
<td>24</td>
<td>8,82</td>
</tr>
<tr>
<td></td>
<td>Sesotho</td>
<td>1</td>
<td>0,37</td>
</tr>
<tr>
<td></td>
<td>IsiNdebele</td>
<td>1</td>
<td>0,37</td>
</tr>
<tr>
<td></td>
<td>IsiXhosa</td>
<td>93</td>
<td>34,19</td>
</tr>
<tr>
<td>Previously charged in items of disciplinary code</td>
<td>Yes</td>
<td>67</td>
<td>25,09</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>200</td>
<td>74,91</td>
</tr>
<tr>
<td>Suffering from a medical condition</td>
<td>Yes</td>
<td>37</td>
<td>13,60</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>235</td>
<td>86,40</td>
</tr>
<tr>
<td>Alcohol</td>
<td>0 - 4 drinks per week</td>
<td>158</td>
<td>70,54</td>
</tr>
<tr>
<td></td>
<td>5 - 7 drinks per week</td>
<td>37</td>
<td>16,52</td>
</tr>
<tr>
<td></td>
<td>8 - 14 drinks per week</td>
<td>16</td>
<td>7,14</td>
</tr>
<tr>
<td></td>
<td>15 or more drinks per week</td>
<td>13</td>
<td>5,80</td>
</tr>
</tbody>
</table>

Table 2

*Characteristics of the Study Population (continued)*

<table>
<thead>
<tr>
<th>Item</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoker</td>
<td>Yes</td>
<td>75</td>
<td>27,88</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>194</td>
<td>72,12</td>
</tr>
<tr>
<td>Previous suicide attempt</td>
<td>Yes</td>
<td>7</td>
<td>2,63</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>266</td>
<td>97,37</td>
</tr>
</tbody>
</table>
It can be seen from Table 2 that the sample was made up of White, Black and Coloured members. Inspectors made up more than half the sample (64.23%). Almost 62% of the sample had Grade 12 qualifications. Members in this sample were predominately male (78.47%), and mostly married (50.36%). Afrikaans was indicated by more than half the sample (56.25%) as their first language. Of the officers in the current sample, 25.09% indicated that they had previously been charged in terms of the disciplinary code. A total of 37 (13.60%) of the members had medical conditions they felt were affecting their quality of work in the SAPS. Of the total sample 27.88% indicated that they were smokers, and 2.63% had made previous suicide attempts. The mean age of the participants was 34.53 years. The average number of years officers had been in the police service was 12.78 with a standard deviation of 5.95. Average years in the current position was 4.54. On a 5-point scale, officers rated their job satisfaction at an average of 3.67.

**Measuring Battery**

Four questionnaires were used in the empirical study, namely the Adult Suicide Ideation Questionnaire (ASIQ) (Reynolds, 1991a), the Cope Questionnaire (COPE) (Carver, Scheier & Weintraub, 1989) and 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. 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, Kopper, Lineham, Barries, Gutierrez & Bogge (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, 1995). According to Rothmann and Strijdom (2002), the internal consistencies of the ASIQ are 0.98 and 0.95 for white and black police members respectively. These internal consistencies could be regarded as acceptable according to Nunnally and Bernstein (1994). Pienaar (2002) found an alpha value of 0.97 in a national sample of police officers.

---------------------------------------------
- The Police Stress Inventory (PSI) was used to measure participants' job stress. Pienaar and Rothmann (2003a) constructed the PSI for police officers in the SAPS based on the findings of several investigations regarding stressors specific to the policing environment. They subjected the PSI to a principal components factor analysis with a varimax rotation. Three internally consistent factors were extracted, namely Job Demands (17 items), Lack of 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 these values are acceptable ($\alpha > 0.70$, Nunnally & Bernstein, 1994), and thus indicate the internal consistency of the factors of the PSI.

- The COPE Questionnaire (COPE) was used to measure participants' coping strategies. The COPE is a multidimensional 53-item coping questionnaire that indicates the different ways that people use to cope in different circumstances (Carver et al., 1989). Although the original questionnaire measures 14 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, Passive Coping and Seeking Emotional Support. The alpha coefficients of the three scales are 0.93, 0.86, and 0.87 respectively. All these values are acceptable ($\alpha > 0.70$, Nunnally & Bernstein, 1994), and thus indicate the internal consistency of the factors of the COPE. Test-retest reliability varies from 0.46 to 0.86 and from 0.42 to 0.89 (applied after two weeks).

- A questionnaire was developed to gather information about the demographic characteristics of the participants. This questionnaire gave participants the option of supplying their names and personal numbers. Other information that was gathered included: 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, other drug use, exercise behaviour and previous suicide attempt.

**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 were 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.

Pearson product-moment correlation coefficients were used to specify the relationships between the variables. In the case where the distribution of scores was skew, 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 what 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 separated the members of the groups maximally. The assumption of discriminant analysis is that the independent variables are continuous, but that the dependent variables are 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 3 shows the descriptive statistics, Cronbach alpha coefficients and inter-item correlation coefficients of the ASIQ, PSI and COPE.

Table 3
Descriptive Statistics, Inter-Item Correlation Coefficients and Cronbach Alpha Coefficients of the Measuring Instruments (n=274)

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>r-Mean</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem-focused Coping</td>
<td>70.23</td>
<td>13.10</td>
<td>-0.82</td>
<td>0.37</td>
<td>0.31</td>
<td>0.91</td>
</tr>
<tr>
<td>Passive Coping</td>
<td>26.29</td>
<td>7.34</td>
<td>0.35</td>
<td>-0.19</td>
<td>0.29</td>
<td>0.83</td>
</tr>
<tr>
<td>Seeking Emotional Support</td>
<td>18.92</td>
<td>5.11</td>
<td>-0.43</td>
<td>-0.57</td>
<td>0.43</td>
<td>0.84</td>
</tr>
<tr>
<td>Job Demands</td>
<td>77.83</td>
<td>26.58</td>
<td>-0.36</td>
<td>-0.33</td>
<td>0.39</td>
<td>0.91</td>
</tr>
<tr>
<td>Lack of Resources</td>
<td>77.28</td>
<td>23.44</td>
<td>-0.61</td>
<td>0.18</td>
<td>0.42</td>
<td>0.91</td>
</tr>
<tr>
<td>Inherent Police Stressors</td>
<td>42.25</td>
<td>16.14</td>
<td>-0.50</td>
<td>-0.68</td>
<td>0.49</td>
<td>0.88</td>
</tr>
<tr>
<td>ASIQ Total</td>
<td>7.62</td>
<td>16.88</td>
<td>5.07*</td>
<td>32.58*</td>
<td>0.57</td>
<td>0.96</td>
</tr>
</tbody>
</table>

* High skewness and kurtosis
Table 3 shows that acceptable Cronbach alpha coefficients (α > 0.70) were obtained for all the scales (see Nunnally & Bernstein, 1994). The mean inter-item correlations of most of the scales are also acceptable (0.15 ≤ r ≤ 0.50, Clark & Watson, 1995), except for the ASIQ scale that is somewhat high. The confirmatory factor analysis resulted in acceptable loads on the various factors, which confirm to some extend construct validity. It is evident from Table 3 that the scores on the measuring instruments are relatively normally distributed, with low skewness and kurtosis. The only exception is the ASIQ, which shows high skewness and kurtosis.

The inter item correlation coefficients between the ASIQ, PSI and COPE 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 skew distribution of suicide ideation scores. The scores on the other measuring instruments are normally distributed and Pearson correlation coefficients were computed.

Table 4

<table>
<thead>
<tr>
<th>Correlation Coefficients between Measuring Instruments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Item</strong></td>
</tr>
<tr>
<td>-------------------------------------------------------</td>
</tr>
<tr>
<td>Passive Coping</td>
</tr>
<tr>
<td>Seeking Emotional Support</td>
</tr>
<tr>
<td>Job Demands</td>
</tr>
<tr>
<td>Lack of Resources</td>
</tr>
<tr>
<td>Inherent Police Stressors</td>
</tr>
<tr>
<td>ASIQ</td>
</tr>
</tbody>
</table>

* Statistically significant correlation: p ≤ 0.05

+ Practically significant correlation (medium effect): r ≥ 0.30

++ Practically significant correlation (large effect): r ≥ 0.50

Table 4 shows a statistically significant correlation (practically significant, large effect) between Problem-focused coping and Seeking Emotional Support. Problem-focused coping also showed statistical significant correlations with Passive Coping, Job Demands and Lack of Resources. Problem-focused coping correlated statistically significant and negatively with
the ASIQ. Passive Coping correlated statistically significant with Seeking Emotional Support (practically significant, medium effect). Passive Coping also correlated statistically significant with Job Demands, Inherent Police Stressors and the ASIQ. Seeking Emotional Support showed a statistically significant correlation (negative) with Lack of Resources and a statistically significant positive correlation with Job Demands. Job demands showed statistically significant correlations with Lack of Resources and Inherent Police Stressors (practically significant, large effect), and a statistically significant correlation with the ASIQ. Lack of Resources correlated statistically significant with Inherent Police Stressors (practically significant, large effect), and statistically significant with the ASIQ. Inherent Police Stressors showed a statistically significant correlation with the ASIQ, although only small effect.

The frequency of participants' perceptions of social support for various sources thereof is given in Table 5.

**Table 5**

*Descriptive Statistics for the Social Support Scale*

<table>
<thead>
<tr>
<th>Item</th>
<th>Support</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes (%)</td>
<td>No (%)</td>
</tr>
<tr>
<td>The public</td>
<td>67,88</td>
<td>32,12</td>
</tr>
<tr>
<td>The SAPS in general</td>
<td>63,87</td>
<td>36,13</td>
</tr>
<tr>
<td>Psychological Services</td>
<td>26,64</td>
<td>73,36</td>
</tr>
<tr>
<td>Top Management</td>
<td>25,18</td>
<td>74,82</td>
</tr>
<tr>
<td>Direct commander</td>
<td>78,10</td>
<td>21,90</td>
</tr>
<tr>
<td>Colleagues</td>
<td>90,88</td>
<td>9,12</td>
</tr>
<tr>
<td>Family</td>
<td>96,35</td>
<td>3,65</td>
</tr>
<tr>
<td>Friends</td>
<td>92,70</td>
<td>7,30</td>
</tr>
<tr>
<td>Religion</td>
<td>87,96</td>
<td>12,04</td>
</tr>
</tbody>
</table>

In Table 5 it can be seen that members indicated that they did not feel supported by Top Management of the SAPS (74.82%) and Psychological Services (73.36%). Members do however feel supported by their family, friends and colleagues. Religion also plays an
important supportive role in the members' lives. Members also perceive themselves to be supported by the SAPS in general and the public.

Table 6 gives the intensity, frequency and severity of the items of the Police Stress Inventory.

Table 6

The Intensity, Frequency and Severity of Stress Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Intensity</th>
<th>Frequency</th>
<th>Severity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequent changes from exciting activities to boredom</td>
<td>4.36</td>
<td>3.72</td>
<td>16.22</td>
</tr>
<tr>
<td>Deadlines that have to be met</td>
<td>4.38</td>
<td>4.03</td>
<td>17.65</td>
</tr>
<tr>
<td>Being assigned more responsibility</td>
<td>4.85</td>
<td>4.17</td>
<td>20.22</td>
</tr>
<tr>
<td>Having to make critical and immediate decisions</td>
<td>4.58</td>
<td>3.89</td>
<td>17.82</td>
</tr>
<tr>
<td>Having to deal with crisis situations</td>
<td>5.18</td>
<td>4.34</td>
<td>22.48</td>
</tr>
<tr>
<td>Lack of personal time (for example: for lunch)</td>
<td>4.36</td>
<td>3.80</td>
<td>16.57</td>
</tr>
<tr>
<td>Being given new duties, or duties not previously performed</td>
<td>4.42</td>
<td>3.48</td>
<td>15.38</td>
</tr>
<tr>
<td>Having to work shift work</td>
<td>3.83</td>
<td>3.15</td>
<td>12.06</td>
</tr>
<tr>
<td>More paperwork than you can handle</td>
<td>5.01</td>
<td>4.95</td>
<td>24.80</td>
</tr>
<tr>
<td>Attending to incidences of domestic violence</td>
<td>4.63</td>
<td>3.62</td>
<td>16.76</td>
</tr>
<tr>
<td>Too much supervision</td>
<td>4.28</td>
<td>2.62</td>
<td>11.21</td>
</tr>
<tr>
<td>Having to do someone else's work</td>
<td>4.87</td>
<td>4.48</td>
<td>21.82</td>
</tr>
<tr>
<td>Having to work overtime</td>
<td>4.32</td>
<td>4.34</td>
<td>18.75</td>
</tr>
<tr>
<td>Being frequently interrupted</td>
<td>4.97</td>
<td>4.25</td>
<td>21.12</td>
</tr>
<tr>
<td>Having to perform tasks that are not part of your job description</td>
<td>4.94</td>
<td>4.87</td>
<td>24.06</td>
</tr>
<tr>
<td>Noisy work area</td>
<td>4.19</td>
<td>3.21</td>
<td>13.45</td>
</tr>
<tr>
<td>Reorganisation and transformation within the organisation</td>
<td>4.64</td>
<td>3.21</td>
<td>14.89</td>
</tr>
<tr>
<td>Lack of officers to handle specific tasks</td>
<td>5.62</td>
<td>4.67</td>
<td>26.25</td>
</tr>
<tr>
<td>Inadequate or poor quality equipment</td>
<td>5.81</td>
<td>4.77</td>
<td>27.71</td>
</tr>
<tr>
<td>Item</td>
<td>Intensity</td>
<td>Frequency</td>
<td>Severity</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-----------</td>
<td>-----------</td>
<td>----------</td>
</tr>
<tr>
<td>Lack of recognition for work well done</td>
<td>5.73</td>
<td>4.51</td>
<td>25.84</td>
</tr>
<tr>
<td>Other officers not doing their job</td>
<td>6.16</td>
<td>5.40</td>
<td>33.26</td>
</tr>
<tr>
<td>Supervisor's support is lacking</td>
<td>5.58</td>
<td>3.89</td>
<td>21.71</td>
</tr>
<tr>
<td>Negative attitudes experienced towards the organisation</td>
<td>5.09</td>
<td>4.18</td>
<td>21.28</td>
</tr>
<tr>
<td>Lacking opportunities for advancement</td>
<td>5.65</td>
<td>3.95</td>
<td>22.32</td>
</tr>
<tr>
<td>Other officers poorly motivated</td>
<td>5.64</td>
<td>4.82</td>
<td>27.18</td>
</tr>
<tr>
<td>Supervision is poor or inadequate</td>
<td>5.11</td>
<td>3.10</td>
<td>15.84</td>
</tr>
<tr>
<td>Inadequate salary</td>
<td>6.18</td>
<td>5.30</td>
<td>32.75</td>
</tr>
<tr>
<td>Staff shortages</td>
<td>6.48</td>
<td>5.91</td>
<td>38.30</td>
</tr>
<tr>
<td>No participation in policy-making decisions</td>
<td>4.92</td>
<td>3.69</td>
<td>18.15</td>
</tr>
<tr>
<td>Strong competition for advancement</td>
<td>4.86</td>
<td>3.69</td>
<td>17.93</td>
</tr>
<tr>
<td>Difficult relationship with supervisor</td>
<td>4.47</td>
<td>2.83</td>
<td>12.65</td>
</tr>
<tr>
<td>Fellow officer killed in the line of duty</td>
<td>6.52</td>
<td>1.92</td>
<td>12.52</td>
</tr>
<tr>
<td>Killing someone in the line of duty</td>
<td>5.48</td>
<td>1.19</td>
<td>6.52</td>
</tr>
<tr>
<td>Forced arrest or being physically attacked</td>
<td>5.04</td>
<td>2.64</td>
<td>13.31</td>
</tr>
<tr>
<td>Having to handle a large crowd/mass demonstration</td>
<td>4.83</td>
<td>2.27</td>
<td>10.96</td>
</tr>
<tr>
<td>Racial conflict</td>
<td>5.46</td>
<td>2.74</td>
<td>14.96</td>
</tr>
<tr>
<td>Delivering a death message or bad news to someone</td>
<td>4.58</td>
<td>2.43</td>
<td>11.13</td>
</tr>
<tr>
<td>Seeing criminals go free</td>
<td>6.50</td>
<td>4.33</td>
<td>28.15</td>
</tr>
<tr>
<td>Having to deal with the media</td>
<td>3.84</td>
<td>1.82</td>
<td>7.0</td>
</tr>
</tbody>
</table>

Table 6 shows that the items relating to fellow workers not doing their job, inadequate salary and staff shortages present the highest severity for police members. Seeing criminals go free, the poor motivation of other officers, a lack of recognition for work well done, a lack of officers to handle specific tasks and inadequate or poor quality equipment also present severe stressors in the policing environment.
A fellow officer killed in the line of duty is one of the most stressful experiences, although it doesn’t happen on a regular basis. Some of the other items with a high intensity but a low frequency are when a fellow officer is killed in the line of duty, lacking supervisor’s support, racial conflict, lacking opportunity for advancement and a forced arrest or being physically attacked.

Items that are not so stressful in the police environment according to the questionnaires are the working of shifts, having to deal with the media, working in a noisy area and too much supervision.

Subsequently a stepwise discriminant analysis was performed in order to determine which variables discriminate between those 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 7.

**Table 7**

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

<table>
<thead>
<tr>
<th>Variable</th>
<th>High Suicide Ideation</th>
<th>Low Suicide Ideation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-124,15</td>
<td>-155,88</td>
</tr>
<tr>
<td>Race</td>
<td>2,98</td>
<td>2,64</td>
</tr>
<tr>
<td>Rank</td>
<td>1,20</td>
<td>0,34</td>
</tr>
<tr>
<td>Size</td>
<td>1,13</td>
<td>1,53</td>
</tr>
<tr>
<td>Years in the SAPS</td>
<td>0,35</td>
<td>0,47</td>
</tr>
<tr>
<td>Years in the position</td>
<td>0,66</td>
<td>0,65</td>
</tr>
<tr>
<td>Sex</td>
<td>14,97</td>
<td>15,68</td>
</tr>
<tr>
<td>Status</td>
<td>3,77</td>
<td>4,27</td>
</tr>
<tr>
<td>Criminal charge</td>
<td>6,61</td>
<td>6,65</td>
</tr>
<tr>
<td>Satisfaction with police</td>
<td>3,99</td>
<td>4,59</td>
</tr>
<tr>
<td>Medical status</td>
<td>16,87</td>
<td>21,11</td>
</tr>
<tr>
<td>Use of alcohol</td>
<td>5,10</td>
<td>4,97</td>
</tr>
</tbody>
</table>
By applying the discriminant analysis, it was found that all the variables listed above had to be retained for the stepwise discriminant analysis. Table 8 summarises the frequencies and percentages of police members that can be classified as belonging to the high or low suicide ideation groups (based on these variables).

**Table 8**

*Classification of Membership of High/Low Suicide Ideation Groups*

<table>
<thead>
<tr>
<th>Group</th>
<th>High Suicide Ideation</th>
<th>Low Suicide Ideation</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Suicide Ideation</td>
<td>6 (66.67%)</td>
<td>3 (33.33%)</td>
<td>9 (100%)</td>
</tr>
<tr>
<td>Low Suicide Ideation</td>
<td>12 (5.74%)</td>
<td>197 (94.26%)</td>
<td>209 (100%)</td>
</tr>
</tbody>
</table>

Table 8 shows that the combination of variables classifies 66.67% of the high suicide ideation cases and 94.26% of the low suicide ideation cases correctly. A total of 33.33% of the high and 5.74% 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 9.
Table 9

Variables that Predict Suicide Ideation in Police Members

<table>
<thead>
<tr>
<th>Variables</th>
<th>Partial R-Square</th>
<th>F-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous suicide attempt</td>
<td>0.12</td>
<td>31.06</td>
</tr>
<tr>
<td>Medical status</td>
<td>0.05</td>
<td>12.56</td>
</tr>
<tr>
<td>Passive Coping</td>
<td>0.02</td>
<td>5.66</td>
</tr>
<tr>
<td>Problem-focused Coping</td>
<td>0.02</td>
<td>4.50</td>
</tr>
<tr>
<td>Police Stressors</td>
<td>0.02</td>
<td>2.36</td>
</tr>
<tr>
<td>Job demands</td>
<td>0.01</td>
<td>4.44</td>
</tr>
</tbody>
</table>

Table 8 shows that the following variables can be used to predict suicide ideation of police members, namely previous suicide attempts, medical status and passive coping strategies, problem-focused coping, police stressors and job demands. A previous suicide attempt explains 12% of the variances in suicide ideation, medical status 5% and passive coping and problem-focused coping each 2%. Job demands explain a further 1% of the variance in suicide ideation.

DISCUSSION

Compared with a cut-off raw score of 31 (the 97\textsuperscript{th} percentile on a norm table for community adults in the United States of America, Reynolds, 1991a), 9 (3.28\%) of the uniformed police members have significant suicide ideation levels. The current research shows a lower level of suicide ideation in the SAPS in the Northern Cape than what was previously found in the North West Province (10.58\%) (Rothmann & Van Rensburg, 2001). Pienaar (2002) also calculated the national level of police suicide ideation to be at 8.64\%. This result actually shows that suicide ideation among police members in the Northern Cape might not be as prevalent as the actual rate of suicide. It would be expected that suicide ideation should be more prevalent than actual rates of completed suicide (Rossouw, 1999; SAPS, 2000). It is also possible that members in this Province are more reluctant to admit to psychological difficulty, because the Province has been identified as one of high-risk (Rossouw, 2000). The underreporting of suicide ideation can thus be interpreted as confirmation of previous research.
(Brown et al., 1999; Nel & Burgers, 1996), showing police to not express personal problems. An even further hypothesis might be that police members are more socially isolated because of the geographical make-up of the Northern Cape Province. A lack of needed social support could imply a shorter route from suicide ideation towards behaviour. Further research is needed to clarify the translation of suicide ideation into suicide attempts among these officers.

Results of the stepwise discriminant analysis indicated that a previous suicide attempt, medical status, passive coping and problem-focused coping strategies, inherent police stressors and job demands could be used to predict the suicide ideation of police officers. These variables correctly identified 66.67% of the high suicide ideation cases and 94.26% of the low suicide ideation cases.

The best predictor of current suicide ideation is a previous attempt. Several other studies also indicated that a previous suicide attempt is the best predictor of a completed suicide (Baker & Baker, 1996; Canapary et al., 2002; Gliatto & Rai, 1999; Preuss et al., 2003; Rossouw, 2000; Sachs et al., 2001; Vilhjalmsson et al., 1998). A study by Staal and Hughes (2002) in the U.S. Air Force found that those with a previous suicide attempt were approximately 1.500 times more likely to complete a suicide in the future than those with no attempt history. Considering that low levels of suicide ideation were found for the current sample, special attention needs to be paid to those officers with a previous attempt as high-risk candidates for repeat attempts.

The second predictor of suicide ideation is a person's medical status. Medical status refers to the presence of a chronic physical condition, chronic pain, cancer or terminal diseases like Human Immunodeficiency Virus (HIV). It is thus suggested that police officers with some medical condition present a case of interest in the prevention of police suicide. In this sample 37 people indicated that they were suffering from a medical condition, which in their opinion was affecting their quality of service. None of the people indicated that they had been infected with HIV, which probably rather reflects the stigma attached to this disease in society than the actual rate of infection. In the current sample police members indicated that they use medication for headaches, stress, anxiety, peptic ulcers and high blood pressure.

Several studies found the medical status of a person to be a predictor of suicide. Druss & Puncus (2000); Gliatto & Rai (1999); Rothmann & Van Rensburg (2001); Sachs et al., (2001) and Vilhjalmsson et al., (1998); all found a significant association between the presence of a medical condition and suicidality. Sachs et al. (2001) also note the possibility of other undetected comorbid conditions such as panic disorder, post traumatic stress disorder,
untreated alcohol and/or psychoactive substance abuse disorders that could further increase the risk of suicide. Mann et al. (1992, in Knowlton, 2002) also refer to three categories or triggers, namely acute psychiatric illness, substance, alcohol or medication abuse and social or family crisis.

Suicide ideation was predicted by passive and problem-focused coping. Passive coping means that a member does not directly confront stress and problems when he/she experiences it. Most probably medication or alcohol would be used, or the officer would try to ignore the situation. This member cognitively or behaviourally disengages from the negative effects of work experiences. Passive coping could lead to an accumulation of work stress up to a point where the officer becomes overwhelmed - this may be the point of no return, with the officer unable to find an alternative.

Problem-focused coping means that a member directly confronts the stress and problems experienced. This could include the mobilisation of the necessary support needed and actively combating and working through the negative effects of job stressors. Correlations also indicated the nature of the relationship between suicide ideation and coping. In this study, a passive coping style was positively related to suicide ideation, and problem-focused coping was negatively related to suicide ideation. Previous research (Horesh et al., 1996) has shown that suicide risk could be predicted by coping styles.

Correlations also give an indication of the relationship between passive coping and job stressors. Passive coping shows a statistically significant correlation with job demands and inherent police stressors. This implies that the higher the job demands and unique policing stressors an officer experiences, the more likely the member will make use of passive coping strategies. Again, when a member is confronted with a crisis situation, working overtime and performing tasks that are not in the job description could easily lead this member to look at alternatives to handling the pressure. If one looks at the content of the inherent police stressors factor (e.g. fellow officer killed in the line of duty, a forced arrest or being physically attacked and seeing criminals go free) the items typically show a high intensity, but low frequency. When looking at the severity of items, it can be seen that the items with the highest severity are lack of officers to handle a specific tasks, inadequate or poor quality equipment, officers not doing their job, officers poorly motivated, inadequate salary, staff shortages and seeing criminals go free. These items are mainly from the factors of lack of resources and job demands. The stress that members experience because of job demands, a
lack of resources and inherent police stressors could contribute to suicide ideation. Storm and Rothmann (2002) showed that police officers who use a passive coping strategy, and who report high job demands and lack of resources, experience higher emotional exhaustion.

Results in this study indicated that seeing criminals go free is one of the items with a very high severity. Burgers (1994) and Nel and Burgers (1996) previously alluded to the inconsistencies within the criminal justice system being experienced as significant source of stress by police officers. Staff shortages is also an item with a high severity. This echoes previous findings by Biggam et al. (1997) and Kop and Euwema (2001), who also found staff shortages a prime stressor in the policing environment.

Sachs et al. (2001) found that a relationship between suicide and the amount of support that is available for an individual exists. In this study members indicated that they did not feel supported by top management and Psychological Services. Nearly 75% of members indicated that they felt unsupported by Psychological Services (73.36%) and top management (74.82%). Ironically, work sources of support have been suggested as being the most important (Beehr, 1985). During the time of this study the Helping Professions of Northern Cape Police Service comprised out of one psychometrist for the whole of Northern Cape (+2500 members) and four social workers, one for each of the different areas (Diamond fields-, Upper Karoo-, Gordonia- and Springbok area). During this time there were also only two chaplains. Clearly, the capability of Psychological Service to handle the number of possible clients is limited. Members in the rural areas often do not have direct access to psychological counselling when the need arises, either because there are no private psychologists available or because of the vast distances and isolation of rural towns. This situation also lends further support for the hypothesis that a lack of needed support (perhaps at crucial junctions in the translation of ideation into behaviour) may be influencing the pathway of ideation to behaviour.
Except for the shortages of Helping Profession personnel, the other problem in the SAPS is that a fear exists that seeking psychological help will be noted in personal files, which might have a negative influence on future decisions about promotion and job security (Jacobs, 1998). This relates to the findings of Kureczka (1996), Russell (1997) and Lowenstein (1999) that if officers reveal any feelings of weakness or anxiety, or complain, they feel it would be used against them at some point in time, especially when seeking promotion. Police-members also have a strong sense of self-sufficiency and insist that they can solve their own problems (Baker & Baker, 1996; Brown et al., 1996; Brown, 2002; Lewis, 2002, Loo, 2001). The perceived lack of support and confidentiality of the Helping Professions, together with a tendency toward self-sufficiency suggests that police members will in general be reluctant to seek help, even if it should be available.

Studies by Crank and Caldero (1991) and Lowenstein (1999) found that upper management or supervisors were the most frequently selected single source of stress within the organization. The finding of the current study that top management is perceived as unsupportive echoes this previous research. The highly hierarchical structure of the SAPS could also contribute to this perception.

A limitation of this research is that the research design does not allow one to determine the direction of the relationship between the variables. The study also focuses only on coping strategies, work stress and biographical variables, thus not all possible causes of suicide ideation were investigated.
RECOMMENDATIONS

Results show that a previous suicide attempt, medical status, passive coping, problem-focused coping, police stressors and job demands should be taken into consideration when predicting suicidal behavior of police members in the Northern Cape.

As a previous suicide attempt was again found to be the best predictor of current suicide ideation, members of the Helping Professions and management should take preventative steps in managing suicidal behaviour of police members. It must be made clear that all suicide attempts should be reported to the Helping Professions for a follow-up. The only way to assure that this is realized would be for the management and all commanders to buy into it. Normally because of the police culture, a suicide attempt is withheld from the Helping Professions because of the stigma attached to it. This suggests that a need to change the culture of the organisation regarding suicide and job stress needs to take place. It has to become acceptable for police officers to admit to difficulty in dealing with the psychologically debilitating effects of their work.

It is also suggested that Psychological Services and top management urgently embark on an internal relations campaign to improve their image and perceived support among members. The appointment of more registered psychologists would also help to improve the visibility of psychological services, and availability of psychological help. More focus can also be put on the assurance of confidentiality of sessions. Another approach is to enhance the amount of support police officers receive – for example by extending psychological help to significant others of police members.

It is recommended that the current suicide prevention programme must be taken under review to ensure that it addresses all members at all levels within the organisation. Necessary steps must be taken to ensure that all members, especially the functional members at station level, attend the workshops.

The SAPS must prevent suicidal thoughts and intentions by helping police officers to cope with work-related problems and relationship difficulties. Maladaptive coping mechanisms should be examined and methods found to work through the negative effects that follow the use of these behaviours. Training programmes, individual therapy sessions, stress management, defusing workshops and adventure training programmes are only a few
interventions that could be used to equip the individual member with more problem-focused coping strategies. More support groups for members with HIV and other medical conditions, posttraumatic stress and depression must be established at central stations. Members must be exposed to a physical fitness programme on a continuous basis to improve their emotional and physical well-being.

It is recommended that management of the SAPS implement a mentorship programme to give the necessary support to newly appointed commanders. More attention must also be given to the improvement of communication channels, so that all information reaches members at ground level.

To help with the staff shortages, more entry-level applicants must be appointed. The HRM-component must also make sure when they place a newly appointed constable that all factors are taken into consideration, e.g. especially if he/she has the necessary support system (family included) and geographical circumstances. The HRM-component must look into the transfer policy because of incongruence in transfer of members. Members who really need to be transferred couldn’t get their transfers because of manpower shortages at stations.

Regarding coping, longitudinal studies are required to learn more about the factors that influence coping responses among police officers. Future research should also be directed more towards the specific coping mechanisms used by police officers.

Future studies could include variables such as posttraumatic stress disorder, personality dimensions, relationship problems, internal and external locus of control and alcohol abuse in relation to suicide.
REFERENCES


CHAPTER 3

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

In this chapter, conclusions about the literature findings and the results of the empirical study are made. Furthermore, the limitations of the present study are discussed and recommendations for the organisation and future research presented.

3.1 CONCLUSIONS

Conclusions are made in the following section in respect of the specific objectives set out for the present study.

- What are the levels of suicide ideation in the Northern Cape?

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), 9 (3.28%) of the uniformed police members have significant suicide ideation levels. The current research shows a lower level of suicide ideation in the SAPS in the Northern Cape than what was previously found in the North West (10.58%) (Rothmann & Van Rensburg, 2001). Pienaar (2002) also calculated the national level of police suicide ideation to be at 8.64%. This result shows that suicide ideation among police members in the Northern Cape might not be as prevalent as the actual rate of suicide. It is also possible that members in this province are more reluctant to admit to psychological difficulty, because the province has been identified as one of high-risk. Another hypothesis can be that members are reluctant to express their feelings. An even further hypothesis might be that police members are more socially isolated because of the geographical make-up of the Northern Cape.

- What are the most important stressors in the SAPS in the Northern Cape?

Items relating to fellow workers not doing their job, inadequate salary and staff shortages present the highest severity for police members. Seeing criminals go free, the poor motivation of other officers, a lack of recognition for work well done, a lack of officers to handle specific tasks and inadequate or poor quality equipment also present severe stressors in the policing environment. These items are mainly from the factors of lack of resources and job demands. A fellow officer killed in the line of duty is one of the most stressful experiences, although it doesn’t happen on a regular basis. Some of the other items with a high intensity but a low
frequency are lacking supervisor support, racial conflict, lacking opportunity for advancement and a forced arrest or being physically attacked. Items like a fellow officer killed in the line of duty, a forced arrest or being physically attacked and seeing criminals go free show a high intensity, but low frequency.

Results in this study indicated that seeing criminals go free is one of the items with a very high severity. Burgers (1994) and Nel & Burgers (1996) previously alluded to the inconsistencies within the criminal justice system being experienced as a significant source of stress by police officers. Staff shortages is also an item with a high severity. This echoes previous findings by Biggam, Power, Macdonald, Carcary & Moodie (1997) and Kop and Euwema (2001) who also found staff shortages a prime stressor.

Items that are not so stressful for police members in the Northern Cape are the working of shifts, having to deal with the media, working in a noisy area and having too much supervision.

- What are the relationships between stress, coping strategies and suicide ideation in the SAPS in the Northern Cape?

Passive coping was related to job demands and inherent police stressors. This implies that the higher the job demands and unique policing stressors an officer experiences, the more likely the member will make use of passive coping strategies. If members experience job demands (excessive paperwork, having to deal with a crisis situation and deadlines that have to be met) members could have a tendency to use passive coping strategies. Inherent police stressors like killing someone in the line of duty, or a fellow officer killed in the line of duty and seeing criminals going free might also result in passive coping strategies. The stress that members experience because of job demands and inherent police stressors could contribute to suicide ideation.

- Can suicide ideation of police members in the Northern Cape be predicted by making use of coping, stress and biographical variables?

Results of the stepwise desciminant analysis indicated that 66.67% of the high suicide ideation cases and 94.26% of the low suicide ideation cases could be correctly predicted by a previous suicide attempt, medical status, the utilization of passive coping and problem-focused coping strategies, police stressors and job demands.
The best predictor of current suicide ideation is a previous attempt. This finding is in accordance with much previous research (Baker & Baker, 1996; Canapary et al., 2002; Gliatto & Rai, 1999; Preuss et al., 2003; Rossouw, 2000; Sachs et al., 2001; Staal & Hughes, 2002; Vilhjalmsson, Kristjansdottir, & Sveinhjarnardottir, 1998). According to the results in this research a previous attempt correctly identified nearly 70 % of the high suicide ideation cases.

The second predictor of suicide ideation is the officer's medical status. Medical status refers to the presence of a chronic physical condition, chronic pain, cancer or terminal diseases like Human Immunodeficiency Virus (HIV). In this sample 37 people (13.60 %) indicated that they are suffering from a medical condition, which in their opinion was affecting their quality of service. In the current sample police members indicated that they use medication for headaches (12.40 %), stress (8.00%), anxiety (4.40 %), peptic ulcers (4.01 %) and high blood pressure (4.40 %).

Several studies found the medical status of a person to be a predictor of suicide. Druss and Puncus (2000); Gliatto and Rai (1999); Rothmann and Van Rensburg (2001); Sachs et al., (2001) and Vilhjalmsson et al., (1998) all found a significant association between the presence of a medical condition and suicidality. Sachs et al. (2001) also note the possibility of other undetected co morbid conditions such as panic disorder, post traumatic stress disorder, untreated alcohol or psychoactive substance abuse disorders that could further increase the risk of suicide. Mann et al. (1992 in Knowlton 2002) also refer to three categories or triggers e.g. acute psychiatric illness, substance, and alcohol or medication abuse and social or family crisis.

Police stressors and job demands relate positively to suicide ideation. The stress that members experience because of job demands and inherent police stressors could contribute to suicide ideation. Storm and Rothmann (2002) showed that police officers who used avoidance as a coping strategy, and who report high job demands and lack of resources, experience higher emotional exhaustion. The resulting negative effect due to emotional exhaustion could again contribute to suicide ideation.

Suicide ideation was predicted by the utilisation of passive and problem-focused coping strategies. Correlations indicated the nature of the relationship between suicide ideation and coping. In this study, Passive Coping was positively related to suicide ideation, and Problem-focused Coping was negatively related to suicide ideation. Previous research (Horesh et al., 1996) has shown that suicide risk could be predicted by coping styles.
Passive coping means that a member does not directly confront stress and problems when he/she experiences it. Most probably medication or alcohol would be used, or the officer would try to ignore the situation. This member cognitively or behaviourally disengages from the negative effects of work experiences. Passive coping could lead to an accumulation of work stress up to a point where the officer becomes overwhelmed - this may be the point of no return, with the officer unable to find an alternative. Problem-focused coping means that a member directly confronts the stress and problems experienced. This could include the mobilisation of the necessary support needed and actively combating and working through the negative effects of job stressors.

Sachs et al. (2001) found that a relationship between suicide and the amount of support that is available for an individual exists. In this study members indicated that they did not feel supported by Top management and Psychological services. Nearly 75% of members indicated that they felt unsupported by Psychological Services (73.36%) and Top Management (74.82%). Ironically, work sources of support have been suggested as being the most important (Beehr, 1985). The capability of Psychological Services to handle the amount of possible clients is limited. Members in the rural areas often do not have direct access to psychological counselling when it becomes needed, either because there are no private psychologists available or because of the vast distances and isolation of rural towns. According to Sachs et al., (2001) suicide rates are generally highest in areas of low population density and among those with little social support.

Studies by Crank and Caldero (1991) and Lowenstein (1999) found that upper management or supervisors were the most frequent selected single source of stress within the organization. The finding of the current study that Top Management is perceived as unsupportive echoes this previous research. The highly hierarchical structure of the SAPS could also contribute to this perception. When looked at the communication channels of the police, the following channels must been used. Police members must report to their station commander, the station commander report to his area commander, the area commander report to his provincial commander, the provincial commander report to the provincial commissioner and the provincial commissioner report to national management. The effect of this highly hierarchical structure and communication is to render it ineffective.

Recommendations for the prevention and/or management of suicide ideation in the SAPS in the Northern Cape are made under 3.3.
3.2 LIMITATIONS

A limitation of this research is that the research design does not allow one to determine the direction of the relationship between the variables. The study also focuses only on coping strategies, work stress and biographical variables, thus not all possible causes of suicide ideation were investigated. Other possible causes are discussed under recommendations for future research.

3.3 RECOMMENDATIONS

3.3.1 Recommendations to address the problem

Members of the Helping Professions and management should take preventative steps in managing suicidal behaviour of police members. Since a previous attempt was shown to be the best predictor of suicide ideation, it must be made clear that all suicide attempts should be reported to the Helping Professions for a follow-up. The only way to assure that this is realized would be for the management and all commanders to buy into it. Normally because of the police culture, a suicide attempt is withheld from the Helping Professions because of the stigma attached to it.

It is also suggested that Psychological Services and top management urgently embark on an internal relations campaign to improve their image and perceived support among members. The appointment of more registered psychologists would also help to improve the visibility of psychological services, and availability of psychological help. More focus can also be put on the assurance of confidentiality of sessions. Another approach is to enhance the amount of support police officers receive – for example by extending psychological help to significant others of police members.

It is recommended that the current suicide prevention programme must be taken under review to ensure that it addresses all members at all levels within the organisation. Necessary steps must been taken to ensure that all members, especially the functional members at station level, attend the workshops.

The SAPS must prevent suicidal thoughts and intentions by helping police officers to cope with work-related problems and relationship difficulties. Maladaptive coping mechanisms should be examined and methods found to work through the negative effects that follow the use of these behaviours. Training programmes, individual therapy sessions, stress
management, defusing workshops and adventure training programmes are only a few interventions that could be used to equip the individual member. More support groups for members with HIV, posttraumatic stress and depression must be established at central stations. Members must be exposed to a physical fitness programme on a continuous basis to improve their emotional and physical well-being.

It is recommended that management of the SAPS must implement a mentorship programme to give that necessary support to newly appointed commanders. More attention must also be given to the improvement of communication channels, so that all information reaches members at ground level.

To help with the staff shortages, more entry-level applicants must be appointed. The HRM-component must also make sure when they place a newly appointed constable that all factors were taken into consideration, e.g. especially if he has the necessary support system (family included) and geographical circumstances. The HRM-component must look into the transfer policy because of incongruence in transfer of members. Members who really need to be transferred couldn’t get their transfers because of manpower shortages at stations.

3.3.2 *Recommendations for future research*

Regarding coping, longitudinal studies are required to learn more about the factors that influence coping responses among police officers. Future research should also be directed more towards the specific coping mechanisms used by police officers, and investigate why passive coping might be a stronger predictor than problem-focused coping.

Future studies could study variables such as posttraumatic stress disorder, personality dimensions, relationship problems, internal and external locus of control and alcohol abuse in relation to suicide. These variables could provide a clearer picture of the factors related to suicide ideation. The finding of relatively low levels of suicide ideation in a province that shows high rates of completed suicide also warrant a closer investigation of the pathway from suicide ideation to suicidal behaviour among these officers.
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