THE ROLE OF MILITARY PSYCHOLOGY IN PEACEKEEPING OPERATIONS: THE SOUTH AFRICAN NATIONAL DEFENCE FORCE AS AN EXAMPLE

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Abstract

This article is an interdisciplinary publication focusing on the role and development of military psychology in the South African context. Peacekeeping operations and the results of the first and fifth deployment of the South African National Defence Force (SANDF) in the Democratic Republic of Congo (DRC) are used as background to illustrate the relevance of military psychology in such operations. Peacekeeping operations involve military and often civilian personnel. The nature of peacekeeping operations has become increasingly complex and stressful. It is hypothesised that the stressors that members experience may have a destructive effect on their morale and on the cohesion of the force, and that it could lead to alcohol and drug abuse (Ballone 2000).

This article discusses peacekeeping stress theoretically and evaluates the stressors experienced by members of the first and fifth deployment of the SANDF in the Democratic Republic of Congo (DRC). The contribution of military psychology in these and other peacekeeping operations in the South African context is also explored.

History

With the end of World War I, military psychology efforts and interventions ceased as military forces throughout the world demobilised. However, World War II saw the expanded use of military psychologists in leadership development, psychological warfare techniques and in determining the morale and motivation of soldiers (Gal & Mangelsdorff 1991).

Military psychology is defined as the application of research techniques and principles of psychology to the resolution of problems to either optimise the behavioural capabilities of one's own military forces or minimise the enemies' behavioural capabilities to conduct war (Walters 1968). Cronin (1998) defines military psychology as "the application of psychological principles to the military environment regardless of who is involved or where the work is conducted". In 2009 the role of military psychology in peacekeeping operations has become imperative.

Peacekeeping

Johnstone and Nkiwane (1993) define peacekeeping as "the deployment of military and sometimes civilian personnel under international command and control, usually after cease-fire has been achieved and with the consent of the parties". According to Allan (1991), peacekeeping is a form of conflict control that restores and maintains peace. Liebenberg, Malan, Cilliers, Sass and Heinecken (1997) elaborate on these definitions by stating that the concept of peacekeeping has been extended and mutated to include a host of third-party interventions and actions. These range from preventative diplomacy to humanitarian assistance and the military enforcement of agreements or UN mandates.

Furthermore, peacekeeping operations are twofold and involve both civilian and military activities. These activities, including the first and fifth deployments of the SANDF in the DRC, are mandated under Chapter VI of the UN Charter, take place with the consent of the conflicting parties, and do not involve the use of force other than in self-defence (Neethling 2000b; 2000c). Peacekeeping operations may, furthermore, be deployed at various stages of conflict, ranging from "before any violence occurs" to "during a full-scale war" (Green, Kahl & Diehl 1998). Broadly, peacekeeping operations may be seen as having two tasks, namely to stop or contain hostility, thus creating conditions for peace by negotiations, and/or to supervise the implementation of an interim or final settlement negotiated by the peacemakers. In an attempt to accomplish the above-mentioned tasks, the UN deploys two categories of forces, namely observer missions (consisting primarily of lightly armed officers) and peace forces (consisting of light infantry with the necessary logistical support elements) (Neethling 2000b; Allan 1991).

The variety of changes that occurred in both the manner in which peacekeeping operations are executed and the circumstances to which the peacekeeping soldier is exposed will be discussed. Firstly, not only did peacekeeping operations increase in terms of frequency but they also underwent a metamorphosis with regard to the manner in which they were conducted. Liebenberg et al. (1997) state that previously

peacekeeping soldiers were responsible for monitoring and observing cease-fire agreements between formally belligerent states. However, Olonisakin (1998) writes that the 1990s witnessed conflicts where parties did not comply with peace agreements and/or disobeyed the rules of war. He also refers to situations where peacekeeping soldiers themselves were viciously attacked. The nature of conflict also changed. In the past conflict was characterised by being mainly inter-state, but today intra-state conflict is more prevalent (Nkiwane 2000; Cilliers 1999). Another indication of the changing nature of peacekeeping is illustrated in the roles that today's peacekeeping soldiers have to fulfil. The classic roles of the peacekeeping soldier to monitor the implementation of an honourable agreement between two or more parties in conflict; to act unarmed and guard a distinctly marked observation post, or to patrol a demilitarised cease-fire line, have become the exception rather than the rule (Potgieter 1995).

Thus, the evolving nature of peacekeeping duty in itself suggests that today peacekeeping soldiers are faced with new psychological challenges (Litz, Orsillo, Friedman, Ehlich & Batres 1997), and that it is no longer unusual for contemporary peacekeeping missions to include exposure to traditional war-zone experiences (Orsillo, Roemer, Litz, Ehlich & Friedman 1998). Subsequently, the UN Security Council will deploy new complex peace operations in Africa, such as the operation of the SANDF in the DRC in 2008, with mandates that reflect this new interpretation and which contain elements of Chapter VII enforcement authority (De Coning 2006).

Challenges encountered by the peacekeeping soldier

Not only are environmental conditions (such as the terrain, climate and weather) usually new to the peacekeeping soldier, but the exposure to the suffering of civilian populations and damaged infrastructure needs to be dealt with. In many instances, the peacekeeping soldier is required to perform rescue operations or care for the wounded, the dying and the dead while under fire. In dealing with these adverse conditions, the peacekeeping soldier usually has to utilise unsophisticated equipment and technical skills instead of military skills. On a more individual level, this soldier may be exposed to potentially dangerous situations such as epidemics, mines or abandoned ammunition. During deployment, the peacekeeping soldier will make contact with both civilian and conflicting parties. This requires of the soldier to use diplomatic skills, to seek compromises and to be tolerant of others, instead of taking enforcement measures. Lastly, the peacekeeping soldier will be required to co-operate with members of other nations and with civilian personnel of international assistance organisations (Hundt 1996).

On a psychological and social level, peacekeeping soldiers are confronted with long periods of separation from family and friends (Litz, King, King, Orsillo & Friedman 1997; Litz, Orsillo et al. 1997; Carlstrom, Lundin & Otto 1990), feelings of isolation (Litz, King, et al. 1997; Litz, Orsillo, et al. 1997; Carlstrom et al. 1990), boredom (Litz, King, et al. 1997; Litz, Orsillo, et al. 1997; Carlstrom et al. 1990) and unexpected emotions such as fear, anger, depression, hectic states and apathy.

Stress

In view of the fact that the focus area of the current research pertains to peacekeeping embedded within a military context, a definition for stress is derived from the work of Bartone (1998). He conducted extensive research in the military environment (more specifically in Bosnia), and since the questionnaire utilised in this study was based on his findings, the researcher deemed it fit to include this author's definition of stress within the military context.

Bartone (1998) refers to the importance of distinguishing between two very different meanings of the word 'stress'. In the first instance, reference is made to stimuli in the environment (both physical and psychological), which impinge upon the organism, and secondly, to the physical and psychological response of the organism to such stressors. According to Bartone (1998:114),

> In considering stress in the military context, it is best to preserve the term 'stress' to refer to events or forces in the environment, outside the person, as opposed to subjective, internal responses. The application to environmental stimuli is emphasised by the term 'stressor' or 'stressors' instead of just 'stress'.

Stress in the military

Bartone describes stress within the military context as originating from forces in the environment. These forces impact upon the individual, which results in a response. According to Bartone (1998), when addressing the problem of stress in the military, the psychological framework of "interactionism" proves to be a more appropriate approach to take. As mentioned above, this perspective focuses on the situation and the person as well as the interaction between them (Magnusson & Endler in Bartone 1998).

Figure 1 is a schematic representation of the process that takes place between the stressors in the environment (stimuli) and the responses of the organism to these

stressors. The process begins with the presence of a "stressor". The "stressor" represents forces in the environment, physical, psychological or both, that impinge on the individual.

Situation variables

Organisation

Social context
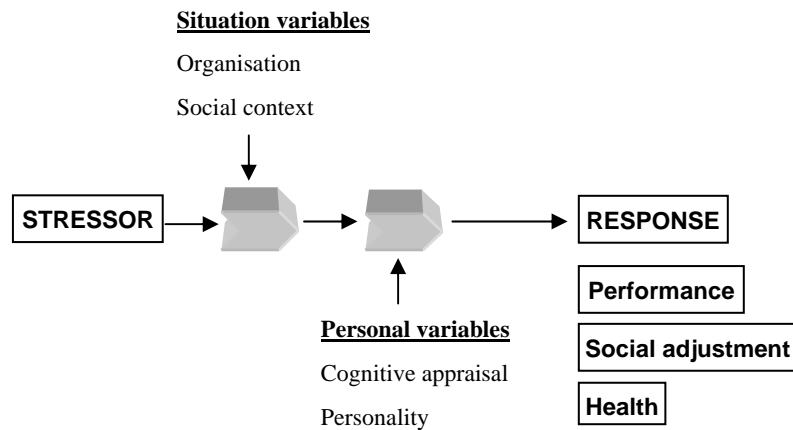
Figure 1: The pathway of stressors (stimuli) in the environment to responses of the organism. (Adapted from Bartone 1998:116)

The diagram is an indication of the process by which stress is interpreted. The variables presented in this process are organisational, social context variables, and personal variables. Leadership (Kruger 2001) is an example of a social context variable in the military environment, while personality characteristics are examples of personal variables (Bartone 1998). All of these examples point to variables that might influence how stressors are processed within the military environment.

In this process, there are three classes of outcome variables. These include performance, social adjustment, and health. In the military context, both individual and group tasks and functions are included under the heading "performance". Furthermore, it is required that soldiers perform physical and mental tasks quickly and accurately, while sustaining effective performance over an extended period of time under adverse conditions (Bartone 1998). Stress in the military can also contribute to a range of social adjustment problems, such as alcohol abuse (Deahl, Srinivasan, Jones, Thomas, Neblett & Jolly 2000). Finally, according to the model, stress can have a profound influence on the physical and mental health of the soldier in the military environment. This is true in war and peacetime. The health of the

force members is a concern to the military because health can influence the performance and achievement of organisational goals (Bartone 1998).

A model of peacekeeping stress

Lamerson and Kelloway (1996) developed a conceptual model (Fig. 2) of the stressors inherent in peacekeeping deployments. The researcher included this model in the current research because of its functionality. The model (Fig. 2) suggests that both combat stressors (e.g. witnessing death of others, hostage taking) as well as contextual stressors (e.g. increased levels of marital, family and financial stress) play an important role in the development of peacekeeping stress. The model recognises to a limited extent personal vulnerabilities, which may result in individuals' adverse reactions to peacekeeping. The model also takes cognisance of moderators (e.g. cohesion) that affect the relationship between exposure to the stressor and the subsequent experience of stress. Lammerson and Kelloway (1996) furthermore posit that all three forms of strain reaction are likely to be outcomes of peacekeeping stress and that the strain experienced by peacekeeping soldiers will have detrimental consequences for the employing organisation.
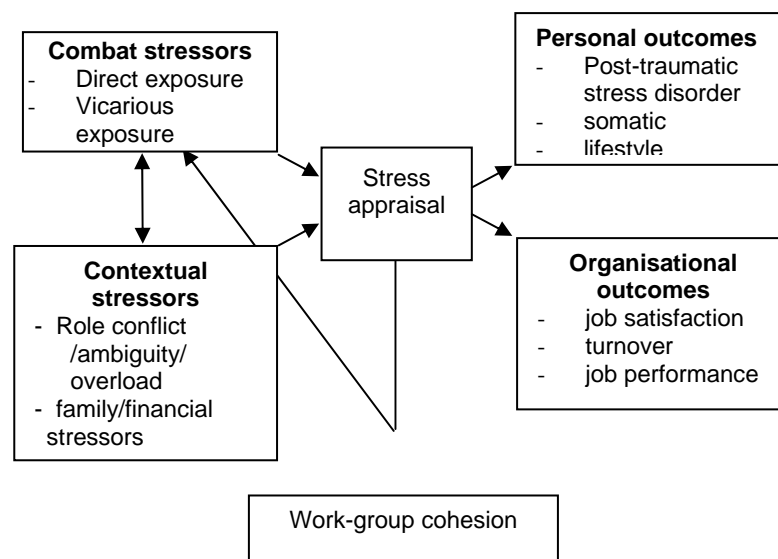
Figure 2: A model of peacekeeping stress. (Adapted from Lamerson & Kelloway 1996:197)

The South African experience

The SANDF had its first peacekeeping experience in 2001 with the departure of the Specialist Contingent on 5 April of that year for the DRC (Thiart 2001). For several reasons, this initial peacekeeping experience of the SANDF served as an immense learning platform for the South African soldiers. Reasons include, firstly, the fact that peacekeeping operations require a different role of soldiers than that for which they were trained during basic training; secondly, that the peacekeeping environment is much less controllable and predictable than the conventional warfare environment and, lastly, the fact that peacekeeping participation is still a relatively new role for the SANDF.

Neethling (2000a) states that, despite certain generic similarities, every peace mission is unique in character. Thus, since a study of the various stressors within the peacekeeping environment encompasses a variety of variables that may differ from area of deployment, phase of deployment, type of mission and individual pre-dispositions, it is imperative to identify the stressors as experienced by members of the SANDF. The rationale behind this is that there may be stressors unique to the South African peacekeeping experience. Furthermore, in order to develop effective stress prevention programmes, and to maintain morale and mental health amongst soldiers and their families, it is necessary to develop a good understanding of the nature and the type of stressors present in the various phases of peacekeeping missions for peacekeepers of the SANDF.

The groups tested for this study were compiled from the first and the fifth South African peacekeeping operations (rotations) to the DRC. The first rotation's deployment date was April 2001 and that of the fifth rotation, August 2003. These rotations are relevant since the first deployment was an unfamiliar experience for the SANDF. Thus, the first deployment could be viewed as a platform from which to improve or continue with current policies (e.g. preparation). Secondly, the time elapsed between the first and the fifth deployment rendered the SANDF adequate opportunity to capitalise on positive experiences and to plan accordingly for challenges that were encountered. Thirdly, this approach is in line with literature stating that each peacekeeping mission is unique in character (Neethling 2000a) and lastly, this also enables one to compare the two groups with regard to their experiences of stressors within the DRC, and, as such, provides the opportunity to reflect on the manner in which the groups differ in terms of their experiences before and during deployment to the DRC. The focus of the research is not on the experiences or stressors between different rank groups nor is it primarily intended as research on peacekeeping. The intention is to use the peacekeeping results as an

example of how military psychology can make a contribution within the South African context.

Aim of study

This article is based on a study which was done to compare the stressors experienced by the first and fifth South African peacekeeping deployments to the DRC, during each phase of deployment. A discussion on the role of military psychology in the management of these stressors follows.

Method

Research design

The design of this quantitative study is *ex post facto* in that the questionnaires were administered only on return from the DRC in the case of both the first and fifth deployments.

Sample

The samples, which represent a convenience sample, as defined by McBurney (1994), consisted of 162 soldiers of the SANDF's peacekeeping contingent. The sample comprised 77 soldiers from the first peacekeeping deployment and 85 soldiers from the fifth peacekeeping deployment, selected by the SANDF to participate in peacekeeping missions in the DRC. Both groups comprised soldiers of the SANDF and were representative in terms of cultural diversity. The sample for the first deployment to the DRC included soldiers from the South African Army ($n = 41$), the South African Air Force ($n = 21$), and the South African Medical and Health Services ($n = 7$). The sample for the fifth deployment to the DRC included soldiers from the South African Army ($n = 42$), the South African Air Force ($n = 15$), the South African Medical and Health Services ($n = 3$) and the South African Navy ($n = 3$). Thirty respondents did not indicate their arm of service. Soldiers from the rank group private to colonel were included. The questionnaires were administered to groups, of which the size was determined by the number of soldiers available at the time of testing.

Instrument

The original questionnaire was developed by the US Army Medical Research Unit – Europe (USAMRU-E). This unit is a field unit of the Walter Reed Army

Institute of Research, which conducts studies on stress and health among American soldiers stationed in Europe, and who deploy for "out-of-sector" peacekeeping and contingency operations (Bartone 1997). For the Implementation Force (IFOR) mission, USAMRU-E investigators developed a short survey instrument to assess stress, health, and moral starting in the pre-deployment period. The questionnaire is divided into three parts, namely, a) biographical information, b) stressors that must be managed and c) experiences relating to the family (Bartone 1997). For statistical purposes, only data obtained from the first two categories was utilised during the present study. Category two (stressors that must be managed) consists of 32 items which are divided into three sections, namely a) stressors that must be managed in the pre-deployment phase, b) stressors that must be managed during the first month of the operation and c) stressors that must be managed in the third month (or at the end of the operation). Soldiers rate the various stressors using a scale of one, three or five, with one indicating being "easy to deal with", three "medium difficulty to deal with" and five "most difficult to deal with".

Procedure

On return from the DRC, the peacekeeping soldiers of the SANDF were exposed to debriefing programmes in South Africa. Questionnaires for this study were administered during the allocated time for these types of tasks. The first set of questionnaires was administered before the debriefing session in Pretoria, and the second set of questionnaires before the debriefing session in Bloemfontein. Participation in the study was on a voluntary basis and participants were reassured of the confidentiality of their responses. All the ethical requirements as stipulated by the Stellenbosch University Ethics Committee and those required by the Health Professions Council of South Africa (Chapter 10, Research and Publication 2004) pertaining to confidentiality, voluntary and anonymous participation, informed consent, and no discrimination, were adhered to. The questionnaire could be completed in approximately twenty minutes but no time restrictions were set. Anonymity and confidentiality were assured.

After completion of the data collection phase, data obtained from the first and the fifth SANDF peacekeeping deployments to the DRC with regard to the experience of stressors during the pre-deployment phase, were ranked. Secondly, the experience of stressors by the first and fifth SANDF's peacekeeping deployments to the DRC during the first and the third month (or at the end of the operation) were ranked. In both instances stressors were ranked as represented by the percentage of peacekeeping soldiers indicating the stressor as being medium to deal with (3) or most difficult to deal with (5).

Data analysis

SPSS (Field 2000) was used to conduct the data analysis. The experience of a specific stressor is expressed as a percentage to represent importance.

Results

Results will be discussed per deployment phase, e.g. pre-deployment, first month of deployment and third month (or at the end of the operation) of deployment. Each deployment phase will be expressed as a comparison between the first and fifth deployment's frequencies of stressors.

Pre-deployment phase

The experiences of stressors for the South African peacekeeping soldiers during the pre-deployment phase are listed in Table 1. The frequencies (indicated as percentages) of peacekeeping soldiers' experiences of stressors during the pre-deployment phase are indicated in Table 1.

TABLE 1
PRE-DEPLOYMENT STRESSORS FOR SOUTH AFRICAN SOLDIERS DEPLOYING TO THE DEMOCRATIC REPUBLIC OF CONGO

ID NR	South Africa – First Deployment		ID NR	South Africa – Fifth Deployment	
9	Problems getting needed services from Army.	76.6%	4	Being separated from family and friends in South Africa.	57.2%
5	Concern rear detachment will care for family.	72.4%	9	Problems getting needed services from Army.	45.3%
4	Being separated from family and friends in South Africa.	71.5%	6	Lack of job advancement opportunities.	42.1%
6	Lack of job advancement opportunities.	70.2%	5	Concern rear detachment will care for family.	41.6%
2	Loss of educational opportunities.	69.7%	2	Loss of educational opportunities.	33.4%

ID NR	South Africa – First rotation		ID NR	South Africa – Fifth rotation	
3	Preparing my family for deployment.	63.7%	3	Preparing my family for deployment.	30.9%
8	Problems with unit leaders.	61.1%	8	Problems with unit leaders.	26.5%
10	Family duties and responsibilities.	56.8%	1	Completing personal business before deploying.	23.5%
7	Financial problems.	55.3%	7	Financial problems.	15.7%
1	Completing personal business before deploying.	46.1%	10	Family duties and responsibilities	13.4%

First month of deployment

The experiences of stressors for both the South African peacekeeping rotations to the DRC during the first month of deployment are listed. The frequencies (indicated as percentages) of peacekeeping soldiers' experiences of stressors (as indicated on the questionnaire) during the first month of deployment are indicated in Table 2.

TABLE 2
STRESSORS EXPERIENCED IN THE FIRST MONTH BY SOUTH AFRICAN
SOLDIERS DEPLOYING TO THE DEMOCRATIC REPUBLIC OF CONGO

ID NR	South Africa – First rotation		ID NR	South Africa – Fifth rotation	
9	Poor communication, flow of information.	84%	9	Poor communication, flow of information.	54.2%
6	Family separation.	72.3%	6	Family separation.	53%
3	Poor sanitation of toilets and living areas.	67.6%	10	"Micro-management" of junior leaders.	34.9%
13	Little recognition.	67.1%	8	Mission ambiguity and uncertainty.	33.8%
8	Mission ambiguity and uncertainty.	65%	13	Little recognition.	31.3%
2	Crowded and confined living quarters.	62.4%	3	Poor sanitation of toilets and living areas.	28%
10	"Micro-management" of junior leaders.	61.9%	4	Cold, harsh weather.	26.5%
5	Frequent and lengthy meetings/briefings.	61.8%	2	Crowded and confined living quarters.	25%

ID NR		%	ID NR		%
7	Isolation (more acute for attached soldiers).	59.2%	7	Isolation (more acute for attached soldiers).	23.5%
1	Heavy workload, long hours.	57.9%	5	Frequent and lengthy meetings/briefings.	23.3%
12	Lack of physical exercise.	56.5%	1	Heavy workload, long hours.	22.6%
11	Sleep loss.	52.6%	12	Lack of physical exercise.	16.9%
4	Cold, harsh weather.	44.7%	11	Sleep loss.	14.3%

Third month (or at the end of the operation) of deployment

The experiences of stressors for both the South African peacekeeping deployments to the DRC during the third month (or at the end of the operation) of deployment are listed. The frequencies (indicated as percentages) of peacekeeping soldiers' experiences of stressors (as indicated on the questionnaire) during the third month of deployment are indicated in Table 3.

TABLE 3

STRESSORS EXPERIENCED IN THE THIRD MONTH (OR AT THE END OF THE OPERATION) BY SOUTH AFRICAN SOLDIERS DEPLOYING TO THE DEMOCRATIC REPUBLIC OF CONGO

South Africa – First rotation			South Africa – Fifth rotation		
ID NR			ID NR		
9	Limited recreation opportunities.	68.8%	5	Monotony, boredom.	36.9%
3	Lack of recognition.	66.6%	9	Limited recreation opportunities.	34.2%
5	Monotony, boredom.	65%	6	Lack of recreation/entertainment.	30.8%
2	Uncertainty and confusion about the mission.	64.5%	2	Uncertainty and confusion about the mission.	25.3%
6	Lack of recreation/entertainment.	63.7%	3	Lack of recognition.	25%
7	Lack of privacy.	62.4%	7	Lack of privacy.	24.1%
1	Isolation.	59.8%	1	Isolation.	22.9%
8	Doubts about mission importance.	55.3%	8	Doubts about mission importance.	22.9%
4	Workload.	37.7%	4	Workload.	13.4%

DISCUSSION

The aim of the study reported on here, was to compare the stressors experienced by the first and the fifth South African peacekeeping deployments to the DRC, during each phase of deployment.

Stressors experienced during the pre-deployment phase

Bartone (1998) emphasises the fact that the pre-deployment phase is usually a very busy time for units preparing to deploy. Planning and preparation for the mission usually requires long working hours from soldiers and leaders. This leaves less time to take care of personal and family business. The primary concern for the first deployment of South African peacekeeping soldiers (Table 1) during this period, pertained to aspects regarding receiving services from the Army, while 45.3% of peacekeeping soldiers of the fifth South African deployment indicated problems getting "needed services from the Army" as being medium or most difficult to deal with.

Being separated from family and friends in South Africa (Table 1) was reported as being medium or most difficult to deal with by 57.2% of the peacekeeping soldiers of the fifth South African peacekeeping deployment to the DRC. Similar results were obtained by Orsillo et al. (1998), who found that stressors such as being separated from family are predictive of psychiatric distress. Kirkland and Katz (1989) reported that soldiers often worry more about how their families will get along in their absence than they do about their own safety in the combat zone.

Being deployed to the DRC also has financial implications (Table 1). In many instances, one might find that financial gain was one of the main motivators for many soldiers. But, when soldiers are not aware of taxation and budget implications, financial gain may become a stressor. Financial problems were indicated by only a small percentage of peacekeeping soldiers from the fifth rotation, in comparison to those of the first rotation. This could be explained in the light of peacekeeping soldiers being more aware of or receiving clear guidelines on taxation and budget management. Thus, receiving clearer guidelines from the military (organisational variable) had a positive influence on the process of how the stressor was interpreted.

Lack of job advancement opportunities and loss of educational opportunities troubled a large percentage of the peacekeeping soldiers of both the South African deployments (Table 1). Table 1 also showed a significant difference between the two rotations in terms of loss of educational opportunities. This could possibly be

ascribed to the fact that one of the requirements for promotion in the military is that the soldier has to be course-qualified. Being deployed implies that the soldier will be prohibited from attending courses, and as such, the next promotion date may be postponed. According to the models of Bartone (1998) and Lamerson and Kelloway (1996), this might impact on both the organisation and the individual.

Overall, Table 1 indicates that the first and fifth rotation differed significantly in terms of the preparation of families for deployment. This could be because the first rotation presented a lot of uncertainty in terms of what to expect, thus making it much more difficult to explain to the family what is going to happen during the next few months of deployment. Members of the fifth rotation had some sort of benchmark to assure families of the activities and the environment to which they were deploying due to information obtained from previous deployment experiences. More members of the first rotation could also have experienced this stressor as being more difficult to deal with because of uncertainty about departure dates. Not knowing when one is leaving makes planning more difficult. Again, this is also confirmed by the models of Lamerson and Kelloway (1996) and Bartone (1998), regarding the input of a contextual stressor ("preparing my family for my deployment") and how the process of appraisal or interpretation can be influenced due to more knowledge about the event, or that on an organisational level there may be more support.

A significant difference was also indicated between the first and fifth rotation in terms of completing personal business before deploying (Table 1). These results confirm the statement by Bartone (1998) that the busy schedule of the pre-deployment phase leaves less time to take care of family business.

Stressors experienced during the first month of deployment

During the first month, the primary concern for peacekeeping soldiers of the first and fifth South African deployment to the DRC, pertained to communication/flow of information, as indicated in Table 2. This is an important stressor because a lack of information may leave people uncertain about what is happening or going to happen. Receiving adequate information could assist in reducing uncertainty. Experiencing this stressor could be ascribed to the fact that not all peacekeeping soldiers had the same means of communication with their families, or that contacting family members was also associated with high costs. This lack of communication with the home front could also be linked to the fact that family separation was still ranked quite high by both rotations (Table 2), as well as to financial problems, since a lot of money is being spent on costs to contact people at home.

Bartone (1998) reported that soldiers could develop an intra-psychic conflict around the perceived imbalance between personal sacrifices required by the mission, the importance of the overall mission, and one's role in it. Furthermore, if the purpose of the mission is not clear to the peacekeeping soldiers, it becomes almost impossible for leaders to validate their soldiers' sacrifices and exertions (Kirkland, Halverson & Bliese 1996). This may lead to increased frustration, bitterness and depression (Bartone 1998). Thus, a peacekeeping soldier must have a complete and clear idea of the reasons and the expected outcome of the mission if he or she is to have solid motivation (Ballone 2000).

During peacekeeping missions, members live and work with the same people in crowded conditions. These circumstances may be worsened if sanitation (e.g. toilets) and living areas are not of a high standard. Both rotations indicated this as an area of concern. Hundt (1996) elaborates on the peacekeeping environment and the challenges associated with the variability of the environment, for example that it might be different for each deployment or that it might be new and unfamiliar to the peacekeeping soldier. In this particular instance, the South African peacekeepers might not have been quite prepared for the circumstances in which they were going to live. This links directly with Bartone's (1998) definition of stress within the military, which states that stress refers to events or forces in the environment, and not from within the person. This is evident from the significant difference between the first and fifth rotation (Table 2) in terms of crowded and confined living areas, as well as poor sanitation and living areas. Fewer soldiers from the fifth rotation than from the first rotation indicated this as being difficult to deal with. A possible explanation could be that members who had returned supplied information regarding their experiences of the environment, and as such provided members to be deployed with a more realistic picture of the environment.

A further significant difference between the two rotations was in terms of heavy workload, long hours and lack of physical exercise (Table 2). This too could possibly be explained in terms of lessons learned and recommendations made by previous rotations on how to conduct work and physical exercise routines. Thus, as peacekeeping soldiers gain more knowledge about their tasks (personal variables), the stressors are processed as less stressful which may have a more positive effect on the performance of the peacekeeping soldier.

Stressors experienced during the third month (or at the end of the operation) of deployment

During the third month of deployment, peacekeeping soldiers become accustomed to their environment and the duties that they have to fulfil. Work that had earlier been regarded a challenge now becomes more of a routine and peacekeeping soldiers can easily become bored. This is also reflected in the responses of both the rotations as depicted in Table 3. The absence of recreation/entertainment and boredom were the most important stressors for most of the peacekeeping soldiers during this phase. Due to organisational variables, such as a lack of provision of adequate recreation/entertainment facilities, the process of appraisal might still be negative, but in this case it will impact more negatively on, for example, job satisfaction. Ballone (2000) reports similar findings for the Italian military component of the United Nations Mission in Bosnia and Herzegovina. The principal variables that were associated with a greater level of stress during this mission were length of the mission and lack of recreational or athletic activities during the mission.

Uncertainty and confusion about the mission was one of the stressors on which the two rotations differed significantly (Table 3). This could possibly also be linked to doubts about the importance of the mission. In this regard, Bartone (1998) argues that, when the sacrifice cannot be offset by meaningful daily work activities with an associated belief in the importance of the mission, increasing frustration, bitterness and depression can result.

The stressors as mentioned in the tables above will have a destructive effect on members in the peacekeeping operation (Bartone 1998; Lamerson & Kelloway 1996). Family stressors (Table 1) will have a negative effect on the morale of the members. Low morale causes low levels of concentration and motivation, which in turn can make members more vulnerable to shooting and vehicle accidents as well as alcohol and drug abuse. Members also experienced problems with their leaders (Table 1). Glad (1990) writes that leadership problems cause a low level of unit cohesion, make members more vulnerable to psychiatric disorders such as adjustment problems, high levels of anxiety and depression. Specifically during the pre-deployment phase, members need strong leadership, relevant information to make the unknown known and a feeling of security. The last group of stressors (Table 2, 3) falls under contextual and organisational stressors like sleep loss, lack of physical exercise, crowded living conditions, poor sanitation and little recognition (Lamerson & Kelloway 1996). These stressors are the hygienic factors of the

operation (Gordon 2002) and need urgent attention to prevent low morale, loss of interest in the operation, loss of respect for leadership and even a resistance to support the focus of the mission.

According to Walters (1968) and Cronin (1998), military psychology is a discipline with knowledge and skills to empower forces to manage the stressors and to keep the morale and motivation of forces high.

The role of military psychology in peacekeeping operations

The international practice is that psychologists provide a wider role than clinical work and psychotherapy. In the Canadian Defence Force, psychologists do psycho-education with members to prepare them to manage stress more effectively (Rosebush 1998). According to Keller (2005), the United States use Soldier Peer Monitoring Care and Support (PMCS) programmes to keep the soldiers mentally fit.

The SANDF needs a change in approach to the psychological preparation of its members before an operation and in terms of psychological support during and after operations. To fit into the international approach, with Canada and the United States as an example, the SANDF needs a psychological plan, such as a logistic plan, for an operation. The psychological plan should include actions to prepare and to support the members during the pre-deployment phase. The plan further needs actions to implement during the different phases in the operation and actions to debrief members and to facilitate the reunion with their families after the operation (Nkewu & Van Dyk 2008). The psychological plan should become doctrine like the logistic plan for any operation.

In the absence of so-called military psychologists in the SANDF, officers who do a B Mil degree in the programme of Human and Organisational Development, followed by a B Hons Mil in Industrial Psychology with specific subjects like military psychology, management of operational psychopathology, organisational psychology and research methodology, will be competent as platoon or company commanders to manage such stressors and the implications of these as mentioned in the tables. The ideal will be that the Faculty of Military Science further educates officers with a master's programme in Industrial Psychology (Mil), in order to continue with an internship at the Military Psychological Institute in Pretoria and thereafter register as Industrial Psychologists.

During the pre-deployment phase, these officers can assisit with psycho-education to equip members and their families to cope with separation, to prepare

them for the expected changes in the household and to sensitise them to logistical obstacles such as specific financial arrangements or the stressors mentioned in Table 1. These officers can implement a support system at the home unit with periodic interaction with the members in the operation. A multi-professional team approach where the medical doctor, psychologist, chaplain, social worker, and sister at the sickbay are involved, will be helpful in the treatment of severe psychological conditions.

These officers can also do research during each phase of the operation to inform the commander of management information about the fears and worries of members, level of group cohesion and the morale of the unit. These officers could also be used to support the commander of the peacekeeping operation through advice and information on stressors during the operation as mentioned in Table 2 and 3.

From the results in Table 2, it can be argued that the first month of any deployment is an adjustment process for the members (Glad 1990). At the end of the first month, the proposed mental health officers can do an evaluation on the levels of morale, motivation and the psychological hygiene factors. Some information on crowded barracks, sanitation problems and lack of physical exercise is important management information for the operational commander. These officers can facilitate morale-boosting programmes, better the communication in the unit and with family members, initiate activities to give recognition to members, plan social and sport activities, do stress management programmes and trauma debriefing if necessary (Williams, Picano, Roland & Bank 2006).

During the last month of any operation, it is a challenge for members to stay focused (Glad 1990). These officers could plan a process of reunion with the families and facilitate a sports and social programme to give members recognition and to keep them motivated (Vandesteeg 2005). It is also important to facilitate insight by members on their contribution to peace on our continent, in support the vision of NEPAD.

These officers can support the operational commander by their contribution to members in the deployment and they can add value to members of the SANDF to stay professional. Only members with a high level of mental health will serve the country with pride and will contribute to the peace process on our continent.

Conclusion

Peacekeeping operations are stressful. The results in Table 1 show "services from the army" and "separation from the family", in Table 2 "poor communication" and '"separation from the family" and in Table 3 "limited recreation", "boredom" and "lack of recognition" as the most important stressors. The SANDF needs to apply doctrine, in line with international practice in Canada and USA, to develop a psychological plan for each operation to manage these stressors. The Faculty of Military Science needs to educate officers for the SANDF to manage such stressors and subsequent implications during the pre-deployment phase as well as during and after the peacekeeping operation. These officers need to refer members for treatment to the multi-professional team at the field hospital. Only members with a high level of mental health will make a success of peacekeeping operations in Africa.

Limitations

The *ex post facto*-design used in this study could be viewed as a negative factor since soldiers are required to reflect back on a three-month deployment period. Possible factors that could have had an influence in this regard include

- information may have been forgotten;
- the initial level of stress had already declined because the soldier is back in a familiar and safe environment;
- the peacekeeping soldier might have been exposed to a traumatic experience or could have experienced the first month of deployment as traumatic, whilst the last month had been more positive, thus compensating for the negativity of the first month; and
- a single negative experience closer to the end of the deployment may lead to an overall negative appreciation of the deployment.

Administering the questionnaire after each phase would have been more appropriate and could even have rendered different results or might have provided a clearer picture of the perceived stressors. All findings are based upon self-report data and do not reflect formal diagnostic assessment, and lastly, because of the nature of the data, it is difficult to establish any psychometric properties of the questionnaire for the South African context. The inclusion of more biographical information could have enabled one to make a more comprehensive comparison between the two rotations, or even within each rotation. Lastly, due to the use of a convenience and a very diverse sample it is not possible to generalise the results obtained in the current study to the larger population.

Recommendations

Future research should focus on establishing the psychometric properties of Bartone's questionnaire for the South African context. Greater attention should be given to the rendering of needed services to peacekeeping soldiers and their families, preparing families for separation, improved communication between deployed peacekeeping soldiers and the home front, the possibility of distance education or e-learning and appropriate recreational and entertainment activities. The advantages of compiling a psychological plan for each deployment should be investigated.

REFERENCES

Allan, J.H. (1991). Peacekeeping in the Persian Gulf. *Military Review*, *LXXI*(8):57-63.

Ballone, E. (2000). Factors Influencing Psychological Stress Levels of Italian Peacekeepers in Bosnia. *Military Medicine, 65*:911-915.

Bartone, P.T. (1997). American IFOR Experience: Stressors in the Early Deployment Period, in J.L. Soeters & J.H. Rovers (eds.). *NL Arms: Netherlands Annual Review of Military Studies (The Bosnian Experience)* (pp. 133-139). Breda, The Netherlands: Royal Military Academy.

Bartone, P. (1998). Stress in the Military Setting, in C. Cronin (ed.). *Military Psychology: An Introduction* (pp. 113-146). Needham Heights: Simon and Schuster Custom Publishing.

Carlstrom, A., Lundin, T. & Otto, U. (1990). Mental Adjustment of Swedish U.N. Soldiers in South Lebanon in 1988. *Stress Med*, 6:305-10.

Cilliers, J. (1999). Regional African Peacekeeping Capacity: Mythical Construct or Essential Tool? *African Security Review*, *8*(4):21-33.

Cronin, C. (1998). *Military Psychology: An Introduction*. Washington, DC: Simon and Schuster.

De Coning, C. (2006). The Future of Peacekeeping in Africa. *Conflict Trends*, *3*:3-7.

Deahl, M., Srinivasan, M., Jones, N., Thomas, J., Neblett. & Jolly, A. (2000). Preventing Psychological Trauma in Soldiers: The role of Operational Stress

Training and Psychological Debriefing. *British Journal of Medical Psychology*, *73*:77-85.

Field, A. (2000). *Discovering Statistics Using SPSS for Windows: Advanced Techniques for Beginners*. London: Sage.

Gal, R. & Mangelsdorff, A.D.C. (1991). *Handbook of Military Psychology*. New York: John Wiley and Sons.

Glad, B. (1990). *Psychological Dimensions of War*. London: Sage.

Gordon, J.R. (2002*). Organisational Behavior: A Diagnostic Approach*. New Jersey: Prentice Hall.

Green, D.M., Kahl, C. & Diehl, P.F. (1998). Predicting the Size of UN Peacekeeping Operations. *Armed Forces & Society, 24*(4):485-500.

Health Professions Council of South Africa. (2004). *Regulations on the Health Professions Act Form 223: Rules of Conduct Pertaining Specifically to Psychology Chapter 10: Research and Publication*. HPCSA, Pretoria. 22-25.

Hundt, U.A. (1996). Coping with Peacekeeping. *Salut*, *3*(3):37-38.

Johnstone, I. & Nkiwane, T. (1993). *The Organisation of African Unity and Conflict Management in Africa.* New York: International Peace Academy Report.

Keller, T. (2005). Soldier Peer Mentoring Care and Support: Bringing Psychological Awareness for the Front. *Military Medicine,* 1.7.0:355-363.

Kirkland, F.R. & Katz, P. (1989). Combat Readiness and the Army Family. *Military Review, LXXIV* (1):63-74.

Kirkland, F.R., Halverson, R.R. & Bliese, P.D. (1996). Stress and Psychological Readiness in Post-Cold War Operations. *Parameters,* Summer:79-91.

Kruger, A. (2001). Military Social Work in the South African National Defence Force. *Military Medicine, 166:*947-951.

Lamerson, C.D. & Kelloway, E.K. (1996). Towards a Model of Peacekeeping Stress: Traumatic and Contextual Influences. *Canadian Psychology, 37*(4):195-204.

Liebenberg, I., Malan, M., Cilliers, J., Sass, B. & Heinecken, L. (1997). South African Public Attitudes on Participation in Peacekeeping, Personnel Issues and Labour Relations in the Military. *African Security Review, 6*(6):3-19.

Litz, B.T., King, L.A., King, D.W., Orsillo, S.M. & Friedman, M.J. (1997). Warriors as Peacekeepers: Features of the Somalia Experience and PTSD. *Journal of Consulting and Clinical Psychology, 65:*1001-1010.

Litz, B.T., Orsillo, S.M., Friedman, M.J., Ehlich, P. & Batres, A. (1997). Post-Traumatic Stress Disorder Associated with Peacekeeping Duty in Somalia for U.S. Military Personnel. *American Journal of Psychiatry, 154:*178-184.

MacDonald, C., Chamberlain, K., Long, N., Pereira-Laird, J. & Mirfin, K. (1998). Mental Health, Physical Health, and Stressors Reported by New Zealand Defense Force Peacekeepers: A Longitudinal Study. *Military Medicine, 163*(7):477-481.

McBurney, D.H. (1994). *Research Methods* (3rd ed.). Pacific Grove: Brooks/Cole Publishing Company.

Neethling, T. (2000a). Peacekeeping in the DR Congo: The Response of the United Nations. Paper presented at the Millennium Colloquium of the SA Political Studies Association. 5 September, Bloemfontein.

Neethling, T. (2000b). The South African Military and Peacekeeping: Reflections on Conditions, Capacity-Building and Prospects. Paper presented at the South Africa at War in the Twentieth Century conference.18 September, Saldanha.

Neethling, T. (2000c). Peacekeeping Challenges in the DRC. *African Insight, 30*(3/4):34-43.

Nkewu, Z. & Van Dyk, G.A.J. (2008). A Framework of a Psychological Plan for the Battle: A Proposal for Discussion, in G.A.J. van Dyk (ed.). *Strategic Challenges for African Armed Forces for the Next Decade*. Stellenbosch: Sun Press.

Nkiwane, T. (2000). The Future of Peacekeeping in Africa. *Africa Insight, 30*(3/4):26-32.

Olonisakin, F. (1998). The role of Nigeria in ECOWAS Peace Support Operations and Some Lessons for South Africa. *ISSUP Bulletin, 6/98:*1-16.

Orsillo, S.M., Roemer, L., Litz, B.T., Ehlich, P. & Friedman, M.J. (1998). Psychiatric Symptomatology Associated with Contemporary Peacekeeping: An Examination of Post-Mission Functioning Among Peacekeepers in Somalia. *Journal of Traumatic Stress, 11*(4):611-625.

Parker, M.W. (2001). Soldier and Family Wellness Across the Life Course: A Developmental Model of Successful Aging, Spirituality, and Health Promotion. Part II. *Military Medicine, 166:*561-569.

Potgieter, J. (1995). Exploring the New Challenges to Peace Operations. *African Security Review, 4*(5):56-59.

Rosebush, P.A. (1998). Psychological Intervention with Military Personnel in Rwanda. *Military Medicine*, 163(8):559-563.

Tabachnik, B.G. & Fidell, L.S. (1996). *Using Multivariate Statistics* (3rd ed.). Northridge: Harper Collins College Publishers.

Thiart, G. (2001). High praise for the SANDF Specialist Contingent. *South African Soldier, 8(6):*14-16.

Vandesteeg, C. (2005). *When Duty Calls. A Handbook for Families Facing Military Separation*. Ontario: David Cook.

Walters, H.C. (1968). *Military Psychology: Its Use in Modern War and Indirect Conflict*. Iowa: Brown Company Publishers.

Williams, T.J., Picano, J.J., Roland, R.R. & Banks, L.M. (2006). Introduction to Operational Psychology, in C.H. Kennedy and E.A. Zillemer (eds.) *Military Psychology: Clinical and Operational Applications*. London: Guilford Press.