OCCUPATIONAL STRESS, PERSONALITY TRAITS, COPING STRATEGIES, AND SUICIDE IDEATION IN THE SOUTH AFRICAN POLICE SERVICE

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The objective of this study is to determine whether suicide ideation among uniformed police officers of the South African Police Service could be predicted on the basis of occupational stress, personality traits, and coping strategies. Using a cross-sectional survey design, the Adult Suicide Ideation Questionnaire, the Police Stress Inventory, the Personality Characteristics Inventory, and the Coping Orientation to Problems Experienced are administered to a stratified random sample of 1,794 police employees from eight South African provinces. A logistic regression analysis shows that low scores on conscientiousness, emotional stability, approach coping, and turning to religion as well as high scores on avoidance coping are associated with more suicide ideation.

Keywords: suicide ideation; police; occupational stress; personality; coping; South Africa

Suicide among police officers has often been studied internationally (see Cantor, Tyman, & Slater, 1995; Helmkamp, 1996; Schmidtke, Fricke, & Lester, 1999; Violanti, 1996). Meta-analyses of police suicide studies show that suicide rates for police are not

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higher than the general population (Hem, Berg, & Ekeberg, 2001; Loo, 2003). In South Africa, studies showed a dramatic increase in the rate of suicide of police officers from 1990 (110 per 100,000) to 2000 (130 per 100,000). The number of suicides in the South African Police Service (SAPS) is more than 5 times that of police suicide rates elsewhere (Pienaar & Rothmann, 2005). The suicide rate is also much higher than the average rate (up to 19 per 100,000 of the general population) in South Africa (Schlebusch, 2000). It can be concluded that there are important cross-cultural variations in rate (and change in rate) of suicide among police officers and that the South African figures are very high.

Suicide ideation is the first warning sign of more serious suicidal behavior (Bonner & Rich, 1987; Reynolds, 1991a; Shea, 1998). Suicide ideation constitutes but one aspect of suicidal behavior and is defined as the domain of thoughts and ideas about death, suicide, and serious self-injurious behavior. It includes thoughts related to the planning, conduct, and outcome of suicidal behavior, particularly as the last relates to thoughts about the response of others. Research has focused on suicide ideation as one domain of suicidal behaviors and as a distinct form of psychological disturbance. Although not all individuals who have suicide ideation will eventually attempt suicide, such thoughts may be a precursor to more serious suicidal behaviors for many individuals. When experienced at clinically significant levels, suicide ideation should in itself be considered as an indication of psychological problems, even in cases where it is not viewed as a precursor to suicidal intent or self-injury (Reynolds, 1991a). In light of South Africa's exceptionally high police suicide rate, a growing emphasis is placed on the early identification of officers at risk (Pienaar & Rothmann, 2005).

Hem et al. (2001) recommend that in studies of suicide among police officers, suicide ideation must be investigated along with completed suicide. Pienaar and Rothmann (2005) found that 8.3% of a sample of 1,781 members of the SAPS showed high levels of suicide ideation. The observed frequencies of suicide ideation varied across ethnicity, rank, gender, province, alcohol consumption, educational qualifications, medical problems, and previous suicide attempts. It is regrettable that no studies have addressed the relationships between occupational stress, personality traits, coping strategies, and

suicide ideation. Therefore, the aim of the current study was to determine these relationships.

SUICIDE IDEATION, OCCUPATIONAL STRESS, PERSONALITY TRAITS, AND COPING

Many factors may contribute to suicide ideation of police officers, including stressors in the work situation, factors outside the work situation, and personality dimensions, as well as the interaction between these variables (Rossouw, 1998; Schmidtke et al., 1999). Based on the holistic model of work wellness (Nelson & Simmons, 2003), suicide ideation can be regarded as an outcome of (un)wellness. This model incorporates a broad range of demands (stressors) and individual difference variables that may be salient for cognitive appraisal and coping. The Transactional Process Model (Lazarus, 1991) and the Spielberger State-Trait (STP) model of occupational stress (Spielberger, Vagg, & Wasala, 2003) conceptualize stress as a complex process that consists of three major components — namely, sources of stress that are encountered in the work environment, the perception and appraisal of a particular stressor by an employee, and the emotional reactions that are evoked when a stressor is appraised as threatening.

Policing in South Africa is particularly stressful, keeping in mind the socioeconomic and political turmoil of the past 30 years under Apartheid rule and the major political changes since its abolition (Gulle, Tredoux, & Foster, 1998). Since the dissolution of Apartheid in 1994, most state departments and state-funded organizations, including the police, have undergone major transformation. These changes, often involving the implementation of employment equity policy and organizational restructuring, have affected the internal solidarity among employees; former political enemies may have become work colleagues. South Africa has one of the highest crime rates in the world, which creates further stress. The combination of these stressors induces a volatile situation regarding the mental health of SAPS officers.

The STP model of occupational stress focuses on the perceived severity and frequency of occurrence of two major categories of stressors — namely, job pressures and lack of support (Spielberger

et al., 2003). The STP model recognizes the importance of individual differences in personality traits in determining how workplace stressors are perceived and appraised. Occupational stress is defined as the mind-body arousal resulting from the physical and/or psychological job demands. The appraisal of a stressor as threatening leads to anxiety and anger and the associated activation of the autonomic nervous system. If severe and persistent, the resulting physical and psychological strain may produce adverse behavioral consequences (Spielberger et al., 2003). Employees evaluate their work environment in terms of the severity and frequency of occurrence of specific job demands and pressure and the level of support provided by other employees (supervisors and coworkers) as well as organizational features (policies and procedures). Failing to take the frequency of occurrence of a particular stressor into account may contribute to overestimating the effects of highly stressful situations that rarely occur, while underestimating the effects of moderately stressful events that are frequently experienced.

Two broad categories of occupational stressors in policing have been identified (Alexander, Walker, Innes, & Irving, 1993; Brown & Campbell, 1990). The first involves organizational aspects of police work, such as a lack of confidence in management, lack of internal communication, and frequent organizational change. The second refers to the nature of police work, such as physical threat, force, exposure to danger, facing the unknown, and shift work (Stephens & Long, 2000). Kohan and Mazmanian (2003) found that the wellness of police officers was more strongly associated with organizational experiences than operational ones.

In South African studies of police stress, Koortzen (1996) found the three top stressors to be the lack of supervisory and management skills, court verdicts that are seen as inappropriate by police officers (e.g., acquittals because of inappropriate police reports), and emotional detachment from the family. Similarly, Gulle et al. (1998) showed that in comparison to stressors reported by police in the United States, most of which are inherent in the nature of the job, SAPS stressors were more organizationally oriented. Roosendaal (2002) identified disinterested commanding officers, lacking opportunities for career development and promotion,

financial pressure, the working conditions, and lacking support systems as factors contributing to stress in the SAPS. Peltzer (2001), however, demonstrated the prevalence of job-inherent stressors in the SAPS that are emotionally intense (e.g., violent injury, pursuit of an armed suspect, and response to a scene involving the death of a child).

The relationship between suicide ideation and personality traits in police settings has received limited research attention (Berg, Hem, Lau, Loeb, & Ekeberg, 2003). However, research has related suicide ideation to personality dimensions (e.g., Hem et al., 2001). Studies have consistently indicated that neuroticism (low emotional stability) is positively related to suicidal thinking (Kerby, 2003; Lolas, Gomez, & Suarez, 1991; Velting, 1999), probably because neuroticism is associated with depression. Increased suicide ideation has also been associated with low levels of extraversion, which reflects a low propensity to experience positive emotions (Kerby, 2003; Lolas et al., 1991). Kerby (2003) found that low scores on conscientiousness and agreeableness and high scores on psychoticism (one of the traits in Eysenck's personality system) are significantly related to suicide (Kerby, 2003). As Eysenck (1992) has argued that psychoticism in his system is related to agreeableness and conscientiousness (in the big five system),1 one might expect that high suicide ideation would be related to either low agreeableness or low conscientiousness, or both. If low conscientiousness is associated with poor job performance (Rothmann, Meiring, Van der Walt, & Barrick, 2002) and if poor job performance is associated with stress and suicide ideation, then low conscientiousness might be related to suicide ideation. With respect to agreeableness, police officers low in that trait are more likely to be rude, to see the motives of others in a cynical way, and to think that most people they know do not like them, which could increase their risk for suicide ideation (Kerby, 2003).

Poor coping skills appear to be a significant predictor of stress experienced in police work (Anshel, 2000; Beehr, Johnson, & Nieva, 1995). Lazarus (1991) emphasized the individual differences in classifying situations as threatening or nonthreatening in his cognitive appraisal approach. Positive and negative responses can occur

simultaneously as a result of the same stressor. Following the initial appraisal, individuals then focus on either the stressor or their response to the stressor in an attempt to cope.

Coping refers to perceptual, cognitive, or behavioral responses that are used to manage, avoid, or control situations that could be regarded as difficult (Folkman & Lazarus, 1984; Moos, 1994; Zeidner & Endler, 1996). In the police stress literature, Evans, Coman, Stanley, and Burrows (1993) define *effective coping* as "(a) the efficacy with which the individuals deal with their emotional responses to stressors and act to resolve the stressors, and (b) the cost of their effectiveness to the individual" (p. 238). According to Carver, Scheier, and Weintraub (1989), individuals have consistent coping preferences or dispositions that are employed across a wide range of situations. In measures of coping dispositions, participants are instructed to think about the ways in which they usually deal with stress. The dispositional version of the Coping Orientation to Problems Experienced (COPE) scale (Carver et al., 1989) is one such inventory.

In a study of the SAPS in the North West Province, Rothmann and Van Rensburg (2001) found that police officers with low scores on approach coping strategies obtained high scores on suicide ideation. Several studies (Billings & Moos, 1984; Hart, Wearing, & Headey, 1995) found that emotion-focused strategies were maladaptive, whereas problem-focused strategies were adaptive. Beehr et al. (1995) showed that problem-focused coping strategies were negatively related to thoughts of suicide among police officers; with the exception of alcohol abuse, emotion-focused coping strategies were related to every police strain. However, Kohan and Mazmanian (2003) showed that both problem- and emotion-focused coping may be beneficial in coping with stress.

On the basis of the literature review, one can expect that in a sample of South African police officers, suicide ideation is related to occupational stress, personality traits, and coping strategies. More specifically, we expect that occupational stress, low emotional stability, low conscientiousness, introversion, low agreeableness, low approach (problem-focused) coping, high avoidance (emotion-focused) coping, and low turning to religion would predict suicide ideation.

METHOD

PARTICIPANTS

A cross-sectional survey design was used to achieve the research objective. Police stations of all South African provinces (except for North West Province, which was included in a previous study) were divided into small (fewer than 25 staff members), medium (25 to 100 staff members), and large stations (more than 100 staff members). All police officers at randomly identified small and medium stations in each province were asked to complete the questionnaire, and stratified random samples were taken according to sex and ethnic group in large stations. The sample (N = 1,794) included all major racial groupings namely, White (n = 574), Black (n = 559), colored (n = 206), and Indian (n = 56) police officers (36 missing cases).

Table 1 indicates the composition of the sample in terms of different ethnic and language groups, as well as rank, size of station, and other demographic variables. Inspectors made up more than half the sample (54.16%). Almost 60% of the sample had Grade 12 qualifications, which is equal to 12 years of formal schooling. Officers in this sample were predominantly married males. The age of participants ranged from 19 to 66 (M = 34.53, SD = 6.23). The average number of years officers had been in the police service was 12.98 (SD = 6.21). The average number of years in the current position was 4.28 (SD = 3.15).

INSTRUMENTS

The measuring instruments used in this research included the Adult Suicide Ideation Questionnaire (ASIQ; Reynolds, 1991a), the Police Stress Inventory (PSI; Pienaar & Rothmann, 2003b), the Personality Characteristics Inventory (PCI; Mount & Barrick, 2002), and the COPE (Carver et al., 1989).

The ASIQ (Reynolds, 1991a) was used to measure participants' current level of suicide ideation. Each of the items measures a specific suicidal behavior or thought. Reynolds reported an internal consistency (coefficient alpha) of .96, whereas Osman et al. (1999) found

TABLE 1: Characteristics of the Participants (N = 1,794)

Item	Category	Frequency	Percentage
Ethnic group	White	574	40.11
	Black	559	39.06
	Colored	206	14.40
	Indian	56	3.91
	Not indicated	36	2.52
Language	Afrikaans	711	49.69
	English	169	11.81
	Sepedi	87	6.08
	Sesotho	136	9.50
	Setswana	44	3.07
	IsiSwati	25	1.75
	Tshivenda	27	1.89
	IsiNdebele	16	1.12
	IsiXhosa	69	4.82
	IsiZulu	135	9.43
	Other	12	2.10
Rank	Constable	110	7.69
	Sergeant	278	19.43
	Inspector	775	54.09
	Captain	226	15.79
	Superintendent	35	2.45
	Senior Superintendent	7	0.49
Size of station	Small .	464	32.42
	Medium	556	38.85
	Large	411	28.72
Education	Grade 10	140	9.78
	Grade 11	71	4.96
	Grade 12	835	58.35
	Technical college diploma	42	2.94
	Technikon diploma	289	20.20
	University degree	24	2.10
	Postgraduate degree	30	1.68
Sex	Male	1,172	81.90
	Female	259	18.10
Status	Single	283	19.78
	Married	787	55.00
	Divorced	322	22.50
	Separated	26	1.82
	Remarried	13	0.91

an alpha coefficient of .98. The test-retest reliability of the ASIQ varies between .86 and .95 (Reynolds, 1991b). Reynolds (1991a) provided evidence for the content, construct, and criterion-related validity of the ASIQ. Osman et al. found that the ASIQ differentiated

significantly between suicide attempt and psychiatric control groups. In previous studies of the SAPS, the ASIQ showed internal consistencies of .98 for Whites, .95 for Blacks (Rothmann & Strijdom, 2002; Rothmann & Van Rensburg, 2001), and .97 in an ethnically mixed sample (Pienaar & Rothmann, 2003c). For purposes of interpretation, a cutoff score may be used to judge the severity of suicidal thoughts. Although no clinical norms for the ASIQ exist, a cutoff raw score of 31 (the 97th percentile on a norm table for community adults in the United States was suggested by Reynolds, 1991a). This score represented the 93rd percentile in South African studies (Rothmann & Van Rensburg, 2001). Respondents whose raw ASIQ score is equal to or greater than 31 should be referred for further evaluation of potentially significant psychopathology and suicidal behavior.

The PSI (Pienaar & Rothmann, 2003b) consists of 88 items and was developed for the purpose of this study. This study addressed both the severity and frequency of stressors. First, participants rated each of 44 items regarding the intensity of stress on a 9-point scale. Then, the frequency part of the questionnaire asked how many times in the past 6 months the source of stress had been experienced. Pienaar and Rothmann (2003b) subjected the PSI to a principal component analysis, followed by Varimax rotation. Only items with a factor loading larger than .45 were retained for the rotation. Three internally consistent factors were extracted — namely, stress-job demands ($\alpha = .92$), stress-lack of job resources ($\alpha = .92$), and crimerelated stressors ($\alpha = .89$).

The PCI (Mount & Barrick, 2002) assesses the five-factor model (FFM) personality dimensions. Barrick (2003) conducted an exploratory factor analysis on the 150 items of the PCI in a sample of 2,396 police officers in South Africa. Although he found that the original FFM (as measured by the PCI) was reliable and content valid, it had high cross-loadings. Exploratory factor analysis, which was used to identify more pure factors, resulted in four factors — namely, conscientiousness (15 items), emotional stability (10 items), agreeableness (14 items), and extraversion (8 items). It is not yet clear why openness to experience did not emerge as a separate factor, although problems with the identification and interpretation of this factor have been reported before (e.g., De Raad, 1994; De Raad & Van Heck, 1994). Each item is rated on a 3-point Likert-type scale varying from 1 (disagree) to 3 (agree). Barrick (2003) reported alpha coefficients of .86 for conscientiousness, .80 for emotional stability, .81 for agreeableness, and .71 for extraversion. The PCI scales also demonstrate adequate convergent validity and divergent validity with the NEO-Personality Inventory (Costa & McCrae, 1992).

The COPE (Carver et al., 1989) was designed to measure both situational and dispositional coping strategies. In the present study, the dispositional version consisting of 53 items was used. Response choices varied from 1 (*I usually don't do this at all*) to 4 (*I usually do this a lot*). Pienaar and Rothmann (2003a) subjected the COPE to a principal factor analysis, followed by Varimax rotation. Only items with a factor loading larger than .45 were retained for rotation. Although the test authors argue that the original inventory measures 14 different coping strategies, only 4 internally consistent factors were found by Pienaar and Rothmann — namely, active coping ($\alpha = .92$), avoidance ($\alpha = .86$), seeking emotional support ($\alpha = .80$), and turning to religion ($\alpha = .83$).

STATISTICAL ANALYSIS

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

As the interest in the study was in the identification of police officers at risk for developing psychopathology or suicide ideation, we did not use the ASIQ scores as a continuous variable but split up the sample in a group with scores higher than 31 (as the group with high suicide ideation) and scores lower than 31 (as the group with low suicide ideation). Scores were dichotomized for two reasons. First, suicide ideation could be assumed to be found infrequently, which leads to a skewed distribution. Second, the interest was in developing tools for identifying police officers who are at a relatively large risk for developing suicide ideation and eventually committing suicide. Direct logistic regression was used to predict membership of high and low suicide ideation groups from occupational stress, coping strategies, and personality dimensions. In logistic regression, the

predictors do not have to be normally distributed, linearly related, or of equal variance in each group (Tabachnick & Fidell, 2001).

RESULTS

Table 2 shows the descriptive statistics, Cronbach alpha coefficients, and correlation coefficients of the ASIQ, PSI, PCI, and COPE. Acceptable Cronbach alpha coefficients (> .70) were obtained for all scales (see Nunnally & Bernstein, 1994).

The scores on suicide ideation were recoded into two categories — namely, low suicide ideation (n = 1,662) and high suicide ideation (n = 132). Direct logistic regression was used to predict membership of low and high suicide ideation groups from occupational stress, coping strategies, and personality dimensions of police officers. This analysis was chosen because there were no specific hypotheses about the order or importance of predictor variables. Direct logistic regression allows evaluation of each predictor as if it has entered the equation last. A test of the full model with all 11 predictors against a constant-only model was statistically reliable, $\chi^2(11, N = 1,794) =$ 170.12, p < .001, indicating that the set of predictors reliably distinguished between the low and high suicide ideation groups.

Table 3 shows regression coefficients and the significance for each of the 11 predictors. Significant, negative regression coefficients (indicating less suicide ideation) were found for approach coping (b = -.10), turning to religion (b = -.10), emotional stability (b = -.07), and conscientiousness (b = -.08). The significant, positive regression coefficient for avoidance coping (b = .13) shows that a high score was associated with more suicide ideation. A Somers' D value of .61 (D2) = .37) was obtained, which indicates a moderate relationship. An inspection of the means of the low and high suicide ideation groups in Table 3 shows that the significant predictors demonstrated medium to large effect sizes. Police officers who are less conscientious, are less emotionally stable, use less approach and more avoidance coping, and turn less to religion were more likely to display suicide ideation. These results confirm the expectation that low emotional stability (neuroticism), conscientiousness, approach coping, and turning to religion and high avoidance coping are related to suicide ideation.

TABLE 2: Descriptive Statistics, Internal Consistencies (Cronbach's Alpha), and Pearson Correlations of the Scales	/e Stati	stics, I	nterna	l Consis	tencies	(Cronba	ch's Alp	ha), and	Pearson	Correla	tions of	the Scal	es	
Scale	M	as	α	1	2	3	4	5	9	2	8	6	10	11
ASIQ total	9.43	18.25	76.			1	1	ı			I		1	
PSI-Job	56.88	19.45	.92	.12**	I	I	I	I	I	I	I	I	I	I
Demands														
PSI-Lack of	63.39	19.31	.92	.07**	**99	I	I	I	I	I	I	I	I	I
Job Resources														
PSI-Crime-	34.21	13.24	68.	.02	.48**	69	I	I	I	I	I	I	I	I
Related														
Stressors														
PCI-Conscientiousness	86.09	7.55	98.	22**	15**	**60	**60	I	I	I	I	I	I	I
PCI-Emotional	31.38	6.93	.80	27**	22**	16**	10**	.16**	I	I	I	I	I	I
Stability														
PCI-Agreeableness	52.51	7.18	18	**60	13**	00.	.03	.59**	.04	I	I	I	I	I
PCI-Extraversion	28.61	4.74	.71	11 _*	14**	04	08**	.54**	.13*	.47**	I	I	I	I
COPE-Approach	21.11	4.43	.92	21	9.	.14	.15**	.36**	.16**	.25**	.28**	I	I	I
Coping														
COPE-Avoidance	14.90	4.53	98.	.15**	.26**	**70.	*90	18**	35**	*90	01	.18	I	I
Coping														
COPE-Seeking	11.35	3.38	.80	13**	.03	02	.03	.19**	.14 **	.21*	.26**	.53**	.24**	I
Emotional Support														
COPE-Turning	9.14	2.52	.83	13**	.05	.05	**80:	.21*	**60:	.21*	.18*	* *	.20**	.38**
to Religion														

Note. ASIQ = Adult Suicide Ideation Questionnaire; PSI = Police Stress Inventory; COPE = Coping Orientation to Problems Experienced. $^*p < .05$ (two-tailed). $^*p < .01$ level (two-tailed).

TABLE 3: Means of High and Low Suicide Ideation Groups on All Psychological Scales, the Effect Size (Cohen's d) of Their Difference, Logistic Regression Coefficients (Predicting Ideation Group Membership), and Their Significance

Variables	Mean of Low Suicide Ideation (n = 1,662)	Mean of High Suicide Ideation (n = 132)	d	b	Wald Test (z Ratio)
PSI-Job Demands	56.47	61.98	28	.01	0.32
PSI-Lack of Resources	63.30	64.55	07	.01	0.26
PSI–Crime-Related Stressors	34.24	33.87	.03	01	0.38
COPE-Approach Coping	21.34	18.27	.74	10	11.08**
COPE-Avoidance Coping	14.75	16.74	46	.13	22.13**
COPE-Seeking Emotional Support	11.47	9.87	.50	06	2.17
COPE-Turning to Religion	9.24	7.87	.57	12	7.77**
PCI-Extraversion	28.73	27.11	.36	.03	1.13
PCI-Emotional Stability	31.74	26.93	.74	07	17.38**
PCI-Agreeableness	52.69	50.26	.37	.03	2.79
PCI–Conscientiousness Constant	61.41	55.48	.89	08 2.96	20.59** 7.39

Note. PSI = Police Stress Inventory; COPE = Coping Orientation to Problems Experienced; PCI = Personality Characteristics Inventory.

DISCUSSION

The SAPS has a high level of suicides. Suicide ideation is known to be an important precursor of attempted suicides. This study set out to determine whether suicide ideation in the SAPS was related to occupational stress, coping strategies, and personality traits. The results showed that police officers at risk for developing suicide ideation had lower levels of approach coping, turning to religion, emotional stability, and conscientiousness and higher levels of avoidance coping.

Job demands were higher in the high suicide ideation group than in the low suicide ideation group (the effect size was -.28). However, when job demands were included with personality traits and coping strategies in the logistic regression analysis, these did not predict suicide ideation. So it appears that the differences in experienced job demands of the high and low suicide ideation groups can be

accounted for by personality traits and coping strategies. It is possible that the other job stress sources (lack of resources and crimerelated stressors) did not vary enough in the current sample to really matter. In a cross-cultural study in which job stress sources show much variation, they would have more impact. On the other hand, it is also possible that personality and coping mediate the influence of job features on suicide ideation.

Suicide ideation was negatively related to approach coping strategies and turning to religion. Police officers who actively engage and confront the stresses they experience and find meaning for events within a religious framework thus actively combat the effects of negative work experiences and their "translation" into suicide ideation. The positive relation between suicide ideation and avoidance coping indicates that disengaging from negative work events by cognitively or behaviorally avoiding the events, coupled with the sources of stress presented in the policing context, predisposes the officer to suicide ideation. Previous research (Horesh et al., 1996) has demonstrated that suicide risk could be predicted by coping strategies. Denying problems, while becoming exhausted and constantly being confronted with organizational stress, may deplete individual resources.

The results of the logistic regression analysis indicate that suicide ideation is best predicted by three coping strategies (i.e., low approach coping, high avoidance coping, and low turning to religion) and two personality dimensions (i.e., low emotional stability and low conscientiousness). These findings suggest that police officers who did not use approach coping strategies and religion and who tended to avoid stressful situations were more inclined to think about suicide, especially if their levels of conscientiousness and emotional stability were also low. Studies in other contexts by Alexander and Klein (2001) and Cocotos and Ortlepp (1999) have shown that employees who experience difficult work circumstances beyond their control often mentally withdraw or escape their reality (i.e., use avoidance coping strategies). Coupled with a breakdown in approach coping strategies and lack of turning to religion, as well as low emotional stability and low conscientiousness (which indicate a breakdown in control), they tend to think about suicide.

Stokols (2003) points out that confinement to degraded and impoverished environments for extended periods may foster helplessness

and despair. Many police officers were affected by the degraded environment created by Apartheid in South Africa. Furthermore, considering challenges (e.g., a high crime rate and the need to transform the SAPS from a "force" to a "service"), which the organization has to manage with limited resources, the environment in which many police officers live and work might contribute to helplessness and despair.

Police officers with low ranks and poor qualifications are especially likely to be confined to an impoverished environment and lack alternative employment and advancement opportunities (Pienaar & Rothmann, 2003b). Pienaar and Rothmann (2005) found that police officers with lower ranks and qualifications (compared with those who have higher ranks and qualifications) were more inclined to suicide ideation. These officers are often burdened with the operational level of policing, where they are exposed to scenes of violence and crime. Furthermore, the SAPS is conflict prone not only because of organizational transformation but also because of the inherent nature of the tasks of police officers in a high-crime environment. To the extent that employees lack alternative employment opportunities and must remain in a conflict-prone organization for an extended period, the impact on their well-being is likely to be severe and to manifest itself in negative mood states at work as well as anxiety and depression.

The present study has certain limitations. The research design was a cross-sectional survey design, which makes it difficult to document causal relationships. The use of other designs, such as longitudinal designs, can aid in establishing causality. A further limitation was the exclusive reliance on self-reports.

RECOMMENDATIONS

The SAPS needs to attend to the suicide ideation of police officers and possible correlates thereof. At least two different structured strategies to deal with suicide ideation can be envisioned. First, our study has demonstrated a reliable relationship between certain personality characteristics and suicide ideation. Hiring applicants with high scores on conscientiousness, emotional stability, approach coping, and turning to religion and low scores on avoidance coping may be helpful. It will reduce the likelihood that hired applicants are more susceptible to develop suicide ideation. Second, the organization could help to prevent suicide ideation and eventually suicide by implementing programs that would help police officers cope constructively with work-related problems and relationship difficulties. Psychologists should be made available to help the significant others of police officers. Maladaptive coping mechanisms should be examined and methods found to neutralize the negative effects that follow the use of these behaviors. Although the SAPS implemented a suicide awareness training program, the effectiveness of this program should be evaluated, as it focuses only on knowledge of suicide symptoms and causes. Little is done regarding coping strategies of individuals using relevant training methodologies.

More research is needed regarding the relationship between personality dimensions, coping strategies, stress, and suicide ideation in the SAPS. As shown by Rothmann and Van Rensburg (2001), personality characteristics of police officers should not be the sole focus of research about suicide ideation. The focus should also be on how a healthy workplace could be created in the SAPS.

NOTE

1. The FFM of personality represents a structure of traits developed and elaborated during the past five decades. The five dimensions of the FFM of personality are neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness (McCrae & Costa, 1997).

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