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Scientia Militaria

South African Journal of Military Studies

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South African Journal

of Military Science



South African Journal of Military Science

Guest Editorial

In this special edition of *Scientia Militaria*, the articles reflect contemporary issues associated with the capacity building of its personnel – the most valuable resource of any organisation – to strengthen the armed forces. Through the higher education of soldiers, the armed forces are indirectly strengthened. Although the South African National Defence Force (SANDF) has been utilising psychologists for many years, the academic discipline of Military Psychology in South Africa is still in its infancy.

Military Psychology was first lectured in 1992 by Dr Jacques Gouws, at second-year level, as part of the BMil degree at the South African Military Academy (SAMA). And in 1993, the BMil Hons (Industrial Psychology) at SAMA included Military Psychology for the first time. Since the introduction of Military Psychology at SAMA, many students have published their research locally and internationally. In 2016, Professor Gideon van Dyk (who succeeded Dr Jacques Gouws) edited the first academic book on military psychology in Africa (*Military Psychology for Africa*). In 2020, the second South African book on military psychology, edited by Nicole Dodd, Piet Bester and Justin van der Merwe, titled *Contemporary issues in South African military psychology*, followed, showcasing the work of SAMA students (see the book review by Fontaine in this edition).

This special issue of *Militaria Scientia*, dedicated to military psychology in South Africa, can be viewed as one of the milestones for military psychology in South Africa. Since the conceptualisation and distribution of the initial call-out for articles, much has happened worldwide, of which the war in Ukraine is probably the most relevant to the armed forces. It is expected that this war will also experience an insurgency element, and later a peace support operation, which will likely include post-conflict reconstruction and development. This war reminds us that we live in a volatile, unpredictable, complex and ambiguous (VUCA) world, and that personnel in the armed forces should be psychologically prepared at all times. The articles – and, indeed most of the book reviews in this edition – resonate well with what is currently happening in Ukraine, confirming the critical role that military psychology plays in preventing war, surviving war, and dealing with the aftermath of war.

In the foreword to this current issue, the Director Psychology, Brigadier General Warren Burgess, highlights the recent achievements and successes accomplished by military psychologists currently serving in the SANDF. He provides a historical overview of how Military Psychology has evolved, and gives specific details on how the need for psychological services progressed within the SANDF since the early 1960s. Additionally, Brig. Gen. Burgess offers a futuristic model – based on real-time combat experiences and unpublished notes – for the psychological debriefing of individuals who have experienced trauma in the line of duty. Finally, he ends on a personal note, appealing to current and future military psychologists to continue in their pursuit of "perfection through innovation".

In the first article, Jacques Gouws focuses on the preventative part of military psychology, and discusses its front-line strategic and diplomatic role in preventing wars. He refers to how the role of psychology has matured: from the selection and placement of soldiers to dealing with the complex demands of the modern battlefield. Gouws emphasises that the world can no longer afford to continue armed conflict in order to settle territorial and international disagreements, as this leads to ongoing and unnecessary strife. Finally, he suggests the strategic deployment of military psychology to counter the psychological factors in areas with potential conflict. He concludes by providing insight into military decision-making to enhance the role of military psychology in curtailing war.

Piet Bester and Johnny O'Neil address the problems that modern military leaders experience on the battlefield – not only in cases where they have to assist the soldier at primary level (i.e. in the trenches), but to also make sense of what is happening. The authors emphasise the importance of *sensemaking* in the VUCA world-related battlefield. They further suggest approaching sensemaking with a best-fit worldview of *social constructivism in complexity*, from where the military leader acts as a sensemaker across the sensemaking and meaning-making nexus. Additionally, a process of sensemaking and meaning-making on the battlefield is postulated. Finally, toolkit elements are provided to assist military commanders in acting as *sensemakers*.

Extending the idea of the military leader as a sensemaker, Johnny and Sumari O'Neil focus on sensemaking training in preparation for effective mission command in the African battlespace. In this article, *sensemaking* is considered a necessary cognitive skill that should be integral to a commander's psychological preparation and training. Moreover, *mission command* is highlighted as a decentralised form of command, which allows subordinate commanders the freedom to take initiative without relying excessively on the hierarchy of command in the military organisation. The authors argue that mission command is the most relevant approach needed for the VUCA African battlespace. To conclude their article, they suggest practical ideas on how to develop sensemaking as a cognitive skill for military commanders (e.g. including it as a commander's training prior to deployments by developing situational awareness through game-based training, simulations and case studies, and by providing feedback during training).

In a qualitative study, Adele Harmse, Sumari O'Neil and Arien Strasheim report the results of semi-structured interviews with 12 SANDF officers to determine their experiences

during extended periods away from home. The results indicate that extended absences may adversely affect the deployed member and his or her family, and that the negative effect may spill over from the family to the deployed member. The authors identify various areas for improvement regarding support to the deployed member and his or her family, and emphasise that organisational support is required before, during and on completion of the deployment (i.e. the reintegration process). Implementing their suggestions may limit the stress that soldiers and their families experience; thus, directly strengthening the family unit, and indirectly enhancing the armed forces' capacity.

Nicolette Visagie, Didi Zungu, Stephanie Joubert, David Schoeman and Renier du Toit focus on peace support operations, when they compare the positive and negative experiences of soldiers deployed to two different mission areas (i.e. Sudan and the Democratic Republic of Congo, which both had different mandates). These authors make a novel contribution by providing a *booster matrix* (positive experiences) versus a *stressor matrix* (negative experiences), categorised in terms of the sphere of functioning within the deployment arena (i.e. the organisational, clinical and relationship spheres). These findings can be used by deploying military commanders to develop interventions to enhance positive aspects, and/or mitigate negative elements; thus, enhancing the wellbeing of soldiers during deployment.

Danille Arendse addresses Covid-19 as a VUCA world event. She conducted a unique quantitative study to explore the experiences of SANDF members who had participated in the first repatriation flight from Wuhan, China. This repatriation was aimed at bringing people home safely and quarantining them in South Africa in terms of Covid-19. The *Stigma and Related Matters Questionnaire* was developed by Arendse, and was used in her study to gain insight into possible stigma, perceptions and emotions that might have been held by SANDF members towards the repatriated individuals of whom the SANDF members had to take care during their repatriation and quarantine. Results of this study suggest that the majority of SANDF members did not report any stigmatising or discriminatory beliefs around Covid-19, nor did they believe that those who had been repatriated, were stigmatised. However, future researchers are urged to do follow-up studies to determine the validity of this newly developed questionnaire, and to determine whether results replicate.

A selection of book reviews by Palesa Luzipo, Piet Bester, Yolandi-Eloïse Fontaine and Anri Delport concludes this special issue of *Scientia Militaria*.

As guest editors, we want to thank each person who – directly or indirectly – contributed to this special edition. A special word of thanks to our reviewers, who acted as the quality gatekeepers, and to the personnel who worked behind the scenes regarding the technical layout and language editing. In addition, we need to mention Dr Evert Kleynhans, the editor of *Scientia Militaria*, who walked the extra mile to make this publication possible. All your contributions are appreciated. Without you, this publication would not have been possible.

As a final thought, building psychological capital through people-development practices implies a long-term commitment. We therefore trust that this special edition will provide key insights into military personnel on strategic, operational and tactical level to enhance best practices during planning, management and operations. Finally, we anticipate that this special edition will inspire practitioners and academics to expand their work and share their knowledge with the international scientific community, broadening the literature and science of Military Psychology.

The Guest Editors

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Foreword

Brigadier General Warren Burgess Director Psychology, South African National Defence Force

"There are but two powers in the world, the sword and the mind.

In the long run the sword is always beaten by the mind"

(Napoleon Bonaparte)

It is a great privilege to be invited to write a foreword to this unique edition of *Scientia Militaria* dedicated to Military Psychology. I am proud to share this platform with the writers of the articles contained in this publication. Two excellent textbooks on South African Military Psychology have already been published, namely the 2016 debut publication *Military Psychology for Africa* by GAJ van Dyk, followed in 2020 by *Contemporary issues in South African Military Psychology* by NM Dodd, PC Bester and J van der Merwe.

I would like to use this opportunity to record some remarks about the history and nature of South African Military Psychology. I would also like to offer an indication of some issues that I believe will require attention in the future.

I have been a military psychologist since 1989 and have served as Director Psychology for the past 12 years. During this time, I have served alongside some remarkable men and women, and have witnessed the significant contributions they have made to their respective organisations.

This year, our military psychologists have again made strides in service of our nation. The Military Psychological Institute (MPI) won the 2022 SIOPSA Presidential Award for the 'Best Industrial Psychology Internship of the Year'. Further, its subunit, The SA Army Assessment Centre of the MPI won the award for the 'Leading Business of the Year'. One of our psychologists was nominated in the category 'Academic Industrial Psychologist of the Year'. These are remarkable feats given that they compete with the corporate environment of the private sector.

I have insufficient space to celebrate all the achievements of my predecessors and colleagues. I would, however, like to commend the patriotism, courage and passion of my colleagues. Even when requests go out to psychologists to undertake unique deployments, we are always flooded by volunteers willing to face unknown risks by undergoing deployments. Whether it is helping to repatriate our citizens from Wuhan during the start of the Covid-19 pandemic or deploying alongside our Special Forces against extremist insurgents on foreign soil, there are always men and women willing to step forward.

When psychologists apply their minds and skills in a military context, they become force multipliers that advance the functioning of that organisation. They become not an ancillary service to the military force but an integral part of how that force functions.

I need to outline some clarifying thoughts on the term 'Military Psychology'. I will not attempt to give a concise definition of the term. This is done comprehensively in *Contemporary issues in South African Military Psychology*. However, I wish to distinguish between psychology within the military on the one hand, and the domain of the professional psychologist within the military on the other.

The role and impact of the human mind on the battlefield have been appreciated and written about long before the establishment of psychology as a profession. There are many ancient written works advocating or celebrating the use of psychological principles on the battlefield.

Many writers consider the Prussian, General Carl von Clausewitz, to have been the first military psychologist. Von Clausewitz was born in the eighteenth century and was an ardent admirer of Napoleon Bonaparte. As a military theorist, he developed novel ideas about the psychology of warfare. His seminal work *On war*, defined concepts still used today. For example, while describing his experiences during the Battle of Bangui, the commander of the South African forces referred to the devastating nature of the 'fog of war' on evaluating the nature of the threat from the opposing forces. However, despite the pioneering and enduring work of Von Clausewitz, I would dispute that he was the first military psychologist.

Others have written seminal works on aspects of military psychology during earlier ages. I would like to single out one book as representing the genesis of military psychology, namely Sun Tzu's *The art of war*. Little is known of this Chinese military theorist. Sun Tzu is believed to have lived somewhere during the fifth or sixth century BC. A reading of his work reveals a multitude of behavioural observations and advice. It stretches from maintaining a willingness to do combat to deception of the opposing force, effective combat leadership qualities, and many more. Thousands of years later, this book is still in print and is used in the corporate world today. This is testimony to the contribution of his work to modern thought. I believe that he is a worthy recipient of the title 'the Father of Military Psychology'.

Today, more than ever, psychology is essential in the military environment. Modern society is characterised by unsurpassed diversity and sophistication. Multiplicity in cultures, beliefs and values within a force, along with a mix of genders and the use of advanced technology have all led to complexity in the challenges facing the modern military force. Decision-making in the face of this complexity, developing cohesion and unity of purpose amongst heterogeneous soldiers, and processing cognitive pileup are all challenges that must be dealt with. Little wonder then that those psychological studies form part of the academic training offered globally to military leaders.

The phenomenon of professional psychologists working within the military environment first occurred at the outset of World War 1. Initially, the utilisation of psychologists

was restricted to testing for screening and selection purposes. Mass testing using verbal and non-verbal assessments became established. Due to the overwhelming extent of psychological sequalae of soldiers returning from the front lines, psychologists became increasingly involved in treatment of patients as the war dragged on, establishing the practice of clinical psychology. The roots of South African military psychology, however, lie in the initial use of psychologists for selecting candidate pilots.

During World War I, the South African pilot Pierre van Ryneveld served in the Royal Flying Corps and later in the Royal Air Force. During this time, he was exposed to and was hugely impressed by French pilot selection techniques. In particular, it was the ability to reduce casualties during flight training significantly that indicated the value of utilising psychologists for selection purposes. When the war ended, Pierre van Ryneveld was tasked by Prime Minister Jan Smuts to establish the South African Air Force (SAAF). This he did in 1920, and he was subsequently promoted to Chief of the Union Defence Force in 1933.

In 1939, when war with Germany appeared inevitable, Gen. Van Ryneveld instructed an SAAF pilot selection capability to be formed. The first South African military psychology establishment was consequently formed as the 'Aptitudes Test Section' (ATS). Simon Biesheuvel was appointed the commander of this capability.

A friend of mine, retired Substantive Lt Roy Robinson, flew SAAF Catalinas in Indian Ocean operations against Japanese submarines. He recalls Biesheuvel as being a tall man, giving the impression of being a scientist (a 'boffin'), who was always looking for pilots with whom he could do experiments, such as spinning someone upside down in a chair and then requiring them to do co-ordination tests. The unit also had a decompression chamber known as 'Biesheuvel's Baby', where he performed numerous physiological experiments. Pilots would allegedly scatter like frightened deer when they saw him approaching. A strictly evidence-based approach was used for developing selection tests. In May 1942, after much research, the first psychology assessment battery was officially taken into use. Acceptance in a specific aircrew category was invariably based on the results of this test.

By the time it was disbanded at end of WW II, the ATS employed almost 90 psychologists. It was not only selecting aircrew and artisans but had also initiated the first psychotherapeutic service in the nation in support of air crew suffering from 'combat fatigue'. Biesheuvel made it clear that it was only the shortage of persons with psychological training in South Africa that was responsible for similar services not being extended to the other branches of the South African Armed Forces.

The psychologist J Louw wrote the following about the ATS in his 1987 article: "World War II, industry, and the professionalization of South African psychology", "[t]here is heavy emphasis on the scientific method, large amounts of data are yielded, and sophisticated statistical techniques are employed ... it carved out this area of expertise for psychologists" (1987, p.37). This gave credence to psychology as a legitimate, empirical science and increased the standing of psychology in the eyes of potential employers and other professionals.

During the 1960s, increasing operational demands were made of the then South African Defence Force (SADF), and a national service system of conscription for eligible white male citizens was implemented. This, in turn, required considerable support from the Military Medical Service. The demand for military psychological services was driven by two specific needs. Firstly, there was a need for scientific assessment and placement of employees. Secondly, there was a growing realisation of the responsibility that the organisation carried for the mental health care of those employees.

In 1966, the Military Medical Institute was established as part of the South African Medical Corps. Initially, it was tasked with the selection of pilots and the development of selection techniques. In November 1967, a small psychology section was added to the medical section. The psychology section then began developing specialised selection techniques in close collaboration with the Human Sciences Research Council, the National Institute for Personnel Research, and consultants from various South African universities. The first recorded application of psychological testing for pupil candidates after WWII took place in 1967, utilising a battery developed by the National Institute for Personnel Research. In 1969, the psychology section was upgraded to a formal department, which provided a variety of organisational psychology and other services to the SADF.

In addition to these organisational psychology services, a therapeutic service was also initiated. Initially, the focus was on the adjustment of patients who had serious physical wounds. This was broadened over time to include those with purely psychological problems. Pioneering research was done in this regard during the seventies as the service began to expand.

A holistic approach was adopted, and the service began to address family dynamics, the effectiveness of military units, and management systems. The service incorporated a broad spectrum of psychologists, namely clinical, counselling, research and industrial psychologists. Services were also increasingly being provided at the Navy Medical Centre, 1 Military Hospital and 2 Military Hospital. By 1978, personnel strengths at these units were Military Medical Institute (MMI) (38), SA Navy (5), 1 Military Hospital (5) and 2 Military Hospital (1).

Although many psychological services had originated with the official Psychological Service of the medical corps, by 1977, most of the functions had spread through the organisation and often functioned autonomously from the Medical Corps. The result was that psychological services were uncoordinated, and there was much duplication of effort. In addition, there was a shortage of official policy and procedures and no professional control over the actions of psychology practitioners. The structure of the psychological service of the medical corps was compromised via the staffing of available personnel elsewhere, and the structure for service delivery had not kept up with the growing need for such services in the SADF.

In July 1977, the Minister of Defence issued instruction HS/DOS/305/6 dd 07/77, which required all psychological services within the SADF to be seated within the South African Medical Corps, that a military psychology institute be created, and that professional control of all psychological services be exercised under the command of the surgeon general.

In 1979, two significant transformational events occurred. The first was that the South African Medical Corps was transformed into South African Medical Service, an autonomous fourth arm of service. The second was that the MMI split into two separate institutes, namely the Institute for Aviation Medicine (IAM) and the Military Psychological Institute (MPI) under command of Colonel Theo Mey. The mandate of the MPI was to act as an internal consultant providing the SADF with the highest standard possible in behavioural sciences.

In order to decentralise the service, members were detached from MPI to 1 Military Hospital, 2 Military Hospital, the Navy Medical Centre in Simon's Town, the Medical Centre in Durban, and various recruitment centres around South Africa.

As the war of liberation expanded in South Africa and South West Africa, the need for clinical psychological services expanded, as psychologists were appointed at the military hospitals and later at sick bays. The practice of routine psychological debriefing was also established.

With the dawn of democracy, the psychological services launched various interventions to facilitate the foreseen challenges. The heads of the psychology departments were summoned from all provinces to help design these interventions. 'Project Bridge' put SADF leaders through a workshop aimed at promoting healthy adaptation to the coming democratic process. The Psychological Integration Programme was run along with social workers and later with chaplains. It created encounter group-like experiences during which integrating forces could develop an appreciation and understanding for one another's experiences. At the time, I was a psychologist in the Eastern Cape, and saw first-hand how effective these two interventions were in facilitating integration. All but one commander received the programme with enthusiasm as contributing positively to both to *esprit de corps* and improved discipline.

After integration, the service made innumerable contributions to social research and small group interventions to resolve conflict between ex-combatants. So successful were these efforts that the Democratic Republic of the Congo (DRC) used South African psychologists to conduct integration exercises between government and rebel forces. Many thousands of DRC members were successfully integrated into a cohesive force through these efforts.

More recently, the Psychological Service has been providing operational support and research during peace support operations. A wealth of information has been generated, and numerous interventions launched. This support has now extended to counterinsurgency operations in Mozambique.

Military psychological debriefing is often misunderstood by non-military academics who confuse it with a therapeutic intervention aimed at preventing post-traumatic stress disorder (PTSD). This requires clarification. For purposes of clarity, I will distinguish between two separate concepts. On the one hand, let me use the term 'diffusion' as the intervention – often in a group format – is aimed at reducing trauma and thus preventing PTSD. On the other hand, 'debriefing' is a military term defined as the process of gathering

information by questioning persons after completion of a military action. Its purpose is to create intelligence in order to guide subsequent action or policy. The term has come to have the collateral purpose of preserving the combat power of a military force. To cast light on this practice, I provide a brief sketch of the history of psychological debriefing and then outline a current model for practice in the SANDF.

The potential adverse effect of combat on the psyche of the soldier has been known since ancient times. It is affected by various factors, such as mental hardiness, age, the way previous trauma was processed, mental toughness, supportive factors (such as God, leadership and group cohesion) in the field and by culture. An interesting observation was the notable differences in the emotional state of the crew after the sinking of the passenger liner, the *Oceanos*, in 1991. Without exception, the Pilipino crew were highly traumatised, and many wept after their rescue. The Greek crew members, however, were models of stoic fortitude. One old sailor informed me, "some ships catch fire, some ship sink, is not problem, problem is find new ship".

In South African military history, the first cases of combat related to acute and delayed psychological trauma were recorded by medics during and after the Second Boer War. The artillery barrages during the 1899 siege of Ladysmith resulted in related symptoms similar to those recorded after artillery barrages during subsequent wars. These syndromes have been labelled 'soldier heart', 'shell shock', 'combat or battle fatigue', 'post-Vietnam syndrome' and 'acute or post-traumatic syndrome' as theories about their aetiology evolved. The recorded descriptions of these conditions also evolved as clinicians became sensitised to the prevailing literature of their day.

The management of combat-related trauma in the field found its first formalised emphasis during WWI. The Allied Forces deployed 'mental hygiene teams' into the field. These teams included staff, such as social workers, psychiatrists and other medical staff. Their purpose was to offer leaders advice and to deal with psychiatric cases. German forces had a more severe way of dealing with perceived cowardice, and simply executed many psychiatric patients. Despite these efforts, many soldiers were repatriated on psychiatric grounds, and overwhelmed the available care.

South Africa too received many traumatised and wounded soldiers back from the battlefields of German East Africa and the European theatre of operations. Our nation became one of the leading nations in the British realm in terms of the rehabilitation of a disabled soldier. However, repatriated psychiatric casualties totally overwhelmed the South African medical capabilities. On 1 November 1918, AJ Orenstein, the acting head of the military medical service, wrote to the director, Lt. Col Stock, who was in England at the time, and insisted that all cases of 'shell shock' should remain in England and should not be repatriated to South Africa, as the Union did not have the capacity to provide the necessary psychiatric care. Only in March 1920 were all war-injured soldiers repatriated from England.

By the start of WWII, psychological screening had become a well-established military practice. It was believed that characterological weakness was responsible for psychiatric

failures on the battlefield. So high was Allied confidence that soldiers susceptible to breakdown were being screened out, that they failed to push psychiatric services into combat zones. This was a tragic mistake. We now know that the only way to prevent traumatic stress disorders is to avoid trauma. If one subjects soldiers to the atrocities of war, some of them will break down. This was nowhere illustrated more clearly than in the high incidence of breakdown in air crew, the most carefully selected of all soldiers. Even the top Allied air ace, the South Africa fighter pilot, Pat Pattle, was grounded due to 'battle fatigue' shortly before taking off against orders and engaging in aerial combat that resulted in his death in 1941.

The psychiatric toll on Allied forces during WWII was massive. This presented a challenge to commanders. Soldiers with psychiatric symptoms simply cannot perform combat duties safely or reliably. Not only did these casualties have to be evacuated and cared for, but they also had to be replaced with trained and equipped men. This was a logistic nightmare. Furthermore, combat veterans were being replaced by unexperienced rookies, undermining combat cohesion. Not only had rookies not yet demonstrated that they could be trusted in battle, but they were more likely to be killed or wounded than their comrades. Veterans often ostracised rookies, not wanting to bond with someone considered likely to let them down or become yet another casualty. Furthermore, premature evacuation had a profound effect on soldiers who believed themselves to be 'weak' or to have let their comrades down.

By the time of Operation Torch in 1942, psychiatric casualties would at times outweigh physical casualties. A number of infamous incidents occurred during this campaign in which the celebrated American General George S Patton physically and verbally assaulted soldiers who had been evacuated from combat for psychiatric reasons (Lovelace, 2019) ². Reaction to this behaviour by the public and by military leaders was severe. The Allied Supreme Commander (and later American president) Dwight Eisenhower set the tone for the later management of combat related trauma.

You do not lead by hitting people over the head. That's assault, not leadership. (Eisenhower, cited by Day et al., 2019, p. 75).³

Mental health services were once again pushed into the field. Combat-weary soldiers were brought to a safe area for rest and recuperation as well as for psychological debriefing. It was found that this reduced the numbers subsequently repatriated and, thus, preserved the cohesion and combat power of the force. The practice of psychological debriefing had been born.

Within the South African context, the recorded practice of psychological debriefing began during Operation Savannah. This was part of the South African Border War and the Angolan Border War. During the period 1975–1976, the South African forces launched a military incursion into Angola. During this operation, the South African Defence Force (SADF) recorded 28 deaths and 100 wounded. The Defence Staff Council instructed Colonel De la Rey, the director of psychological services at the time, to investigate 'combat fatigue'. This led to the deployment of Major Van der Waldt, the first deployment

of a South African psychologist to a combat zone. A team from MPI then conducted an extensive literature study on combat stress-related topics from Freud to the Battle of Yom Kippur. Interventions were designed and became doctrine. Central to the mandate of the debriefing team is the development of behavioural intelligence for senior planning staff. The nature and content of these interventions and assessments have evolved after decades of combat by our forces. The most recently completed and recorded incidents occurred after the Battle of Bangui in 2013, and subsequent battles involving the Force Intervention Brigade in the Democratic Republic of the Congo.

I proffer the model below for future debriefing interventions following extraordinarily traumatic events in the field. It is based on the work of those who went before me, and I rely heavily on the unpublished notes and recollections of retired Brigadier General Albert Jansen.

- The debriefing team should consist of at least one experienced military
 psychologist, versed in the relevant literature and able to make clinical
 diagnoses. The psychologist should be accompanied by a senior officer from
 the Army, well versed in operational doctrine. Much of the assessment to be
 performed will be dependent on an ability to evaluate the military status of the
 combat force.
- The team should be deployed as soon as physically possible after the incident
 but with the elements in rest (away from the front line). The authority and
 mandate of the team must come from and should have the support of the
 command elements in the rear. If the combat leaders are not fully behind the
 interventions, they are likely to undermine the team. This cannot be something
 imposed on them by the medical elements.
- The soldiers to be debriefed should be at a safe distance from the front line, enabling them to rest and catch up on sleep. If at all possible, they must be given comfortable bedding and fresh uniform and be fed warm meals. During this period, they need to replenish their reserves and partake in some light form of exercise, such as a ball game.
- The debriefing team needs to identify soldiers unable to sleep or who are
 displaying symptoms, such as dissociation. Typically, it is the combat veterans
 and experienced non-commissioned officers (NCOs) or officers who will
 identify individuals not able to continue with the operation. They will know
 who can no longer be considered fit for battle. Where possible, these vulnerable
 soldiers should be repatriated with the consent of the commander.
- The psychologist and army expert need to interact with the leader element separately from the troops. They also need to circulate and speak with leaders and junior members. Leaders are typically reluctant to disclose some information or display vulnerability in front of their subordinates. Time constraints will typically determine whether this should be done in groups, and what the sizes of groups should be.
- No expectancy should be created of individual or team repatriation by the debriefers. Such matters are best left in the hand of the leaders, reinforcing

their authority. Technical terms and professional jargon should be avoided. The leader element needs to be educated about the further identification and management of trauma amongst the soldiers. No in-depth emotional diffusion should take place in the field. Emphasis should, where possible, be on a salutogenic approach. Soldiers can be questioned on how they survived and what they did to succeed. The role of their combat experience can be highlighted as a resource to be utilised in the future. If possible, the formal evaluation of the status of the combat group should be deliberated by the psychologist and the Army expert whilst in the field. This will enable further targeted questioning or observation if required. Ideally, consensus should be reached on each finding. The deductions and conclusions of the debriefing team should be shared tentatively with the commander to test his or her thinking.

- Elements that need to be assessed, include the leadership dimension. Is the leader making rational decisions, does he or she still have the will to complete his or her mission, and are his or her subordinates willing to follow him or her?
- The debriefing team must determine whether the combat team is able to
 continue the mission successfully. This depends not only on the morale and
 confidence of the soldiers but also on the availability of soldiers, equipment and
 supplies. Here, the insight of the Army expert will be essential.
- It must also be determined what the prevalence of potentially destructive anger amongst the soldiers is. The nature and direction of this anger must be appreciated and it should be established whether this may sabotage the mission or be used for negative propaganda, against rear headquarters (HQs) or the nation. The nature and impact of hostile PsyOps (psychological operations) against own forces must also be determined, as this has become an increasingly problematic phenomenon, requiring counteraction via Information Operations.
- Finally, the debriefing team needs to compile a report with their findings and recommendations. Findings are typically done in tabular form and colour-coded from green to red in terms of ability to continue the mission. In addition to this, a briefing must be carefully constructed for the planning staff. Typically, no more than ten minutes will be allowed, if that, for reporting back. A helpful suggestion is to indicate the availability of critical information that cannot be covered with the current time constraints. Brevity and conciseness will aid in getting the essential information across. Planning staff are usually under extreme pressure to make decisions regarding the mission. Recommendations, such as that deploying troops need to be trained in body bag procedures, although important, are best left for the report.

In closing, I would say that the SANDF needs military psychologists and not merely psychologists in uniform. By this, I mean there is a need for patriotic men and women who will not sit in an office waiting to be assigned work. Celebrated psychologists were courageous and had an insatiable curiosity about human behaviour. They were passionate about getting into the field to do research and finding better ways of doing things. One of my favourite stories of a military psychologist relates to a Lt Alfonso

of the American forces during WWII. He had observed many plains crash-land when returning from long bombing missions. These crashes were often fatal and often entailed the pilot accidently pulling up the landing gear instead of the flaps. He determined that battle-weary pilots returning from long-distance missions with damaged aircraft were often so fatigued or so absorbed in landing an unresponsive plane, that they were unable to look at what they were doing and did not realise that they had pulled the landing gear lever instead of the identical lever for the flaps next to it. He proposed the idea of placing tactile cues at the top of the levers. A pilot encountering a sharp wedge instead of a wheel was much likelier to correct his action. This became an international practice in aircraft design, saving untold numbers of lives. Psychologists have the research training to know which questions to ask and the knowledge to generate solutions. However, without the willingness to get out and observe the military environment, these solutions mean little.

I trust this has been demonstrated that the birth of not only our profession, but also of its utilisation in the military environment, is founded in scientifically based assessment. It ought to remain a key performance area for the South African Military Psychological Service. Our practitioners must make concerted efforts to continue with innovations to provide this service in the challenging environment of computerised testing in order to remain relevant. I am gratified to be able to say that the Military Psychological Institute has made a good start to establish such a capability, and trust that it will receive the necessary support. The efforts to develop culturally appropriate tests for our citizens are laudable.

Attention also needs to be given to developing cognitive and coping skills to deal with the complex high-stakes decision-making and planning that characterise the battle space today. Innovative and interactive development of these skills is essential if the SANDF is to cope with future challenges.

Knowledge and programmes to deal with aspects of irregular warfare are essential. Containing terror incidents, deradicalisation of extremists and amelioration of hostile psychological operations may all become pressing threats to our nation in the near future, and we must not be caught napping.

Probably the most pressing issue is that of the increasing fiscal constraints facing the SANDF and defence industry. The Psychological Service is a costly capability. If this should thrive, it must find additional ways of enhancing organisational effectiveness, efficiency and cost-effectiveness.

My hope is that those who come after me will treasure this indispensable resource and will support our military psychologists while they, through trial and error, continually seek to improve their competence. The motto of Military Psychology is 'A Renevatione Perfectio'. This has long been the secret being the success of the South African Military Psychological Service – perfection through innovation.

The SAMHS Psychological Service owes a debt of gratitude to Col. Theo Mey and Brigadier General Albert Jansen for their invaluable records detailing various aspects of the history of South African Military Psychology.

Endnotes

¹ Louw, J. (1987). World War II, industry, and the professionalization of South African psychology. *South African Journal of Psychology*, 17(2), 33–39.

² Lovelace, A. G. (2019). "Slap heard around the world": George Patton and shell shock. *Parameters*, 49(3). 79–91. doi:10.55540/0031-1723.2776.

³ Day, A., Penney, S. A., & Hartling, N. (2019). The psychology, potential perils, and practice of leading healthy workplaces. *Organizational Dynamics*, 48(3). 75–84. https://doi.org/10.1016/j.orgdyn.2018.10.002







Military Psychology: Time to embrace a front-line diplomatic role

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Abstract

The weapon systems created for the purpose of fighting the enemy in World War I caused terrible losses of human life on all sides of the conflict. However, World War I was also the event that gave birth to what became the field of Military Psychology. This position article, briefly tracing the development of the field, encourages the development of an expanded scope for this sub-discipline of Psychology.

In its infancy, the role of Military Psychology was the selection and placement of soldiers based on a series of cognitive tests. After World War II, the scope of Military Psychology quickly expanded exponentially into areas such as leadership development, psychological warfare, and the enhancement of morale, motivation, resilience, and human factors, as military psychology with its sub-disciplines became integrated into national military forces to enhance the capabilities of the modern fighting soldier psychologically, physically and technologically. As the discipline matured, its present role can be described as to create soldiers whose skills sets greatly surpass those of their predecessors in meeting the ever-increasing complex demands of the modern battlefield.

In recent years, Afghanistan and Iraq illustrated that conventional warfare tactics are rendered all but obsolete by small numbers of militia fighters with improvised devices and even outdated weapons in a demonstration of human ingenuity trumping advanced technology and well-equipped, superior military forces that inevitably failed dismally to subdue insurgent opposition forces. Even the destruction of the Islamic State in Libya (ISIL) and the Islamic State in Syria (ISIS) forces serves to emphasise that the world can no longer afford to continue armed conflict as a means to settle territorial and international disagreements because these eventually become the rationalisation for ongoing, unnecessary conflict.

In its contribution to the defence role, alternatives to engagement in ill-advised military options must involve the strategic deployment of Military Psychology in a front-line capacity to research, comprehend and then, through diplomatic means, counter the psychological and ideological factors at play in creating the world's current conflict areas. If not, an even greater catastrophe will arise from ongoing ill-informed, ideology-driven international military interventions around the world.

Keywords: Military Psychology, regional conflicts, military intervention, conventional warfare, diplomacy

Introduction

The weapon systems created for the purpose of fighting the enemy in World War I caused terrible losses of human life on all sides of the conflict. However, World War I was also the event that gave birth to what became the modern application of psychology in war, and with that, created the professional field of Military Psychology. This article, drawing on relevant historic mileposts in the past century noted in a brief review of the literature, proposes that the development of a military psychology diplomatic role in conflict prevention is an imperative to curtail unnecessary war operations and their aftermath.

In its infancy, the role of Military Psychology started primarily with the selection, placement and training of soldiers in various capacities within the United States (US) Army. This selection process was the first of its kind applied at grand scale in a military force through the utilisation of a team of psychologists and their trained assistants to conduct screening tests (Army Alpha and Army Beta). In some cases these screening test results necessitated the use of more advanced cognitive (such as the Stanford–Binet scale) and mechanical skill tests (such as the Stenquist Skill Test) as the major tools to differentiate individual variance and usefulness to the American Army (Yerkes, 1921).

One could say that, in this process, Military Psychology advised and provided guidelines to both the military and the government on the role of human factors in warfare. As such, it performed as much a strategic as an operational and tactical role. The purpose of this position article is therefore to draw attention to the importance of the strategic role Military Psychology has to play in a world where conflict escalation has serious implications for the survival of the present order. In doing so, military psychologists, and in particular those in the academic realm, would be encouraged not only to do research, but also to develop applications at the strategic level to ensure a safer world for all.

Perhaps the oversight to understand the important strategic role Military Psychology does play arises from the lack of historical knowledge. For most psychology students, the early history of this discipline is limited to a paragraph or two on the first attempts at psychological mass testing, its application to people utilisation initially in war operations, and later within the broader economy and industry. This, at least, is the impression one gets on cursory reading of the now multiple books that include *Handbook of Military Psychology* (Gal & Mangelsdorf, 1991). The momentous work done by Yerkes and others, and from which modern-day Military Psychology evolved, is found only in very brief descriptions, such as in the foreword to the *Handbook of Military Psychology* (Gal & Mangelsdorff, 1991). When this topic is addressed in the literature by authors such as Rumsey (2012), it is mostly in the context of the evolution of enlisted selection and classification measures from the early days of Army Alpha and Beta in 1917 to the modern explorations into non-cognitive and skills tools (Rumsey, 2012).

This is perhaps the reason why, over many years of attending conferences and workshops on military psychology, this author often felt disheartened by just how little military psychology practitioners know about the beginnings of their specialised field in psychology and the vast domains of unexplored contributions it can make to the wellbeing of

humankind. This lack of knowledge about the important role of giving direction to military decision-makers – from its inception in 1917 to the end of World War II – caused Military Psychology to become fragmented. This rendered the discipline of Psychology useless in the important strategic role of limiting war by promoting deterrence in the strengthening of the implementation of diplomatic solutions (Gouws, 2015). Instead, the emphasis remains on creating better, smarter soldiers with scant attention to the human cost and effect on the lives of soldiers and civilians alike. This is demonstrated in an excellent book by Matthews (2020) where psychology is seen as revolutionising war by contributing to twenty-first-century military success. However, in terms of the demands placed on Military Psychology in modern warfare, only 20 of 300 pages are devoted to peace and ethics in war (Matthews, 2020).

The background to and history of how Army Alpha and Army Beta testing came about after the United States entered World War I in 1917, the creation of Military Psychology as a critical science in the act of war-making, and its implications in warfare application around the world, are seldom discussed. As a result, the imperative to avoid military conflict through psychological endeavour is not fully comprehended. Ideally, every military psychologist, before venturing into this intriguing field, should at least read the more than 900 pages of the report by Yerkes (1921) documenting this history. It is imperative to pursue a thorough understanding of this significant historical development in recruiting, selecting, training and placement of soldiers. This became the foundation, which rapidly expanded to include every aspect of military life in the US Army. It also spread to become an integral part of every military force across the globe. A word of caution: the historical timeframe within which Military Psychology was established, contains many aspects that would be considered inappropriate or outright condemnable by present-day standards. This does not detract from the many important contributions the original works made that resulted in the development and growth of Military Psychology over the past century.

The scope of Military Psychology expanded exponentially into the field of 'human engineering', based mostly on the original work done by Yerkes and his team between 1917 and 1919. As the field of Military Psychology continued to expand in the period between the world wars, it also found application in other countries. The application of military psychology principles by various nations and their military forces has both positive and negative implications. Pre-World War II Germany capitalised on the early American work as described by Yerkes (1941, pp. 206–207) in this quote:

Our Army assumed and maintained leadership in the application of psychology to military problems during World War I. But Germany also, although in less varied ways, improved and profited by adventures in human engineering. Banking on her experience, and having access to the official reports of psychological service in the Army of the United States, she rebuilt her military organization along psychological lines following the war. And when about 1935 opportunity appeared for vast expansive development of her military might, she quickly created an unprecedented type of organization for human engineering.

During the last five years the Nazi command has built its organization about and by means of the marshaled resources of experts in problems of personnel. Known as Military Psychologists, given dignity, status, and high responsibility in the Army, they actively and aggressively further human engineering. In wisdom of organization and effectiveness of utilization of psychological services, the Nazis already have achieved something that is entirely without parallel in military history. It is not without interest that what has happened in Germany is the logical sequel to the psychological and personnel services in our own Army during 1917–1918.

The Nazi Army has today a highly trained corps of psychologists who as personnel experts are serving in military research laboratories and elsewhere as needed...

Evidently the Nazis, in the interim between world wars, prepared with incomparable foresight, wisdom, and patience for the scientific management of military man-power. If their opponents are to compete with them, it must be either by equaling this development or by devising something superior. We face the fact that no army, except that of Nazi Germany, has other than fragmentary, meager, and inadequate provisions for the utilization and further development of human engineering.

As this elaborate quote indicates, when World War II started, Military Psychology was already an integral part of battlefield success or failure. The post-World War II era saw Military Psychology expanding rapidly into areas such as leadership development, psychological warfare, and the enhancement of morale, motivation, resilience and human factors (also known as ergonomics). During the Cold War, the mind-boggling arms race ravaged whole economies, negatively affecting small nations involved in regional conflicts by the field testing of new weapon systems against opposing forces (Gouws, 2012). Throughout these conflicts, Military Psychology and its sub-disciplines worked hand in hand with national military forces to enhance the capabilities of the modern fighting soldier psychologically, physically and technologically. As the discipline matured, its present role can perhaps be best described as the creation of soldiers whose skills sets surpass those of their predecessors in dealing with the ever-increasing complex demands of the modern battlefield (Gouws, 2013). Military Psychology therefore became primarily active at the tactical and operational levels, in the process expanding into other disciplines as well. Unfortunately, simultaneous with these huge strides towards becoming an integral part of just about every aspect of military endeavour, the multi-disciplinarity of Military Psychology added to its intradisciplinary fragmentation. This, in turn resulted in a loss of its capacity to be a force multiplier, simply for lack of coordination and cooperation between its fields of application in the broader rather than the specific military environment (Gouws, 2014).

While it is therefore imperative to understand how Military Psychology became such a force within the militaries of the world, it is also critical to evaluate the premise on which Military Psychology is based, namely that it is a force multiplier that empowers

the military organisation it serves to be successful in the conduct of war operations and warfare. This added a new area of focus in the global war on terror, described as "human performance optimisation" (HPO) (Matthews & Schnyer, 2019, book cover). However, this new area of focus does not include strategies to preserve peaceful coexistence around the world as an alternative to the rather ill-advised engagements in wars that cannot be won, and which are creating the foundation for even more devastating wars of the future (Gouws, 2019). In short, Military Psychology has a critical role to play in preventing belligerent personalities leading their countries into wars that, at best, serve no purpose except political expediency through ever-increasing unnecessary destruction of lives, property and societies.

It is therefore imperative for military psychologists to consider the degree to which the environment in which they are working may exhibit ample characteristics of potentially illegal and criminal settings. As controversial as this statement may appear, it is not new, and thus it behoves Military Psychology to take heed of the perspective of American sociologist, political scientist and historian, Charles Tilly (1985, p. 186):

To a larger degree, states that have come into being recently through decolonization or through reallocations of territory by dominant states have acquired their military organization from outside, without the same internal forging of mutual constraints between rulers and ruled. To the extent that outside states continue to supply military goods and expertise in return for commodities, military alliance or both, the new states harbor powerful, unconstrained organisations [sic] that easily overshadow all other organizations within their territories. To the extent that outside states guarantee their boundaries, the managers of those military organisations [sic] exercise extraordinary power within them. The advantages of military power become enormous, the incentives to seize power over the state as a whole by means of that advantage very strong. Despite the great place that war making occupied in the making of European states, the old national states of Europe almost never experienced the great disproportion between military organization and all other forms of organization that seems the fate of client states throughout the contemporary world. A century ago, Europeans might have congratulated themselves on the spread of civil government throughout the world. In our own time, the analogy between war making and state making, on the one hand, and organized crime, on the other, is becoming tragically apt.

Tilly's commentary that states and their militaries have more in common with organised crime than with democracy and related values reflects the failures of modern governments and their militaries to heed the dour warning issued by US President Dwight D Eisenhower in his farewell speech delivered to the American people on 17 January 1961. The warnings from this speech apply to every other nation on earth. However, through selective quoting of a single passage, the world is mostly only aware of Eisenhower's warning about the increasing power of the military—industrial complex. As a result, critically important aspects of this speech are ignored and therefore its lessons are lost to the collective psyche. Military Psychology, however, as an advisor to its military, must heed Eisenhower's

words in their context and application to preserve world peace. It is incumbent upon every Military Psychologist to study the entire contents of this speech carefully. Eisenhower (1960, pp. 1035–1040) implores the American people and their leaders to "use our power in the interests of world peace and human betterment" even as he warns about opposing ideologies that are threatening the wellbeing of the world. Eisenhower's remedy is the exercise of good judgement, militarily, economically, agriculturally and industrially, all balanced with the national welfare of the future for the nation as much as for the individuals comprising it. Aside from warning about the dangers of the military–industrial complex, Eisenhower also warns about the impact of the technological revolution on research and above all, "a government contract [that] becomes virtually a substitute for intellectual curiosity" (IV) by which "public policy could itself become the captive of a scientific-technological elite" (IV). Finally, Eisenhower implores the listener to his speech to heed a dire warning:

Another factor in maintaining balance involves the element of time. As we peer into society's future, we – you and I, and our government – must avoid the impulse to live only for today, plundering, for our own ease and convenience, the precious resources of tomorrow. We cannot mortgage the material assets of our grandchildren without risking the loss also of their political and spiritual heritage. We want democracy to survive for all generations to come, not to become the insolvent phantom of tomorrow (Eisenhower, 1961, n.p.).

Eisenhower's prophetic words originate from his insights gained from a lifetime spent serving his country as a soldier and politician. He addresses not only the military—industrial complex, but also science, education and business endeavours. These insights should be an encouragement to all peoples, not just the Americans, and especially to military psychologists to carry the ethical torch in a world where drastic changes in all spheres require a strong national defence, which includes the ability to exercise the tact and diplomacy needed to deal with external adversaries as much as with the enemy within society. The latter is aptly identified in Eisenhower's (1960, n.p.) speech as those who engage in the abuse of power for their own advantage. Against this background, Military Psychology has an obligation, in defence of the country it serves, to fulfil its professional duty enshrined in the age-old adage: *primum non nocere*.⁴

Towards a definition of military psychology

A review of the history of warfare and the role of Military Psychology during the past century demonstrates how the definition for this discipline, as understood by practitioners in this field, evolved. The practitioner-based definition does not necessarily reflect a definition of the profession, largely because a practitioner-based definition tends to reflect the work environment and its demands without necessarily considering important aspects such as the ethics and professional code of conduct of the profession. This point is illustrated in what was the generally accepted definition of Military Psychology by the end of the Cold War as we approached the end of the twentieth century:

Military psychology is defined in part by the context in which it is applied. It is the application of psychological principles and methods to the military operations. Military psychology is a broad and complex field; all specialities within psychology can be applied in military settings (Gal & Mangelsdorff, 1991, p. xxvi).

This definition went through a number of rapid mutations as various authors attempted to define Military Psychology in the first two decades of the twenty-first century, contributing to the broad field of application. What is more, the field evolved so rapidly that one author and editor, Christopher Cronin, changed the definition after a mere five years. In the first edition (Cronin, 1998, cited by Van Dyk, 2011, p. 114), the definition was merely, "Military Psychology is the application of psychological principles to the military environment regardless of who is involved or where the work is conducted". In the second edition (Cronin, 2003, cited by Gouws, 2020a, p. 51), the definition changes to: "a microcosm which embraces psychological disciplines and which affects almost all aspects of the military setting". A decade later, and consistent with the practitioner-defined model, Laurence and Matthews (2012, p. 6) formulated this definition:

Military psychology contributes to recruiting, training, socializing, assigning, employing, deploying, motivating, rewarding, maintaining, managing, integrating, retaining, transitioning, supporting, counseling, and healing military members.

However, it may be that there is a return to basics as, more recently, in reviewing the history of Military Psychology, Hacker Hughes et al. (2019, p. 1) merely stated, "Military psychology is a specialist discipline within applied psychology. It entails the application of psychological science to military operations, systems and personnel." This reflects a simpler approach, perhaps because, according to Kumar (2020, p. iii), "Military Psychology has become one of the world's fastest-growing disciplines with ever-emerging new applications of research and development."

Kumar noted that the breadth of this sub-discipline transcends the standard sub-disciplines of psychology, because it draws its practitioners not only from every one of the psychology specialties but also from other disciplines, such as engineering and human factors engineering, amongst others (Kumar, 2020). One could therefore say that this broad-based foundation on which Military Psychology rests, makes it a truly interdisciplinary applied science. What is more, according to Mukherjee and Kumar (2020, p. 3):

Military psychology has over the years established itself as a unique sub-discipline that determines its boundaries not through methodological concerns or subject content, but rather through its ability to optimally fulfil the requirements of the Armed Forces in specific contexts and under unique circumstances, making use of advancements in the broader discipline of psychology.

One could probably add to this statement, 'as well as the various other disciplines from which psychology draws', which would support the earlier statement that the practitioner-based definition does not necessarily reflect a definition of the profession.

Across the past 30 years, the changes in the practitioner-based definition of Military Psychology reflected not only the changes in understanding what military psychology is within the military setting, but also the context of the radical world changes that came about in warfare since the fall of the Berlin Wall in 1989. These changes should be seen as the natural evolution expected of any discipline, including those operating within the military realm. What stands out from the analysis of the focus change of these definitions is the degree to which, within a century, military psychology became an integral component of all military development, planning and operations. Kumar (2020, p. 3) quotes Matthews (2014) on how, as a whole, "the discipline of psychology had morphed into an inalienable entity within all areas of the military apparatus: Psychology is more relevant and viable today for the military, than at any point in history."

The implication from the change in practitioner-driven definitions and the broadening of the scope from which this discipline draws is that, as an offshoot of its mother science, Psychology, Military Psychology continues its evolution into a weaponised science. Keeping in mind the focus on human behaviour and performance in an ever-increasing technological world, Military Psychology may well become its own progenitor of a completely new science that powers the utilisation of artificial intelligence (AI) in applications such as unmanned aerial vehicles (UAV), remotely piloted aircraft (RPA) and machines making 'rational' decisions with no human intervention on the deployment of weapon systems that may even include nuclear, biological, and chemical warfare. This is an area of great concern given that some of this is already in place and utilised by the US military and selected allies in their military operations. Consequently, it is now, more than ever before, imperative for the profession of military psychology to remain ethical and moral in the conduct of its defence duties to the country in whose forces it serves. While ethical and moral behaviour go hand in hand in every profession, it should be more so in the military because of the serious ramifications that stem from all military actions (Gouws, 2021).

Against this background, the definitions adopted in the practitioner-defined roles and purposes of military psychology in a particular military setting, must be superseded by the universally accepted role and purpose of military psychology. This is already well described by national and international professional psychological associations. These professional associations generally define the focus of the psychology profession in all of its specialist applications with the paramount consideration to ensure the ethical and moral execution of psychological duties in all areas of application. As far as the military application is concerned, it is important to remember that Military Psychology historically came into its present existence in 1917 under the auspices of the American Psychological Association (APA). Robert Yerkes, who is credited as the 'father' of modern military psychology, was at the time also the president of the APA, and he acted fully within the prescriptive ethical and professional guidelines of the time, and with the approval of the APA Board (Yerkes, 1921).

Presently, the APA remains the world's largest and most influential psychological organisation in directing all of the professional endeavours of the discipline. It sets the standards not only for research, training and general practice of psychology, but also

for the moral and ethical aspirations, to which all psychologists are required to adhere. In order to understand the field of military psychology as a specialty area of general psychology fully, the APA definition of Psychology (APA, 2015, n.p) as published on their website, provides some core concepts:

Psychology is the study of the mind and behavior. The discipline embraces all aspects of the human experience – from the functions of the brain to the actions of nations, from child development to care for the aged. In every conceivable setting from scientific research centers to mental healthcare services, "the understanding of behavior" is the enterprise of psychologists.

Referencing this definition, the APA (2022, n.p.) articulates the role and purpose of psychology in its Mission Statement very clearly as "the betterment of society improving people's lives: Our mission is to promote the advancement, communication, and application of psychological science and knowledge to benefit society and improve lives".

The APA comprises 56 divisions. One of the founding divisions in 1944 was Division 19, the Society for Military Psychology. 'Div 19', as it is often referred to, articulates the role and purpose of Military Psychology (APA, 2020, n.p.) as:

Division 19: Society for Military Psychology encourages research and the application of psychological research to military problems. Members are military psychologists who serve diverse functions in settings including research activities, management, providing mental health services, teaching, consulting, work with Congressional committees, and advising senior military commands.

An important area of service to the country is summarised in the following statement, and it reflects the close ties Military Psychology has to both government and senior military command: "work with Congressional committees, and advising senior military commands" (APA, 2020, n.p).

There is no question that Military Psychology therefore is not just limited to the tactical and operational levels of warfare, but indeed should be involved in the strategic and political levels of warfare as well. Although not spelled out as such, this is reflected in its Vision on the Division 19 website (APA, 2022, n.p.): "To serve as the premier organisation for the advancement of the psychological study of military, national defense, and national security organizations".

This is further crystallised in the Strategic Plan (Society for Military Psychology, 2019, Introduction), defining the Mission and Values of Military Psychology, Division 19. While the Mission is to advance the practice of psychology in several ways within the military establishment, in the opinion of this author, the most important value is expressed as: "Wellbeing – We are dedicated to the promotion of the wellbeing of individuals and organizations." (APA, 2020, n.p.).

As these definitions and mission statements indicate, as an applied field of psychology, Military Psychology serves the military forces of its respective countries in order to promote the wellbeing of the country's people and organisations, in addition to the military. Within the military, the more obvious utilisation of Military Psychology is to serve the wellbeing of one's own forces, obviously not the opposing (enemy) forces. After all, military operations are not intended to serve the wellbeing of the intended targets. However, the pitfall in this thinking is illustrated, for example, by the marked shift during World War II from conventional military operations to aerial bombing campaigns targeting not only the enemy forces and installations, but also the civilian population in areas where enemy forces operated. Ironically, the bombing of particularly London – by Germany and later of German cities by the Allied Forces – had been counterproductive because neither party recognised the degree to which these actions reinforced resistance in the populations being bombed. Rather than capitulation, it forged endurance simply because of the unforeseen resilience of well-organised societies to withstand bombing without suffering either moral or economic collapse. Even though people suffered, the majority became used to it (Overy, 2013). There is therefore a fallacy in thinking that own forces are more capable of resisting sustained operations than one's enemy. It is this fallacy that inevitably caused much suffering with no change in eventual outcome, as illustrated in the disastrous endings of the Vietnam and Afghanistan wars.

In the aftermath of World War II, examples such as Vietnam and Afghanistan, but also Angola, South Africa, Namibia and other countries where people fought for freedom, illustrate the degree to which both Military Psychology and its application failed to grasp the most basic instinct of human behaviour designed to ensure survival: the ability to withstand incredible suffering and pain, both physical and emotional, when there is a potentially viable end-goal. The reason for this oversight is rather simple: as soon as military psychology becomes weaponised against a common enemy, it loses its ability to understand and thus predict human behaviour on both sides of the conflict. What is more, it loses its advisory role and fails as a science and a profession to live up to the ideals espoused in its professional mission and values.

The only antidote to the weaponisation of Military Psychology to the exclusion of its proper use (i.e. acting to the benefit of all parties involved in a given conflict), is to maintain a scientific focus on primarily human behaviour interpretation and the underlying motivational factors of the players involved in a developing conflict. This can only be achieved if Military Psychology, true to its own definitions of its role and purpose, advises senior military commanders and their governments on the various conflict exit and resolution strategies before any engagement in military operations. This advisory role requires that the practioners of military psychology assess both sides of the potential armed conflict, and then contribute strategies to reduce, rather than escalate, military conflict in a world where the perpetuation of armed conflict can no longer be condoned if humanity wants to survive as a species.

Human factor failures: Analysing the enemy within and without

Military Psychology, despite the important role it plays in the military organisation, fails as a science and as a profession when it does not engage in all four levels of warfare, serving at the tactical, the operational, the strategic and the political levels. This also requires a level of integration that serves to maintain a view of the whole picture in order to advise and recommend options to de-escalate and prevent unnecessary military conflict. It is this author's opinion, that the absence of the latter is why the same mistake of underestimating the human factor is continuously made, sadly resulting in an ever-escalating war effort with no real positive outcome for anybody. The events at the end of the Afghanistan war and the troop withdrawals in August 2021 more than serve to illustrate the point.

From another perspective, it is worth noting this author's observations of the prevailing South African situation in 1989–1990. Regardless of the reasons proffered for the government of the day's political decision to unban the 'terrorist organisations' – as they were then labelled – and to proceed to a fully democratic system based on one person, one vote in 1994, either inadvertently or by design, the country avoided the very chaos and bloodshed that erupted in Afghanistan after 20 years of war. Indeed, the Afghan experience should be a primary focus of study for Military Psychology on how not to get it so wrong when the war served no other purpose but to return the same entity to power. Conversely, despite the challenges faced in the current South African situation, it would be useful for Military Psychology to study the successes and failures of the South African solution after decades of conflict.

In the three decades since the fall of the Berlin Wall on 9 November 1989 (considered by many political commentators as the pivotal event that signalled the end of the Cold War), the twentieth-century conventional warfare paradigm of business as usual was rapidly replaced by a new paradigm: twenty-first-century unconventional warfare. While many commentators appear to approach this paradigm shift from primarily a threat to Western civilisation of autocratic communist rule in multiple countries, it is important to note that the 1990s brought not only the dissolution of the Soviet Union, but also riots and suppression of autocratic communist rule in multiple countries, amongst others, the Central Asian Republics. Some countries entered into self-determined splits, such as Czechoslovakia, while others split up in a brutal civil war, such as the Balkans. These events indeed set the stage for other groups with political aspirations to commence their own quests for independence and the power independence brings.

In the early 1990s, having developed an academic course in Military Psychology at the Faculty of Military Science, this author had postulated in frequent class discussions on the radical international changes at the end of the Cold War that, just as nature abhors a vacuum and will fill it, so the political landscape will change as mainstream ideologies and political posturing upend the existing order. This author further postulated that the implications of this paradigm shift will only be understood over time in the West when it may be too late. This was a logical development following the regional wars in which East and West were battling it out for supremacy in places such Angola in Southern Africa and Afghanistan on the Soviet Border. While the end of the Cold War had paved the way for

democracy in South Africa, many complications expected from the country's own violent history could have been managed if only people would reasonably have accommodated each other's expectations, but sadly, the goodwill that existed in South Africa in the first decade of the new dispensation was squandered to the disadvantage of all the country's people (Gouws, 2020b, pp. 193).

Against the background of rapid political change in countries outside of the immediate sphere of what was considered 'the West', as it was seen then, the impact of the end of the Cold War leaving a political and ideological vacuum in 'the East' was felt intensely in Europe. The attack on the United States on 11 September 2001 (since referenced as 9/11) was a result of this vacuum being filled by other forces. This was also the first time in its history that the United States experienced an attack of this magnitude by a rising and increasingly powerful insurgency-based Jihadist force conducting its 'war operations' on America's own territory. The inability of particularly the American government at the time to understand that this was no longer a state-driven action, but jihadist operations involving non-statutory forces, drawn from various population and ethnic groups, acting either as 'lone wolves' or organised militia groups, resulted in the ill-conceived occupation of Afghanistan with its disastrous consequences spanning 20 years. Meanwhile, the same jihadist zeal is still powered by, for the Jihadists, their reasonable rationalisation that it is their duty to destroy an aberrant modern civilisation in Europe, but particularly also in the United States, the latter being perceived as their main enemy.

Had Military Psychology – both as an academic discipline and in practice – not failed in its ability to advise against fighting a largely invisible enemy with traditional statutory military forces with their advanced technology, superior weapon systems, and huge troop numbers at the time, this catastrophe could have been avoided. Instead, the lessons learned in Vietnam only three decades earlier were forgotten and had to be relearned the hard way. Even new technologies designed for long-distance remote warfare were not sufficient to counter forces consisting of primarily civilian-based, non-statutory militia operating like phantoms in an undeveloped and inhospitable, harsh country. The failure of Military Psychology to exert its influence as it did in 1917 to serve in defence of the country at all levels of warfare originated in the fragmentation of Military Psychology, and then became entrenched with the dangerous practice of using a now-weaponised Military Psychology as a one-sided tool within the military apparatus.

Ironically, instead of recognising that a dramatic paradigm shift towards waging unconventional war took place, especially the US Military, supported by Military Psychology, rationalised this as a 'change in war tactics' to what was labelled as 'asymmetrical' or 'hybrid' warfare. While one can argue about the value, if any, of these labels, history is replete with examples of small, unconventional forces taking on big, conventional forces and even their multiple allies – and winning the battles. As Afghanistan and Iraq have illustrated, small numbers of militia fighters with improvised devices and even outdated weapon systems, rendered conventional war operations by mighty modern armies, including the United States, all but obsolete. In the quest for survival, human ingenuity will always trump superior technology and even superior numbers, as often illustrated in the history of warfare. Vietnam clearly brought this

home to the American people but, due to political arrogance, leaders chose to ignore this basic truth. This resulted in a very expensive lesson from which the United States has still not recovered. Afghanistan is now added to this list with the impact thereof lasting for decades to come.

The British Empire learned these lessons in various places around the globe. An example is the British–South African War of 1899–1902, when a relatively small militia consisting of mostly local farmers successfully resisted the mighty British Army, first by conventional and then by guerrilla warfare. The stalemate between these forces was only broken when the British decided to target civilians so as to deny the fighting forces their local support. In a 'scorched earth' policy, the British burned down the country-side and forced women, children, elderly and non-combatants into a series of concentration camps, where many thousands perished. Although the British won the war, the emotional impact of this destruction on the country and all of its peoples still reverberates in some political hallways to this day. As such, the enemy from within, making war decisions, is as strong as the enemy from without, because they feed on each other's whims.

In 2021, refugee camps in parts of Africa especially still overflow with civilians fleeing local conflicts. While this situation is no different today from those left destitute by earlier wars across the centuries, the main difference is that many refugees today find refuge in the very countries that were involved in the conflict in the refugees' countries. For example, Canada is accepting 40 000 refugees from Afghanistan (The Kabul Times, 2021); yet, through its involvement in that war was partly responsible for the refugee crisis. Government communiques convey an obligation to accommodate at least those people who collaborated with Canada during the war (Global News, 2021).

However, what no one talks about, is that for these resettled refugees, the challenges of adjusting to a new culture, a new language and, above all, failed attempts or limited opportunities at procuring work to create an income to afford a place to live and bring up children, add to their already overwhelming frustrations. This in turn causes the euphemistically referred to 'radicalisation' of their young people who are merely wanting a better life than what they are being offered. The process by which this takes place and how the very people intent on helping refugees are creating the future conflict from amongst those they are trying to help, is well documented. It is also very well described from a first-hand experience depicting the disastrous occupation of Iraq in a book every military psychologist should read (see Kilcullen, 2009).

In order to understand both the enemy from without as well as the enemy from within, it is imperative – in Military Psychology terms – to comprehend the complexity of situations where the imbedding of non-statutory forces or insurgents amongst civilians has resulted in many civilians in these conflict zones losing their lives or being seriously injured, as well as losing their homes and/or family members. In the end, it does not matter who does the damage; the occupying force will primarily be held accountable. Not surprisingly, when civilians are caught in the crossfire, they exhibit particular negative reactions towards the occupying or even peacekeeping forces they hold responsible for the 'collateral damage'. Such events not only strengthen the resolve to resist and fight

back, but also expand the ranks of the insurgents and their resistance movements, as was clearly demonstrated in the South African situation during the 1980s especially. What is more, the same process plays out in countries where displaced persons feel they have no other option but to protest the inequalities they experience in the resettled settings.

Closer to home, South Africans learned little if anything from how the country experienced this phenomenon in a very personal way in especially the 1970s and 1980s. The impact of political policies based on ideological hardliner folly deprived many people of a decent life. The consequences from these events still reverberate through the country and its peoples. Much of this could have been avoided if only those involved in Military Psychology had taken the initiative to research the multitude of psychological motives that played a major role on all sides in the development and continuation of the South African conflict. The data could have been used to advise the military and political leadership on the obvious alternatives that were ripe for the picking. However, as in the rest of the world, this requirement for a thorough analysis of the motives on all sides involved in a particular conflict was not identified nor acted upon, even though it was the most important contribution any profession could make to the defence of a country with so much human potential. Sadly, it seems as if history is about to repeat itself as the country struggles with considerable challenges and ongoing divisions between population groups.

For South Africa – as for the rest of our world – it is imperative that the discipline and practice of Military Psychology should analyse the current conflict potential inside the country as much as outside of it. This analysis should serve to identify the ways to defuse conflict as early as possible and to prevent a catastrophe arising from ill-informed intervention decisions directed at largely illusory and/or invisible opponents. The failure of Military Psychology in the past 30 years to participate in the opportunities to unite nations and peoples after the end of the Cold War is unacceptable, albeit mostly attributable to the hesitancy and unwillingness to risk censure for legitimate and scientifically based assessment of senior military and political leaders whose actions serve as the enemy within.

The role of Military Psychology in advising military leadership and government decision-makers on conflict resolution and prevention of catastrophic, drawn-out wars, retaliatory strikes and upheaval of the civilian population, including scores of refugees swamping refugee camps as well as neighbouring and other countries, can be of incalculable value for a safe, clean and peaceful world. Imagine a world where 20 years ago military psychologists, using the persuasive techniques of 1917, could have convinced the American government and its allies not to invade either Afghanistan or Iraq, but instead to pursue a different option to bring those responsible for the 9/11 attacks to justice. Not only would it have reduced the considerable human catastrophes in both those countries and the loss of soldiers' lives and health, but it would also have reduced the climate change footprint and soil and water contamination caused by the explosion of many thousands of tons of military ordnance. The trillions of dollars wasted on a fruitless, ill-conceived war could have created and sustained infrastructure across the globe that would have improved the lives of all.

However, attempting to determine the actual cost of even just the war in Afghanistan is an incredibly difficult task because of security classifications on the costs and ordnance expended on many of the military operations. The accurate cost in loss of life, the wounded, the damage to or loss of property and the disruption of fragile economic stability will probably never be known. As far as Afghanistan is concerned, if recent figures (updated in August 2021) compiled by Al Jazeera journalist Mohammed Haddad (2021) are only 50% accurate, these costs are terrifying in their long-term implications, not even taking into account the ecological impact of the countless tons of ordnance dispersed across the country.

Diplomatic failures: The war that will end war - a century later

As argued in *The war that will end war* (Wells, 1914), World War I was supposed to be the war that will end all wars. What started as an expression of idealism became bitter disappointment only two decades later, when the mass slaughter of World War I was followed by the even greater casualties of World War II. Even so, aside from Wells' writings on the topic, it should be of particular interest to military psychologists to read a review article of 13 studies dealing with the effects of war on psychology during the period 1914–1916, and comparing that with the prevailing status of war today. Then, as now, there has been a continuous analysis of how to possibly avoid wars, including studying the conditions and the mental processes that give rise to war. It is therefore somewhat disheartening how, for a century, there has been little if any change in the bellicose spirit that enchants whole nations to engage in war even when other more peaceful conflict resolution options are available. The following quote illustrates how the same concerns about war engagement remained unchanged for more than a century (Wright, 1916, p. 462–466):

The question whether wars can be avoided in the future has prompted thoughtful analysis of the mental processes that give rise to war and of possible means for their suppression or control.

Crowds of pacifists exercise little influence in war time, and democratically governed nations are as much addicted to war as others. Wars are not caused by ideals, though a war becomes largely a conflict between ideals, and the latter may help determine the outcome. The only kind of force that could bring lasting peace to Europe would be the rise of an international "overcrowd" led by an overmastering ideal more potent with populations than any which single nations can exert ... Hostile impulses are nourished in a nation during peace through economic competition, the *Borse*, duelling, rivalry between officials, teachers, scholars, artists, theologians, *et al.*

When war is threatened the influence of those educated in science, philosophy, and art may be on the side of peace, but it is weak in opposition to rulers, politicians, diplomats, officers, journalists, and others who find war to their personal advantage. If a proposed war appears to be defensive, patriotic and other motives of a social and moral character are also potent. Hobhouse (4)

believes that if peace at the end of the present war in Europe could be settled on the basis of the right of each population to choose its own allegiance or independence, carrying out Green's view that "will and not force is the true basis of the state," permanent peace might ensue ... The danger is that settlement will not come on a rational basis, but "in the rough and tumble of forces, or through a give and take imposed at the last by common exhaustion," with desires for *revanche* and a continued armed truce as consequences.

The above quote demonstrates that, regardless of resistance to war engagement, political messaging plays an overriding role in countries deciding to go to war. These decisions are not made rationally, except for the advantage they hold for the decision-maker(s). A cursory review of 21st Century politics, especially after 9/11, shows that the same ideological rhetoric that resulted in the Cold War applies. The only difference is the use of new terminology, e.g., hybrid or asymmetric war as rationalisation for 'the War on Terror'. War is driven by personalities and belief systems inherent to the political and religious heritage of nations. At their core, conflicts in various parts of the world therefore consist of similar yet opposing belief systems. These can destroy the world as we know it – not because of their inherent power base, but because of the immense firepower and advanced weapons systems that are continuously being developed by superpowers and sold to surrogate powers.

The threat posed globally and nationally by the continuing arms races between countries expanded exponentially and now include non-statutory, insurgent forces. According to UN Resident Correspondent and CBS News foreign affairs analyst, Pamela Falk, there are so many radical groups operating in the world today that the deployment of a so-called 'dirty bomb' at some point in the very near future is a given; the only unknown is the "when" and "where" (Falk, 2017, n.p.).

Statutory military and intelligence organisations do not have the means to prevent this from happening. Yet, national leaders from especially powerful 'Western' countries continue to make derogatory, threatening statements to leaders of countries they oppose on ideological grounds, rather than engage in conciliatory diplomacy to find solutions despite differing ideologies. This is doable, as for example, illustrated by the Reagan–Gorbachev meetings in the late 1980s, which facilitated the end of the Cold War. It is chilling, however, to what degree old rhetoric is resurfacing and rekindling the Cold War bellicose spirit. At the time of writing, the world is on edge about retaliatory threats for potential Russian intervention in Ukraine bouncing back and forth between the United States, the EU and NATO on the one hand, and the Russian Federation on the other, with diplomatic efforts to prevent the conflict from escalating holding little promise. At the time of review of this article, a mere few months later, the war materialised. As this war continues, there is a paucity of reliable reporting on all sides as accusations are levelled at each other by the opposing sides.

In this context, military psychologists also have an obligation, in protecting the country they serve, to comprehend the motives behind the rhetoric of their own leaders and advise them on the preferable diplomatic rather than military confrontational options for conflict resolution. Put another way, the military constitutionally obeys the government of the day by protecting the integrity of the borders and interests of the country. However, the military also has an obligation to disobey illegal orders from political masters (established in what became known as the Nurnberg Defence (see *Oxford Reference*, n.d.a), where culpability for illegal actions cannot be delegated upwards) if such orders are not based on international and national legal principles. Military leaders who fail to do so, may find themselves facing sanctions they did not foresee. One example is the United Kingdom's Iraq Inquiry set up in 2009 (United Kingdom Government, 2016) to look at decision-making in relation to the invasion of Iraq. Chaired by Sir John Chilcot, it found that the invasion of Iraq was based on the execution of illegal political orders. The most likely implication this holds for the future is that senior military leaders may well be held accountable for following such orders, as had happened at Nurnberg.

The survival of humankind – and for that matter, any country – depends not on the indiscriminate use of force in pursuit of political objectives, but on knowledge of the conflict-generating belief systems that may lead to unnecessary and ill-advised wars. It is the task of Military Psychology to obtain this knowledge by its focused research and analysis of the prevailing rhetoric and belief systems, and then to create the tools whereby this can be countered by equally well-placed counter-arguments. In short, more than ever before, the militaries of the world will have to engage in psychologically based conflict de-escalation operations not only to support the necessary military operations against the ever-increasing invisible opposition forces operating in regional conflicts, but also to prevent becoming involved in them in the first place.

In the current world climate of division and fringe movements becoming more powerful, there is no longer any excuse for powerful and influential armed forces not to be instrumental in identifying the universal and acceptable belief systems that unite people in peaceful resolution. When all else fails, Military Psychology should support military engagement designed to de-escalate violent regional conflict.

This means that not only should Military Psychology be advising against the excesses of the military–industrial complex Eisenhower warned about (see Yale Law School, 1961), but it should also warn about the dangers of seeing war as the only viable solution to conflict (by militarists, politicians, economists, bureaucrats and others – even academics). This is articulated very eloquently by the American political scientist and historian, Michael Parenti (2014, n.p.):

Through much of history the abnormal has been the norm. This is a paradox to which we should attend. Aberrations, so plentiful as to form a terrible normality of their own, descend upon us with frightful consistency.

The brutish vagaries of plutocracy are not the product of particular personalities but of systemic interests.

Our various leaders are well informed, not deluded. They come from different regions and different families, and have different personalities, yet they pursue pretty much the same policies on behalf of the same plutocracy.

So it is not enough to denounce atrocities and wars, we also must understand who propagates them and who benefits. We have to ask why violence and deception are constant ingredients.

Unintended consequences and other oddities do arise in worldly affairs but we also must take account of interest-driven rational intentions. More often than not, the aberrations – be they wars, market crashes, famines, individual assassinations or mass killings – take shape because those at the top are pursuing gainful expropriation. Many may suffer and perish but somebody somewhere is benefiting boundlessly.

Knowing your enemies and what they are capable of doing is the first step toward effective opposition. The world becomes less of a horrific puzzlement. We can only resist these global (and local) perpetrators when we see who they are and what they are doing to us and our sacred environment.

What is of particular concern is that even a cursory review of daily news statements indicates that, in addition to fringe groups, established and legitimate political and military entities alike appear to engage in a variety of actions that are designed to perpetuate regional war operations simply because it is politically convenient to do so. This is aptly illustrated in the following quote from an opinion article on Canada's involvement in the war in Afghanistan, written by retired senior Canadian diplomat, Gar Pardy (2015, n.p.):

Unfortunately there is one aspect of the war that is being ignored, and as with most modern wars it is the most important. No one, especially the militaries involved, has offered any assessment of success in understandable terms of what this war will achieve. Most will only say that a conclusion is years away, which in today's world is no answer whatsoever.

We have dressed for a ball that we do not understand, and invited ourselves, knowing we have no capability of influencing the outcome. Instead, leaders who should know better see the war as a means of scratching a small itch in the national body politic-fear of an imprecise national security threat. In response, they send our soldiers into harm's way, and this even before they have satisfactorily dealt with the wounded from the last war.

We do not have to go back to Vietnam for a detailed understanding of the futility of fighting forces on their own land. Eleven years of fighting the Afghans with overwhelming force and money, the creation of comprehensive new security and military forces, the fostering of civilian political measures of electoral politics and the holding of elections and the creation of a hothouse corrupt economy based on foreign money have done absolutely nothing to change anything of any significance in that ancient land.

Part of the reason for the entrenchment of war as a solution to supposedly irreconcilable differences between countries and factions, may be found in the work done by prominent historians. For example, even a brief look at historical data discussed by Israeli historian

Yuval Harari (2014, p. 60) suggests that humankind throughout its existence, at least as *Homo sapiens*, engaged in bloody war and genocide for probably the past 30 000 years. However, these conflicts became particularly bloody in the last 12 000 years or so. Harari further postulates that war and genocide were as violent then as it was in the twentieth century (p. 60).

An American historian, Ian Morris (2014), on the other hand postulates that, in the past millennia, war had played a positive rather than negative role in advancing society:

War is mass murder, and yet, in perhaps the greatest paradox in history, war has nevertheless been the undertaker's worst enemy. Contrary to what the song says, war *has* been good for something: over the long run, it has made humanity safer and richer. War is hell, but – again over the long run – the alternatives would have been worse (p. 7) (emphasis in the original).

What has made the world so much safer is war itself (p. 8).

However, in spite of the fact that Morris sees war as positive development in the history of humankind, he also predicted that the next half century or so could be the most dangerous of all times (p. 8). As much as Morris may explain the positive benefits of war, the rationalisations that arise from his comparative statistics therefore do not negate in any way the significant numbers of lives destroyed and futures crushed in the ongoing conflicts around the globe. Even Morris acknowledges that the nuclear bombing of Hiroshima and Nagasaki killed more people than what was probably the entire world's human population 50 000 years ago (p. 8). These numbers are both frightening and earthshattering when one starts to contemplate the magnitude of the human suffering that takes place as a result of failed diplomacy seriously.

Therefore, there can be no question that this is a critical time in which both the discipline and the application of Military Psychology must become a radical change agent in the area of military conflict management and resolution. It is imperative to find an alternative solution to violent conflict for, if the trends as identified across history are any indication of what awaits us, it may well be that humankind will destroy itself even before the current century reaches its end. In preventing this catastrophe, Military Psychology has a very important role to play and indeed, as the principal science that studies human needs, actions, emotions and behaviour in military and conflict contexts, has an obligation to heed the existence of the gap in knowledge that Harari (2014, p. 296) warned about:

Most history books focus on the ideas of great thinkers, the bravery of warriors, the chastity of saints and the creativity of artists. There is much to tell about the weaving and unravelling of social structures, about the rise and fall of empires, about the discovery and spread of technologies. Yet they say nothing about how all this influence the happiness and suffering of individuals. This is the biggest lacuna in our understanding of history. We had better start filling it.

Leadership failures: The pathology conundrum

In order to understand the impact of all human actions in the world we inhabit adequately, Military Psychology must derive its knowledge from investigating and analysing both the visible, tangible things around us, and from that anticipate the results and outcomes of alternative actions. This requires gaining an understanding of the whole spectrum of living as human beings at both the conscious and not-so-conscious (e.g. hidden agenda and manipulation) levels. Only then would Military Psychology be able to contribute to the knowledge base required to manage conflict and armed forces operations in the coming decades.

However, to be doing this, Military Psychology will have to pursue a very necessary pathway, which is fraught with pitfalls when analysing the political motives underlying conflict engagement. After all, the military serves the government of the day and is expected to obey lawful orders. The test of whether an order is lawful or not is based on knowledge of the big picture, and not only on certain segments of it. Full knowledge can only be derived from looking at the political rationalisations put forward by political leaders as well as by studying and understanding the role of the individual and collective psyches of political and military entities in leadership positions who are driving conflict initiation and perpetuation on all sides of the proverbial red line. This is an urgent necessity, given the blunt and rather shocking perspective on political leadership offered by a World War II psychiatrist and later assessor of Nazi-accused, Maurice N Walsh (1971, p. 6):

It is now quite universally recognised that the superficial and naive statement that war maintains the balance of nature in humans in the same way that predators do in the animal world is a myth, since the present studies show that the expression of naked aggression, manifested through the destruction of other human beings, is largely led and initiated by psychologically abnormal individuals.

One can say with certainty that the time-honoured human habit, unfortunately not rare, of placing nations under the control of psychologically abnormal, aggressively perverted persons, together with the modern factor of the everincreasing new invention of massive weapons of destruction, is certain to be suicidal for the human race unless interrupted. This tendency of societies to select psychiatrically and pathologically charismatic abnormal individuals, of the nature of aggressive perverts, to control nations and to lead them into war indicates that intra-specific aggression in the human race has gotten out of hand and has become a serious threat to the survival of the species. This can only mean that natural selection in the human is being interfered with, and that unconscious forces, basically responsible for the existence of aggressive perversions as well as for the uncanny ability of such pathologically charismatic individuals to seduce normal human beings into selecting them as leaders and following them to death, can effectively upset the balance of human nature and can brutalize and destroy human beings en masse with enormous damage to the painfully attained process of civilisation.

If ever there was a case to be made for military psychologists to study the political pronouncements, beliefs and actions of political leaders that promote war over diplomacy, this quote provides it. The role of the military is to defend the country it serves against outside attacks. Operating in other countries when no war was declared and approved by the international community through bodies such as the United Nations is pure aggression and illegal. Hence, military leadership, armed with the knowledge generated from these Military Psychology studies, in defence of their countries, should instruct government leaders about the threat posed by their actions, as described in the above statement by Walsh. It is important to note, now more than ever before, how this tendency of voters – regardless of the political system – to place aggressive and pathological leaders in charge of their nations, continues to perpetuate those factors within the individual and the collective psyches of particular groups of humans that opt to engage in war decisions and actions.

While some political leaders are more prone than others to engage in war, in the game of politics it is not uncommon for most politicians to act with less restraint than expected, because, as illustrated in a quote attributed to the English publisher, Ernst Benn, "[p] olitics is the art of looking for trouble, finding it everywhere, diagnosing it wrongly and applying unsuitable remedies" (Radcliffe, 2012, p. 324).

In defence of the country, the military should therefore also demonstrate their commitment to finding peaceful solutions first through its expressed unwillingness to engage in aggressive war operations,. This can only be achieved by developing an informed understanding of the human drives, fears and anxieties that influence political and military leaders' perceptions and their reactions to given situations. This in turn would identify the psychological drives behind decisions reached on crucial issues, including regional war engagement and disengagement. It is therefore imperative that military psychologists not only assess opposition and rival leadership but also do a similar analysis of own and allied leadership thinking. Such analysis would provide the data necessary to assess the viability of the decision-making process about potential military operations. In addition, it would identify if envisaged military operations are carried out without a clear mandate, with an ill-defined military objective, and/or lacking a viable exit strategy. Most important, military psychologists should analyse the available options to support and bring about alternative solutions through diplomatic engagement, as non-negotiable imperatives before any military action would even be considered by top military leaders. This is doable in much the same way as Yerkes and his team did a century ago.

Opting for alternatives to military engagement must be the first course of action. Even in the twenty-first century, most of these violent and bloody military actions are still based on mythical and imaginary creations of the individual and the collective minds of political leaders who choose to engage rather than disengage the military to pursue war rather than peace. This was very bluntly articulated almost six decades ago by the late Senator J William Fulbright (1966):

The more I puzzle over the great wars of history, the more I am inclined to the view that the causes attributed to them – territory, markets, resources, the

defense or perpetuation of great principles – were not the root causes at all but rather explanations or excuses for certain unfathomable drives of human nature. For lack of a clear and precise understanding of exactly what these motives are, I refer to them as the "arrogance of power" – as a psychological need that nations seem to have in order to prove that they are bigger, better, or stronger than other nations. Implicit in this drive is the assumption, even on the part of normally peaceful nations, that force is the ultimate proof of superiority – that when a nation shows that it has the stronger army, it is also proving that it has better people, better institutions, better principles, and, in general, a better civilization (p. 5).

Fulbright's indictment of political leadership highlights the stark contrast in Harari's (2014) excellent example of a political leader who had opted *not* to use the force and power of the state and engage in bloody internal conflict:

Had the last Soviet ruler, Mikhail Gorbachev, given the order, the Red Army would have opened fired on the subjugated masses.

Yet, the Soviet elite, and the Communist regimes through most of eastern Europe (Romania and Serbia were the exceptions), chose not to use even a tiny fraction of its military power. When its members realised that Communism was bankrupt, they renounced force, admitted their failure, packed their suitcases and went home. Gorbachev and his colleagues gave up without a struggle not only the Soviet conquests of World War Two, but also the much older tsarist conquests in the Baltic, the Ukraine, the Caucasus and Central Asia. It is chilling to contemplate what may have happened if Gorbachev had behaved like the Serbian leadership – or like the French in Algeria (pp. 269–270).

While one would wish that this would be the rule and not the exception, even a cursory reading of the rather excellent historic assessment by Canadian historian, Margaret MacMillan (2013) of the factors that resulted in World War I, indicates the almost unbelievable psychopathological actions by political, military and bureaucratic decision-makers that brought about a perception of threats posed by leaders of other countries that made war inevitable. Careful reading of MacMillan's personality descriptions compiled from historic documents on most of these decision-makers suggests that significant psychological factors, combined with particular personality traits, were involved in the decision-making processes of those leaders that fuelled the pursuit of these conflict strategies, rather than finding alternative solutions. It is imperative that military psychologists understand and also address these very serious threats posed to the security of their own and other countries.

The cost of human suffering incurred during World Wars I and II remains incalculable. This human suffering, sadly, continues to be multiplied today in regional conflicts on particularly the African continent, but also in other parts of the world, most notably the Middle East, with the economies of small countries collapsing through the deliberate and mostly illegal interference of outside powers. Where three decades ago the impact

of these actions went mostly unnoticed because of media limitations, in today's world, connected by technology such as unlimited access to the internet available to anyone with a mobile phone and the ability to make a video, such actions are broadcast to the world. This means that the previously well-used rationalisation that minimised these sufferings with euphemisms like 'collateral damage' is no longer effective. Through the actions of outside actors, often occupying forces, the economic and social disintegration of a country is vividly displayed for all to see, even when described as 'collateral damage'.

This extensive coverage of human suffering provides the impetus that could serve to call political and other decision-makers on military operations to account in the future. What is more, the influx of refugees that descended on countries in especially Europe over the past two decades will serve to keep these stories alive as testimony of the misery heaped upon them, with dire consequences in the future. This is because modern military operations always bring misery to especially civilian populations, who suffer fates, such as loss of life and limb, family and property. Fleeing their war-ravaged regions and countries further reduces their quality of life to virtually nothing. In turn, this creates the dissatisfaction and hopelessness, stemming from nothing more to lose, that lays the foundation for future conflicts based on centuries-old hatred for wrongs done to them. A poignant example from recent history is the 1999 war between Serbia and Kosovo, which was in retaliation for the Serbian loss of the Battle of Kosovo on 28 June 1389, when Ottoman Turks defeated the Serbian army of Prince Lazar. According to Longworth (1999), it was at the 600th commemoration of this battle that Slobodan Milosevic ignited the nationalistic fires that eventually destroyed Yugoslavia.

Ironically, in the Middle East, and in particular in Iraq and surrounding countries, very similar circumstances gave rise to the formation of the Islamic State (ISIS) and the subsequent horrors perpetrated by it. Ironically, the seed for the creation of ISIS was sown on 5 February 2003, when then US Secretary of State, Colin Powell, in his address to the United Nations to make the case for the war in Iraq, mistakenly identified the unknown violent criminal and thug, Abu Musab al-Zarqawi, as the crucial link between al-Qaeda and the regime of Saddam Hussein. In truth, al-Zarqawi was deemed an unacceptable person even by Usama bin Laden, the founder of al-Qaeda, because of his extreme views and violence (Gouws, 2016). Such is the impact of political lies and machinations for political gain. Yet, even as ISIS was conquering territory, the general political message espoused around the world remained that these nations were not engaging in all-out war; instead, they were only serving peace through engagement in 'regional conflicts'. However, according to the Defence Review (Armed Conflict Location & Event Data Project [ACLED], 2022), the African continent experienced more than 94 000 armed conflict events between 1997 and 2014. While this number is staggering, it becomes incomprehensible when one considers the information offered on the website of the Armed Conflict Location & Event Data Project (ACLED, 2022). Even with the restrictions of a worldwide pandemic, the number of political violence events, fatalities, riots, battles, explosions and violence against civilians are considerable.

In order to gain an understanding of the human cost of these events, military psychologists should regularly review the data offered by this and similar projects. There is an ever-

present danger that these regional conflicts could escalate and become the source of major conventional conflict, primarily instigated and waged by smaller groups. What should be of great concern is that the apparent 'destroyed Islamic State' again appears to become a significant threat, evidenced by it actions in Palma, Northern Mozambique, in 2021 (Rédaction Africanews, 2021). Furthermore, while governments in primarily Western countries attempt to counter 'radicalisation' domestically and abroad, they conveniently continue to overlook the fact that the disgruntled and unhappy populations serving as militant recruitment sources came about precisely because these governments created the circumstances from which this became possible.

Indeed, all of these 'small wars' form an integral part of a new type of world war, as explained by Kilcullen (2009). As one of the architects of the 2007 'surge' counterinsurgency strategy in Iraq, Kilcullen came to understand intimately how legitimate grievances raised by people instead of being addressed, resulted in them being misidentified as 'insurgents'. Their only option in the end was to become embroiled in counteractions. These cumulatively served as the core from which actual radicals generated a unified worldwide terror network. From even a basic understanding of human behaviour, one can deduct from reading Kilcullen's (2009) monumental work, *The accidental guerrilla*, that the millions of displaced persons who found refuge in Europe from two decades of ill-conceived and brutally executed 'allied military operations' in their countries of origin, would include those with legitimate reasons to actively seek revenge for the losses they had suffered. The vicious cycle of 'an-eye-for-an-eye' and 'a-tooth-for-a-tooth' therefore continues even though it could have been prevented.

Clearly, against this background, military psychologists have a very important role to play in advising military leadership during the strategic, operational and tactical planning cycles, and most importantly, also in the execution of military actions at the various command levels and the to-be-expected psychological impact of these operations regardless of command level. This is particularly important in those theatres where specific cultural factors must be considered carefully, especially with regard to winning the hearts and minds of the people who will be affected by these essentially foreign military operations on their soil.

Multiple authors depict the allied military operations in Iraq and Afghanistan as a massive failure across two decades of military operations in these countries (see for example Dyer, 2019; Haddad, 2021). However, reading between the lines, Kilcullen (2009) attributes this to the absence of psychological common sense, which brought about the overall failure of the Americans and their allies to bring about stability and prosperity, not only in these two countries, but also in every other country where they have been militarily engaged in what should have been avoidable wars. Indeed, after two decades in Afghanistan, nothing changed politically or ideologically. Dyer wrote in January 2019 (n.p.), almost two years before the disastrous US withdrawal in August 2021:

"The Taliban have committed, to our satisfaction, to do what is necessary that would prevent Afghanistan from ever becoming a platform for international terrorist groups or individuals," said Zalmay Khalilzad, the US official in

charge of Afghanistan peace talks, on Tuesday. So why didn't the United States have this discussion with the Taliban seventeen years ago, in October 2001?

The American representative has just spent six days negotiating with the Taliban in Qatar, and he has their promise that they will never let terrorist groups like al-Qaeda or Islamic State use Afghanistan as a base. The Taliban are Islamists and nationalists (despite the incompatibility of these two principles), but they were never international terrorists.

There is no question that the allied militaries share complicity with their political leadership for failing to comprehend the underlying, pathological drives in the psyches of their own nation, their own leaders, and the people they represent. The only remedy for this pathological war-mongering is for military psychologists to include at least a component of analysis of the psychological factors playing a role in the decision-making process of their own forces and government to engage militarily in a particular conflict arena. Based on these findings, military psychologists should play a decisive role in advising military and political leaders of the underlying psychological factors that are driving unnecessary and even illegal political decisions to engage the military in both aggressive and defensive wars.

Military failure: The psychological impact of (illegal) war operations on own forces

Throughout the history of warfare, conflict is dependent on the readiness of one group of people (say group A, mostly a nation or subgroup of a nationality) to engage in physical conflict with another group (say group B). This requires the dissemination of a consensus message from group A leadership (mostly political or ideological in nature) that the group B state poses a dangerous threat to the continued existence of group A's present order and its members. Group B can therefore not be allowed to continue to function in its present existence. The argument is that to ensure the future safety of all, group B must be neutralised by force and replaced with an acceptable alternative (note the absence of concern for the lives of the people so affected). The most effective way to convince one's own people (group A) is by stereotyping oneself in an acceptable and the other (group B) in an unacceptable manner. This makes the loss of life an acceptable consequence (and justified by the people comprising group B's choice to live in their pariah state). The same process is applied when creating allies to act jointly against another state or groups of states. In psychology, this process of creating beliefs that are associated with categories of people or social groups based on prejudice, is called stereotyping (see Allport, 1954). These stereotypes are "primarily images within a category invoked by an individual to justify either love-prejudice or hate-prejudice" (Allport, 1954, p.189).

Stereotypes can thus be both beneficial and dangerous, but politically – when used in either capacity – they are particularly useful as tools to direct and channel human behaviour (see Eysenck, 1953). In understanding the benefits and dangers of stereotypes when used in ideological and political messaging, the 1953 work of one of the past century's oft-quoted psychologists, Hans Eysenck, not only on understanding intelligence and personality,

but also on other critical issues in psychology, is noteworthy. Judged by modern-day standards, some of his work has recently been considered "incompatible with modern clinical science" by some reviewers of his work (Marks 2019, pp. 409–420). Eysenck was nevertheless a towering figure in the field at the time. His description of the role of stereotypes remains valid today (see Eysenck, 1953). Applied to Military Psychology – and in particular how stereotyping serves to further war and conflict – the following quote, although elaborate, explains the role of stereotyping as still manifested in the world today:

Stereotyped ways of looking at things have their obvious dangers. They tend to be maladaptive and may lead to disaster if taken seriously ... Stereotypes also have obvious advantages. They give us an ordered, more or less consistent picture of the world to which our habits, tastes, capacities, comforts, and hopes have adjusted themselves. They may not be a complete picture of the world but they are a picture of a possible world to which we are adapted. In that world people and things have their well-known place and do certain expected things. We feel at home there; we fit; we are members; we know the way around. There we find the charm of the familiar, the normal, the dependable; its grooves and shapes are where we are accustomed to find them.

Perhaps the most obvious field in which stereotyped attitudes are found is that of national differences. It is not, however, the only one. We all have mental images of certain groups of people which make us endow these groups with certain uniform characteristics...

But it is in the field of national differences that stereotypes appear with particular virulence, possibly because in the case of most other groups reality and acquaintance impose a certain check on us, whereas in so far as other nations are concerned we can rationalize our preferences in the complete absence of factual knowledge. Nor is it only the uneducated who hold views of this kind; many a learned professor have written tomes on the national characteristics of various groups, based almost entirely on passing fancies and stereotyped prejudices (Eysenck, 1953, pp. 244–245).

Gouws (2017, pp. 17–36) notes that the visible psychological impact of war operations on soldiers, regardless of nationality, contrasts sharply with the stereotypes in political and ideological rhetoric used to bring about escalation rather than de-escalation of the bellicose spirit. This plays into the context of military recruitment and generates public support for military war operations. Stereotypes serve a common purpose in that they provide the labelling of a group of people (be it a nation, tribe, or ethnicity) as 'the enemy'; thus, allowing the government of the day and its military to act with impunity against the 'aggressor' in 'defence' of the society it serves. Engaging in war operations against a 'vile enemy' brings about an 'acceptable morality' of killing and destruction that becomes inherent to all subsequent military operations. In this regard, the military, as an instrument of the state in its enforcement role, is made to 'resemble normality', which then becomes just another way of conducting business — when things go right, all is fine, but when they go wrong, some reorganisation takes place. War operations, at least politically, are

managed in much the same way as commercial and manufacturing business operations, except the workforce is soldiers, used as the tools to execute the political and ideological policy of the day through orders designed to bring about 'positive restructuring' whereby military operations should make sense to the voting public. One way to describe the driving force behind this process is found in an explanation by Peter (1986):

When our study of human organizations is successful, it leads us to concepts that make our lives and our world more intelligible to us. When things are intelligible we have more of a sense of participation, and when they are unintelligible we have a sense of estrangement. So, when the world appears to be a chaotic mass of unrelated elements, we are in need of a new formulation to give meaning to those events (Peter, 1986, pp. 14–15).

This statement applies to many of the current events in world affairs. Perhaps one of the best examples of such a new formulation is found in media reports that were based on government briefings on the threat posed by 'weapons of mass destruction' held in the arsenals of the Iraqi government, finally resulting in the invasion of that country in 2003. Regardless of voices in the international and national arenas calling on the US and British governments and advising non-intervention, this is an event that illustrates how easily two societies and their governments became swept up in its support of yet another war effort in the aftermath of 9/11. This followed shortly after the invasion of Afghanistan, from where 'the enemy' was supposedly operating. Even though reporters at the Knight Ridder newspapers (see Follmer, 2008) were actively questioning the Iraqi links with 9/11, and later were vindicated in their commentary on the false intelligence reports, this was not enough to stop the war. In Iraq – even after no weapons of mass destruction had been found – the deployed military forces remained a willing and able tool in the hands of their governments who, following orders, continued war operations as instructed until that country was destroyed and left destitute, according to the United States Institute for Peace (USIP) (2020).

Meanwhile, the war in Afghanistan ended in the same way it had started by ironically returning the ousted Taliban to power after 20 years of what can only be considered to have been a senseless war. One could argue that the post-9/11 political messages served the purpose of bringing about a 'new formulation' to make sense of a very chaotic world and to create the infrastructure that would foster a renewed sense of security in an otherwise unpredictable world situation. Peter (1986) quotes Arnold Toynbee in his book *The Peter pyramid* in a chapter titled "Proliferating pathology", who aptly describes the current world state: "The human race's prospects of survival were considerably better when we were defenseless against tigers than they are today when we have become defenseless against ourselves" (p. 99).

The military is an institution that requires its soldiers to follow orders, even though it implies that their actions not only destroy the lives of others, but also their own. Soldiers do this because, in soldiering – consistent with the ethos of the warrior – all military forces purport, above all else, to serve in the defence of their country and their people. This means however that, in this 'defenceless against ourselves' reality, for soldiers to perform

ethically and morally in a technologically advanced world, there is an imperative for senior military leaders to question the political motives that form the basis for any decision to go to war outside the borders of one's own country. This imperative is necessary because soldiers trust their leadership to have determined the validity, morality and justification for their engagement in war operations. When lies perpetrated to bring about these operations are exposed, a massive cognitive dissonance sets in for soldiers from which serious mental health reactions eventually develop. This is also the reason behind the psychological decompensation of some soldiers after deployment: they cannot reconcile the contrast between that which is the ideal that humans strive for in their everyday lives, and their actual behaviours when they have engaged in war operations based on lies.

What makes this such a powerful negative experience is that not only have soldiers been conditioned through military training to follow orders; they have also obeyed these orders without question because of their belief that what they were doing was the right and moral thing to do. Soldiers' obedience to authority is also facilitated by the fact that obedience is part of what humans most do, as illustrated by the Milgram (1974) experiments in the early 1960s. These findings were not enigmatic; they were replicated several times over the decades with the same disturbing findings. Of even greater concern is the real-life materialisation in 2004 at the Abu Ghraib jail of behaviours first observed in the 1971 Zimbardo simulated prison experiment (Wargo, 2006).

Ironically, while the shock and dismay at such events are palpable, no one talks about the many other horrors that take place in theatres of war and how these very 'uncharacteristic' behaviours by otherwise 'normal' soldiers affect them in private. One example is the impact of the Vietnam War on the mental health of the soldiers that served there, which laid the foundation for a new psychiatric diagnosis, posttraumatic stress disorder (PTSD). As the psychological study of these trauma reactions continued, it became clear that a core component of PTSD reflects the all too human failure to live up to modern civilised codes involving *morality*, especially during military deployment. In the past two decades or so, the concept of *moral injury* therefore became a major focus in clinical psychology in attempts to explain the mental health reactions of soldiers who return to civilian life following deployment as described by authors such as Meagher and Pryer (2018).

Understanding moral injury requires an understanding of moral disengagement (Bandura, 2016). Rated as the fourth most frequently cited psychologist of all time in 2002, Bandura explains how people adopt standards of right and wrong as part of developing their moral selves. While violations of moral standards may bring about societal sanction, it is *self-sanction* that keeps conduct in accordance with internal standards. However, these self-regulatory mechanisms, once activated, can be by-passed by what Bandura (2016) calls psychosocial manoeuvres designed to disengage from self-sanctions (p. 2). In simple English, it is fine to engage in state-sanctioned killing of the enemy, but not to kill the neighbour, except in self-defence. The problem for soldiers, however, is the later realisation that the enemy they attacked and killed may not have been the threat as they were made to believe; thus, rendering the killing of the enemy as nothing less than state-sanctioned murder. In the end, numerous soldiers commit suicide because of their struggles with PTSD and the horrors of which they were a part.

While the dilemma this 'state-sanctioned murder' poses is described by anti-war⁵ activists and scholars, it is the first-hand accounts in numerous books by soldiers⁶ that provide a far more chilling picture and support the imperative for military leaders to question in depth the political motivations and agendas put forward by politicians before committing a country's forces to war. The impact of this is illustrated in the following quotes from the Vietnam War era by Moore and Galloway (2008):

What all of us know is that we are soldiers still. Some of us revisit the battlefield in nightmares. Some of us wear scars, visible and invisible, that mark us as changed men who walk unseen among our neighbors, who have never known what it is like to hold a dying boy in their arms and watch the life fade from his questioning eyes. The world may now know something of the events that changed us, but thankfully most are spared the experiences that are ours and the burden that is the province of men who have killed other men at the bidding of political leaders more concerned with personal pride and national honor than with peace.

Yes, we were soldiers once, when we were young. Now that we are old we are soldiers still. We are soldiers who mourn for young men and women dying on other battlefields in other parts of our world four decades and more after our war ended so badly. A generation of political leaders who studiously avoided service in our generation's war seemingly learned nothing from that history and thus consign a new generation of soldiers to "preemptive" wars of choice, condemning them to carry their own memories of death and dying through their lives.

May God bless and keep all soldiers, young and old, and may that same God open the eyes of all political leaders to the truth that most wars are a confession of failure – the failure of diplomacy and negotiation and common sense and, in most cases, leadership.

We who still dream of war in our troubled nights hope against hope for peace and its blessings for all (pp. xix–xx).

Conclusion: The diplomatic role of military psychologists to curtail war

When attempting to understand war in the twenty-first century there is much to learn from the twentieth-century wars, including the Cold War. One lesson that stands out is that, in the scientific study of war, the data point to a very clear problem in society: the rationale for war is generated at both the individual and the collective psyches of humans in positions of leadership who allow their human drives, biases, fears, anxieties, insecurities and vengeful motives to influence their perceptions on any given situation by favouring going-to-war decisions. As formulated by Stoessinger (1992, p. ix), the psychological component is overlooked:

I read that wars were caused by nationalism, militarism, alliance systems, economic factors, and by some other bloodless abstraction that I could not understand ... Often I

was told that war was an ineradicable part of human nature. ... I wondered if this could be true ... The conventional wisdom ... somehow always missed the human essence of the problem. After all, wars were begun by people. Yet this personality dimension was seldom given its due weight in traditional books on war. Instead, forces over which men had no control often were enthroned as "fundamental causes".

This happens, as Walsh (1971, p. 6) says, because of the "tendency of societies to select psychiatrically and pathologically charismatic abnormal individuals, of the nature of aggressive perverts, to control nations and to lead them into war". The great American general, Omar Bradley (1967) summed it up even more poignantly:

Man is stumbling blindly through a spiritual darkness while toying with the precarious secrets of life and death. The world has achieved brilliance without wisdom, power without conscience. Ours is a world of nuclear giants and ethical infants. We know more about war than we know about peace, more about killing, than we know about living.

This is our twentieth century's claim to distinction and progress (pp. 588–589)

The price for this continued insanity is paid not only by the targets of these aggressive military interventions, but also by the very soldiers who are misled into believing that they are acting in the best interest of their country, the world, and humanity, because they serve in the defence of their country and their people. However, to do so ethically and morally in a technologically advanced world requires senior military leaders to question the political motives that form the basis for any decision to go to war outside the borders of one's own country. This would require a willingness by military psychologists to collect the data that will support senior military leaders when they question political orders that are contrary to the defence of the country. The need for this is articulated by the late Senator Fulbright in the preface of a book on the psychological aspects of war and peace (Frank, 1967, p. vii):

Most of what we learn, certainly in the field of politics, we learn by trial and error, which is to say, by going about our affairs in a customary way until, by experience of error, we learn that the customary way is no longer workable and, accordingly, we revise it. It is a perfectly good way of learning as long as the error itself is not fatal or irreparably destructive. In matters of war and peace in the nuclear age, however, we cannot learn by experience, because even a single error could be fatal to the human race. We have got learn to prevent war without again experiencing it; and to change the traditional ways of statecraft without benefit of trial and error; and, in addition, we have got to be right not just in most, but in **all** of our judgements pertaining to all-out nuclear war (emphasis in the original).

Society, through its political leaders and other entities, will always rationalise all their actions as brought about by *the evil perpetuated* or the *threat posed* by *the enemy*; thus, placing the blame for the resultant conflict on the *unjust system*, which had to be opposed, while ignoring the fact that "[w]ar is something that people do, not something

that happens: activity with a military dimension is activity, not mere blind process and event" (Paskins & Dockrill, 1979, p. 210)

The above statement emphasises that war is an aberrant human behaviour perpetrated by few and forced upon many. Societal and national leaders incite others to follow their own deep-seated vengeance and hate as a projection onto others who are not a part of their 'love objects'. These 'hate objects' then become the 'legitimate targets' of the unacknowledged, inner aggression they hold towards their own 'love objects', a process well described by psychiatrist and psychoanalyst, Franco Fornari (1974). However, there is also a significant degree of power hunger and arrogance present in many of the warlike policies emanating from certain leaders of some countries more so than others – at a time when the world can no longer afford to engage in armed conflict solutions to settle political or ideological disagreements. The solution to war prevention – not only in terms of regional conflicts but also the revival of the Cold War paranoia – will continue to elude military and political leaders unless military psychologists take on a front-line, diplomatic role in identifying and explaining the psychological factors at play in the world's current conflict areas. This role would be within the mandate defined by both practitioners and the leading psychological association in the world.

Regardless of the back-and-forth propaganda blaming each other, all sides involved in these conflicts require examination of their psychological motives for perpetuating these conflicts. Only through a thorough analysis of these motives would it be possible to start the process by which these conflicts may be resolved. If not, an even greater catastrophe arising from these ongoing and ill-informed international military interventions awaits the world as non-statutory forces continue to grow. They will expand their operations to the very countries they deem had threatened and attacked them first, a fact already proved by the terrorist attacks in Europe in this century.

Every military psychologist – regardless of the area within the broad Military Psychology spectrum in which he or she practices – has a key role to play in assisting military leadership and government decision-makers to engage in conflict resolution actions that preclude engagement in military conflicts that cannot be won and where options offered by diplomacy had not been exhausted. It is time to defend countries and their serving soldiers through the curtailment of wily politicians and big business in their creation of fertile breeding grounds for perpetual conflict. The time has come to put a stop to the practice of engaging 'created enemies' in other countries that will as a consequence become 'real enemies'.

Put another way, military psychologists must provide generals with the necessary data to question the motives of their political masters, enabling them to challenge orders that are not in the interest of the defence of the country, but which place the country at risk of unnecessary war. After all, regardless of the reasons for engaging in war, the validity of the actions taken, and the legality of the execution of military orders, in the end, soldiers on all sides pay the price for the actions of politicians who failed, by means other than military action, to address the common differences that exist between peoples, countries, nations, and ideological blocs. This can be achieved through knowledge of self, as much

as knowledge of the beliefs held by both sides to a conflict. This makes it possible to challenge the less than factual rhetoric, while also respecting the right of each side to have opposing viewpoints, beliefs and cultural imperatives. This front-line diplomatic role fits Military Psychology like a glove but only if, as a discipline, military psychologists become the voice of reason and heed the call by the late Senator Fulbright of the United States, quoted by Peter Watson (1978):

[I]n this field of the psychological aspects of war and peace, psychology's role is to provide a 'new dimension of self-under-standing':

We have got to understand, as we have never understood before, why it is, psychologically and biologically, that men and nations fight; and why it is, regardless of time or place or circumstances, that they always find something to fight about; why it is that we are capable of love and loyalty to our own nation or ideology and of venomous hatred toward someone else's. We have got to understand whether and how such emotions satisfy certain needs of human nature and whether and how these needs could be satisfied in a world without war. Only on the basis of an understanding of our behaviour can we hope to control it in such a way as to ensure the survival of the human race (p. 439).

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References

- Allport, G. W. (1954). The nature of prejudice. Addison-Wesley.
- American Psychological Association. (2015). About APA: Frequently asked questions about the American Psychological Society How does the APA define "psychology"? https://www.apa.org/support/about-apa?item=7
- American Psychological Association. (2020, December 31). Society for Military Psychology. https://www.apa.org/about/division/div19
- American Psychological Association. (2022, January 31). *About APA*. https://www.apa.org/about Armed Conflict Location and Event Data Project. (2022). *Dashboard*. https://acleddata.com/dashboard/#/dashboard
- Bandura, A. (2016). Moral disengagement: How people do harm and live with themselves. Macmillan.
- Bradley, O. N. (1967). An Armistice Day address. November 10, 1949. In O. N. Bradley (Ed.), The collected writings of General Omar N. Bradley: Speeches 1945–1949 (Vol. 1, pp. 584–589). U.S. Government Printing Office.
- Cronin, C. (Ed.). (1998). Military psychology: An introduction. Pearson Learning Solutions.
- Cronin, C. (Ed.). (2003). *Military psychology: An introduction* (2nd ed.). Pearson Learning Solutions.
- Dyer, G. (2019, January 29). Afghanistan: Seventeen years too late. http://gwynnedyer.com/2019/afghanistan-seventeen-years-too-late/
- Eysenck, H. J. (1953). Uses and abuses of psychology. Penguin Books.
- Falk, P. S. (2017, April 4). The dirty bomb threat: Too dangerous to do nothing. *Foreign Affairs*. https://www.foreignaffairs.com/articles/2017-04-04/dirty-bomb-threat
- Follmer, M. (2011, May 25). The reporting team that got Iraq right. *Huffington Post*. https://www.huffpost.com/entry/the-reporting-team-that-g n 91981
- Fornari, F. (1974). The psychoanalysis of war. Fitzhenry & Whiteside.
- Frank, J. (1967). Sanity and survival: Psychological aspects of war and peace. Random House.
- Fullbright, J. W. (1966). The arrogance of power. Random House.
- Gal, R., & Mangelsdorff, A. D. (Eds.). (1991). *Handbook of military psychology*. Wiley. *Global News*. (2021, August 13). Canada to accept more than 20,000 Afghan refugees [Video]. https://globalnews.ca/video/8111090/canadatoacceptmorethan20000afghanrefugees
- Gouws, J. J. (2012, November 5–9). 21st century warfare: Quo vadis military psychology? [Conference session]. 54th International Military Testing Association Conference, Dubrovnik. http://www.imta.info/PastConferences/Presentations_v2.aspx
- Gouws, J. J. (2013, May 27–31). *Military psychology: Coming of age in a new world order* [Conference session]. 48th International Applied Military Psychology Symposium, Bern. http://www.iamps.org/PastConferences
- Gouws, J. J. (2014, June 16–19). A model for the defragmentation of military psychology [Conference session]. 49th International Applied Military Psychology Symposium, Tallinn. http://www.iamps.org/PastConferences
- Gouws, J. J. (2015, May 18–22). A century of military psychology: Are we ready for the next 100 years? [Conference session]. 50th International Applied Military Psychology Symposium, Lisbon. http://www.iamps.org/PastConferences/Overview.aspx
- Gouws, J. J. (2016, November 7–11). Post-psychological assessment: Factors affecting armed forces resilience [Conference session]. 58th International Military Testing Association Conference, New Delhi. http://www.imta.info/PastConferences/Presentations_v2.aspx

- Gouws, J. J. (2017). Deployment and combat stress: Is making the invisible visible the antidote? In A. MacIntyre, D. Lagace-Roy, & D. R. Lindsay (Eds.), *Global views on military stress and resilience* (pp. 17–36). Canadian Defence Academy Press.
- Gouws, J. J. (2019, October 7–11). *The changing face of deployment: Psychological challenges*[Conference session]. 61st International Military Testing Association Conference,
 Tallinn. http://www.imta.info/PastConferences/Presentations_v2.aspx
- Gouws, J. J. (2020a). Polemology: Orphan of military psychology. In U. Kumar (Ed.), *The Routledge international handbook of military psychology and mental health* (pp. 51–64). Routledge.
- Gouws, J. J. (2020b). Shattered hopes: The disintegration of South Africa's peaceful transition. In M. J. Celinski & K. M. Gow (Eds.), *War or peaceful transformation:*Multidisciplinary and international perspectives (pp. 171–199). Nova Science.
- Gouws, J. J. (2021, July 18–23). *Military psychology: A front line role as peacemaker*[Keynote address, Military and Space Psychology, conference session]. 32nd
 International Congress of Psychology, Prague. https://www.icp2020.com/scientific-program/keynote-addresses-kopie/
- GOV.UK. (2016, July 6). The report of the Iraqi inquiry. https://www.gov.uk/government/publications/the-report-of-the-iraq-inquiry
- Hacker Hughes, J., McCauley, M., & Wilson, L. (2019). History of military psychology. *Journal of the Royal Army Medical Corps*, 165(2), 68B70. https://doi.org/10.1136/jramc-2018-001048
- Haddad, M. (2021). Afghanistan: Visualising the impact of 20 years of war. Aljazeera. https://interactive.aljazeera.com/aje/2021/afghanistan-visualising-impact-of-war/index.html
- Harari, Y. N. (2014). Sapiens: A brief history of humankind. McClelland & Stewart, Random House.
- Kilcullen, D. (2009). The accidental guerrilla: Fighting small wars in the midst of a big one. Oxford University Press.
- Kumar, U. (Ed.). (2020). The Routledge international handbook of military psychology and mental health. Routledge.
- Laurence, J. H., & Matthews, M. D. (Eds.). (2012). The Oxford handbook of military psychology. Oxford University Press.
- Longworth, R. C., & Tribune Staff Writer. (1999, March 26). Ancient hatreds provide tinder for conflagration. *Chicago Tribune*. https://www.chicagotribune.com/news/ct-xpm-1999-03-26-9903260114-story.html
- MacMillan, M. (2013). The war that ended peace: The road to 1914. Penguin Books.
- Marks, D. F. (2019). The Hans Eysenck affair: Time to correct the scientific record. *Journal of Health Psychology*, 24(4), 409–420.
- Marlantes, K. (2011). What it is like to go to war. Atlantic Monthly Press.
- Matthews, M. D. (2020). *Head strong: How psychology is revolutionizing war*. Oxford University Press.
- Matthews, M. D., & Schnyer, D. M. (Eds.). (2019). *Human performance optimization: The science and ethics of enhancing human capabilities*. Oxford University Press.
- Meagher, R. E., & Pryer, D. A. (2018). War and moral injury: A reader. Wipf & Stock.
- Milgram, S. (1974). Obedience to authority: An experimental view. Tavistock.
- Moore, H. G., & Galloway, J. L. (2008). We are soldiers still: A journey back to the battlefields of Vietnam. Harper.
- Morris, I. (2014). War! What is it good for? Conflict and the progress of civilization from primates to robots. Picador.
- Mukherjee, S., & Kumar, U. (2020). Military psychology in war and peace: An appraisal. In U. Kumar (Ed.), The Routledge international handbook of military psychology and mental health (pp. 3–11). Routledge.

- Overy, R. (2013). *The bombing war: Europe 1939–1945*. Penguin. *Oxford Reference*. (N.d.). https://www.oxfordreference.com
- Pardy, H. G. (2015, April 1). The convenience of perpetual war. Embassy News. http://www.embassynews.ca/opinion/2015/04/01/the-convenience-of-perpetual-war/46897
- Parenti, M. (2014, August 18). A terrible normality: The massacres and aberrations of history.

 Global Research. http://www.globalresearch.ca/a-terrible-normality-the-massacres-and-aberrations-of-history/5320619
- Paskins, B., & Dockrill, M. (1979). The ethics of war. Duckworth.
- Peter, L. J. (1986). The Peter pyramid or, will we ever get to the point? Unwin Hyman.
- Peter, L. J., & Hull, R. (1969). The Peter principle. William Morrow.
- Ratcliffe, S. (2012). Little Oxford dictionary of quotations. Oxford University Press.
- Rédaction Africanews. (2021, March 29). ISIS claims control on Palma Mozambique.

 Africanews. https://www.africanews.com/2021/03/29/isis-claims-control-on-palmamozambique/
- Rumsey, M. G. (2012). Military selection and classification in the United States. In J. H. Laurence & M. D. Matthews (Eds.), *The Oxford handbook of military psychology* (pp. 129–147). Oxford University Press.
- Sajer, G. (1967). The forgotten soldier. Potomac Books.
- Society for Military Psychology. (2019, August 26). Strategic plan. https://www.militarypsych.org/strategic-plan/
- Society for Military Psychology. (2022). Home. https://www.militarypsych.org
- Stoessinger, J. G. (1992). Why nations go to war (6th ed.). St. Martin's Press.
- Swanson, D. (2010). War is a lie. David Swanson.
- Swanson, D. (2011). When the world outlawed war. David Swanson.
- Swanson, D. (2013). War no more: The vase for abolition. David Swanson.
- Swanson, D. (2016). War is a lie (2nd ed.). David Swanson.
 - The Kabul Times. (2021, October 13). Canada to only settle for 40,000 Afghan refugees, How to apply? https://thekabultimes.gov.af/canada-to-only-settle-for-40000-afghan-refugees-how-to-apply/
- Tilly, C. (1985). War making and state making as organized crime. In P. Evans, D. Rueschemeyer, & T. Skocpol (Eds.), *Bringing the state back in: Strategies of analysis in current research.* (pp. 169–187). Cambridge University Press.
- United States Institute of Peace. (2020, August 4). *The current situation in Iraq: A USIP fact sheet.* https://www.usip.org/publications/2020/08/current-situation-iraq
- Van Dyk, G. A. J. (2008). The role of military psychology in peacekeeping operations: The South African National Defence Force as an example. *Scientia Militaria*, 37(1), 113–135 https://doi.org/10.5787/37-1-62
- Walsh, M. N. (1971). War and the human race. Elsevier.
- Wargo, E. (2006, August 1). Bad apples or bad barrels? Zimbardo on the 'Lucifer effect'.

 Association for Psychological Science. https://www.psychologicalscience.org/
 observer/bad-apples-or-bad-barrels-zimbardo-on-the-lucifer-effect
- Watson, P. (1978). War on the mind: The military uses and abuses of psychology. Hutchinson.
- Wells, H. G. (1914). The war that will end war. F. & C. Palmer.
- Wright, W. K. (1916). Psychology and the war. Psychological Bulletin, 13(12), 462–466. https://doi.org/10.1037/h0070807
- Yale Law School. (1961). Military-Industrial Complex speech, Dwight D. Eisenhower, 1961. https://avalon.law.yale.edu/20th_century/eisenhower001.asp
- Yerkes, R. M. (Ed.). (1921). *Psychological examining in the United States Army*. Washington Government Printing Office. https://archive.org/details/psychologicalexa00yerk/
- Yerkes, R. M. (1941). Man-power and military effectiveness: The case for human engineering. *Journal of Consulting Psychology*, 5(5), 205–209.

Endnotes

- ⁴ This Latin phrase is generally attributed to the Hippocratic Oath, namely 'first, do no harm' and is a fundamental healthcare principle throughout the world, also known as the principle of non-maleficence (see Oxford Reference, n.d.b).
- ⁵ Antiwar activist, David Swanson, author and executive director of World BEYOND War, researched and wrote three books on war that should be on the shelf of every military psychologist: *War is a lie* (2010 first edition; 2016 second edition); *When the world outlawed war* (2011) and *War no more: The case for abolition* (2013).
- ⁶ These two books should be on the shelf of every military psychologist:

Karl Marlantes (2011). What it is like to go to war. This book gives a chilling first-hand perspective on the Vietnam War.

Guy Sajer (1967). *The forgotten soldier*. This book is a most powerful indictment of the impact of war on the individual soldier, and is a classic memoir by a World War II German soldier, born of French–German heritage.



The modern military leader as sensemaker on the battlefield

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Abstract

The study on which this article reports, addressed the problem with which modern military leaders on the battlefield are faced in assisting the soldier at basic level to make sense of what is happening. In this study, the term 'sensemaker' implied a process of individual and group sensemaking that forms the basis for meaning-making in the volatile, unpredictable, complex and ambiguous (VUCA) world within which soldiers are functioning. The authors postulate a best-fit world view for military leaders in this military leadership sensemaking and meaning-making nexus. They coined 'social constructivism in complexity' where the military leader acts as a guide for soldiers through a sensemaking process. This process is graphically represented, and requires a toolkit to assist military leaders in working as sensemakers on the battlefield. The article concludes with recommendations to military psychologists and military educators who have to make policy changes to develop and implement such a toolkit for sensemaking on the battlefield.

"War is the most complex thing that humans do"

- Donald Stoker (Cassidy, 2019, introductory section).

Introduction

There is general consensus in the contemporary military leadership and military psychology literature that individuals and groups in the modern battlefield are faced with more complexity and ambiguity than in the past (Bester & O'Neil, 2022; Cassidy, 2019; Kott, 2018; Lele, 2019; McChrystal et al., 2018; Miller, 2019; Mukherjee & Kumar, 2020; Symonds, 2018). Tilman and Jacoby (2020) note that this complexity and ambiguity imply more dangerous contexts, especially for the soldier on the battlefield when considering that evolution has tended to make individuals risk-aversive, by either being impulsive or reluctant to act, focusing on fending off dangers.

The first individuals confronted with ambiguous situations will be the soldiers at the most basic level. Campbell (2012) emphasises that sensemaking by leaders at this level assists their subordinates in reducing ambiguity and deriving meaning from events in military operations. This is confirmed by Inbar et al. (1989) who observed more than 30 years ago that the attitude of the military commander influences not only the affected soldier but also the responses of other soldiers in the unit. Ahuja and Kumar (2020) mention the significance of leadership when saying that leadership remains the most important consideration that can turn the path of a conflicting situation and change losses into victory, irrespective of the type of operation. It is therefore not surprising that Bartone (2006) states that leaders play a role in how experiences of subordinates are interpreted.

It follows from the above that the modern military leader will be at the point of impact; hence, drawing attention to his or her role in sensemaking on the modern battlefield. In support, Kernic (2017) notes that, in the face of death, leadership plays a crucial role in reinforcing and strengthening a certain social and political order for sensemaking, especially at the collective level. Veldsman and Johnson (2016) also mention individual sensemaking and meaning-giving by leaders to themselves as part of what they refer to as 'a strategic value chain perspective on leadership' as an organisational capability intervention. This implies that sensemaking and meaning-making are part and parcel of the entire chain of activities that leaders should do to deliver the product or service they are responsible to deliver. In the case of the military, that would, for example, be to defeat the enemy and win the war or battle.

From the above it is clear that there are three core elements present along a time continuum when dealing with military leaders and their subordinates on the modern battlefield. The first element is complexity or chaos; the second is leadership and its subordinates; and lastly, individual and collective sensemaking in this military context, also referred to as the social construction of reality (see Veldsman & Johnson, 2016), based on what the soldiers have experienced and are likely to experience in future. These core elements are involved in the short term through immediate achievement of military objectives, as well as in long-term health and sustainability of performance for both the individual and functional team.

The study reported here thus found sensemaking during military operations to be a problem with which modern military leadership is faced during military operations at individual and group level and this study will provide practical advice and suggestions for developing a sensemaking toolkit for military leaders. To achieve the aim of describing sensemaking on the modern battlefield, non-empirical research was conducted, which started with clarifying two concepts, namely 'sensemaking' and 'meaning-making', followed by a brief conceptualisation of the battlefield. The battlefield is described as a manifestation of the changed character of warfare. This conceptualisation includes the typical events with which soldiers may be confronted, and the impact that the changed nature of warfare will have on them. This will address a world view within the leadership domain, namely complexity or chaos (Veldsman, 2016a). This is followed by the social construction of reality, which manifests in the context of a world view of social constructivism. From an analysis of these two world views (i.e. a world view of chaos and complexity and social

constructivism), a world view of social constructivism in complexity is postulated as the best-fit world view for the modern battlefield. The discussion that follows briefly refers to modern military leadership and links it with sensemaking and meaning-making. Based on an analysis of the existing literature, sensemaking as part of this best-fit world view of social constructivism in complexity is postulated, which is then integrated with the military workplace (i.e. the military context). The focus then shifts to the function of the modern military leader as sensemaker in terms of the world view of social constructivism in complexity. The process of sensemaking in social constructivism is postulated to act as guide for developing a toolkit to direct military leaders in sensemaking on the modern battlefield. The article is concluded with recommendations to military psychologists and military educators who have to make policy changes to ensure that the recommendations can be implemented.

Concept clarification

Various authors (see Barnes et al., 2011; Bartone, 1994, 2006; Bartone et al., 2008; Peterson et al., 2011) refer to either sensemaking or meaning-making or both. These are two separate, but interrelated concepts, and it is important for the reader to understand their meaning and the relationship between these concepts. Furthermore, it is important to define these concepts to prevent misunderstanding. Mezirow (as cited by Law et al., 2007) suggests that if one wants to make meaning of an event on the battlefield, one first needs to make sense of an experience. One therefore needs to define sensemaking, as it is related to the outer world one experiences before defining meaning-making, as the latter is related to one's inner world, according to Gurteen (2016).

Sensemaking defined

At its core, sensemaking is about the interpretation of patterns of information from the external world (Gurteen, 2016). From an overview of the literature (see Barren & Scott, 2010; Blignaut, 2020; Herberg & Torgersen, 2021; Stern, 2017), one can conclude that sensemaking is not only about interpretation through the sharing of information and the interpretation of patterns, but also about an adequate interpretation of what is experienced as a complex, dynamic, ambiguous and even chaotic situation. Mostert (2020) argues that sensemaking is not only about what has happened but also about considering possible futures. A commander is, for example, involved in sensemaking when he or she interprets higher-level instructions, orders and directives. On a cognitive level, this implies that what is being understood is logical, and on an emotional level, it means that one cares about the situation (Sagy et al., 2015). Recent research on resilience by Herberg and Torgersen (2021) underscores the role of emotions in sensemaking as these can be a source of fear, dread, anxiety, worry and insecurity. Sensemaking is thus more than developing a picture of what is happening. It also entails understanding and communicating the implications from vantage point of the affected individual or group to give them a sense of meaningfulness in terms of whether it is worthy of engagement, coping and commitment. Without sensemaking, soldiers are likely to be confused. Sensemaking is thus a prerequisite for and part of the process of meaning-making for man in general and more specifically the soldier on the battlefield.

Meaning-making defined

According to Kegan (cited in Law et al., 2007), meaning-making is a complex primary human action that takes place at three levels of interaction. Relating to an incident on the battlefield, the first level is the physical, or what is referred to as the perceptual and cognitive level, which is about grasping the concrete experience and changing internally based on the incident; hence, the concept of sensemaking as alluded to above. This is intricately linked to a second level related to creating meaning from the incident in order to ensure future survival. The last level happens when subordinates and leaders interact with others to create meaning at the group or social level.

Bush et al. (2013) note that issues of meaning and identity surface on an individual and/ or group level during times of change and transition. Meaning-making is about personal meaning of what the individual senses or knows through own interpretation and social meaning, which refers to the social construction negotiated between the participants in various social settings, for example on the battlefield (see Stelter, 2013).

From the above, it is thus clear that sensemaking and meaning-making are theoretically two different concepts, and that sensemaking precedes meaning-making, but in practice, both are part of a logically integrated and often indistinguishable process (see Weick, 1995). Furthermore, meaning-making or 'reframing' is a logical next step from the process of sensemaking, which culminates in shared purpose and understanding, commitment and control (see Weick, 1995). In the context of this article, when reference is made to the leader as sensemaker, it refers to where the leader facilitates the process where subordinates make sense and attribute meaning to a situation experienced on the battlefield. To understand the role of the modern military leader in sensemaking and the ensuing meaning-making, one first has to get a view on the modern battlefield and the changed nature of warfare.

The changed nature of warfare: A world view of chaos or complexity

Fowler (2019) refers to the opinion that the character of war is changing. He highlights that advancement in technology and changes in operational approaches, where states (such as Russia) increasingly use unconventional warfare to gain an asymmetric advantage over their opponents, contributing to the changing nature of war. Consequently, an increasing number of aspects contribute to this changing nature of war, providing states with additional warfighting options, thereby increasing chaos and complexity in the battlespace.

This opinion is supported by a number of authors (see Bartone, 2006; Lampton et al., 2003; Steinberg & Kornguth, 2009; Van Dyk, 2016) who refer to the changing nature of war and operations – from linear conventional operations to asymmetric warfare – and the fact that these operations often take place in environments where the enemy is hidden among the local population. These types of operations frequently take place in enclosed surroundings where visibility is limited, such as urban areas, tunnels, jungles and thick bush or shanty towns. Because of its design and nature, modern communication and navigation equipment does not always work as effectively in enclosed conditions where visibility is limited, as in open areas, with a resultant increase in ambiguity and

uncertainty. Furthermore, the necessity to carry heavy equipment, such as body armour, interacts with the reality of doing so in physical extremes, which may include extremes of temperature – hot or cold – humidity and altitude, and smoke stressors. The ambiguity and fluidity of these operations place not only physical demands on personnel, but also increased cognitive and social demands. Blignaut (2020) illustrates the causes of these demands well when she refers to dealing with the Covid-19 world. Blignaut (2020) emphasises that dealing with the Covid-19 world is about dealing with unknown and even unknowable entities where one cannot discern cause-and-effect relationships. Applied to the modern battlespace, soldiers have to navigate a non-linear battlespace where seemingly insignificant events can trigger disproportionate system-wide unintended consequences. For this reason, references are often made to the cognitive domain of warfare, as suggested by Ottewel (2020). However, a detailed discussion of this aspect was beyond the scope of this study.

Similar to this position is the view held by the United States Marine Corps (US Marine Corps, 1997, pp. 12–13), as defined in its document, *Warfighting*:

War is an extreme trial of moral and physical strength and stamina. Any view of the nature of war could hardly be accurate or complete without consideration of the effects of danger, fear, exhaustion and privation on those who must do the fighting.

Furthermore, McNab (2016) calls war, with specific reference to the modern battlespace, as the 'ultimate extreme environment', and describes it in terms of the strenuous demands on the will of man. In his description of the modern battlespace, he highlights factors that would characterise this environment, such as unpredictability and periods of prolonged boredom intermixed with brief periods of sudden, shocking terror and violence. One could also include uncertainty, especially when the enemy is part of the broader population when one cannot differentiate friend from foc.

Research by Colman et al. (2013) in the forestry fire-fighting environment makes similar observations on the constant physical and cognitive demands placed on forestry workers by the complexity, unpredictability, variability and consequential working conditions. Again, identical to asymmetric military operations, there are no linear solutions, and the environment necessitates constant cognitive adaptations.

The views mentioned above of the modern battlefield are brought together by Van Dyk (2016), who describes it as a chaotic, intense, and highly destructive and complex theatre. Therefore, one can expect that the modern battlefield will be characterised by advanced technology, hyper-mobility, unconceivable destructive firepower and numerous cognitive challenges in making decisions, thus putting pressure on the military leader to assist his or her subordinates to make sense from events.

As illustrated by the literature, the nature of war and extreme situations contribute to creating a systemic or organic world view where reality is formed by the interconnected whole of reciprocally influencing, interacting variables characterised by continuing resolution of dynamic opposing tension (Veldsman, 2016a). These tensions are resolved

through self-organisation, typically manifesting in dynamic patterns of interaction. These patterns are governed by underlying organising rules and can be either a virtuous or a vicious cycle of interaction. As a result, reality moves through successive states of chaos, representing either the breakdown of a pattern (and order) or the emergence of a pattern (order). In the military context, various authors (Herberg & Torgersen, 2021, p. 2; Lindsay, 2020, p. 3; Nuciari, 2021, p. 6; Rosinha et al., 2020, p. 165) refer to it as a "VUCA world", deriving the acronym from volatile, unpredictable, complex, and ambiguous. Thus, within this VUCA environment, the function of the military leader is to reframe the reality of chaos to create sense and meaning for him or herself and his or her subordinates. This will firstly be in the short term to achieve mission results and secondly in the long term to ensure sustainable effectiveness and mental health. The successful leader would thus be the one that can progress through these successive states of chaos and create meaning for both him- or herself and his or her subordinates. On the other hand, the unsuccessful leader is the one that allows chaos to overwhelm the existing reality and does not create new patterns and meaning.

Despite changes in the social and physical environment in which war occurs, Matthews (2020) observes that human nature has not changed and as much as complexity, chaos and uncertainty are part of war and extreme environments and have an influence on the role players functioning in this VUCA world, there is simultaneously another world view where the individual or the group socially constructs reality based on what they experience in this chaotic and complex world.

The social construction of reality: A world view of social constructivism

Veldsman (2016a) states that when one refers to the social construction of reality, it typically means that one follows a social constructivist (symbolic interpretive) view with respect to the understanding of the world in which the military leader and his or her subordinates function. Veldsman (2016a) emphasises that reality is co-created and enacted by people in their shared, communicated meanings; it is for example expressed in language, artefacts, and symbols. Reality is co-created by the military leader and his or her followers in their interactions, which include dialogue during which they ascribe shared meaning and purpose to reality. They then internalise these co-created norms, beliefs, language, symbols, and values, after which these are sanctioned externally; hence, a concurrent world view to complexity or chaos is created.

These concurrent world views of complexity/chaos and social constructivism then fuse into a single view of the world that Veldsman (2016a) refers to as a *best-fit world view*.

Best-fit world view: Social constructivism in complexity

The authors subsequently postulate a hybrid world view that can be described as 'social constructivism in complexity', where the individual – or as part of a larger group (section, platoon, battalion, etc.) – best understands the world as a place where reality forms an interconnected whole with dynamic opposing tensions between the various variables and where individuals, individually or collectively, co-create their reality through interactions

in the form of dialogue. Reality is thus co-created through the combination of external events and individual and collective sensemaking. Consequently, interactions ascribe a shared meaning and purpose to reality in the wake of dynamic interactions in the context in which they function. These dynamic patterns of interaction are formed with limited underlying rules forming either virtuous or vicious cycles of interaction, where shared meaning and purpose are expressed in language, beliefs, artefacts, norms, values and symbols. Reality furthermore becomes a combination of an interconnected whole consisting of social constructivism and a world of complexity and chaos, where the people's co-created language, beliefs, artefacts, norms, values, and symbols are stated publicly. Figure 1 was developed by the authors to illustrate how the combination of social constructivism and a world of chaos and complexity provides the best-fit world view of social constructivism in complexity and shows the different world views merging into social constructivism in complexity.

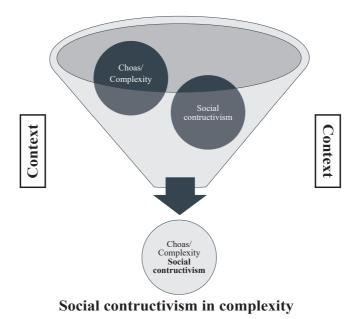


Figure 1: Best-fit world view: Social constructivism in complexity

It is in this world that the military leader plays a significant role in an intervention that contributes to the sensemaking and meaning-making by soldiers individually and collectively. Leadership thus becomes an important "linking pin" or "node in a network" (McChrystal et al., 2018, p. 399) between soldiers and the reality within which they have to function as far as sensemaking and meaning-making are concerned. One can then postulate that modern military leadership will be different from the conventional view of leadership (as will be detailed below), and must be in touch with the interpreted reality of all the relevant role players; thus, a realistic form of leadership.

Modern military leadership: The military leadership, sensemaking and meaning-making nexus

In essence, modern military leadership refers to leadership within the best-fit world view, which is referred to as social constructivism in complexity. As seen in Figure 2, this implies that someone in a leadership position helps sensemaking through his or her subordinates' social construction of reality based on this best-fit world view. For the military leader, sensemaking is thus more than developing a picture of what is happening; it also encompasses understanding and communicating the implications from the vantage point of the military leader and from the viewpoint of his or her subordinates. Because of the disruptive nature of events on the battlefield, one can expect that the situation would be emotionally charged and subordinates (or followers) would look up to leaders to help them understand the meaning of what has happened and then place it in a broader perspective (Stern, 2017). Getting to make meaning of a situation or event implies in the first instance sensemaking, which is the focus of this article.

From an overview of the military leadership literature, an expanded definition of military leadership by McChrystal et al. (2018, p. 397) surfaced, which links closely to this discussion on sensemaking: "leadership is a complex system of relationships between leaders and followers, in a particular context, that provide meaning for members".

As seen in Figure 2, this leads to meaning-making (which implies sensemaking first) where the leaders focus not only on understanding the operational challenges, but also on the way in which their subordinates perceive and understand these (Stern, 2017). Meaning-making or 'reframing' is therefore a logical outcome of the process of sensemaking, which leads to shared understanding, commitment and control between leaders and subordinates in extreme situations. Furthermore, Rosinha et al. (2020) show that the ability to find meaning and purpose is viewed as one of the cognitive styles associated with resilience. Figure 2 below was created by McChrystal et al. (2018, p. 397) to illustrate the relationship between the leaders and their followers in relation to the particular context.

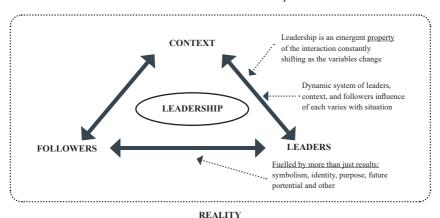


Figure 2: Leadership in reality

Figure 2 above suggests that leadership is contextual and dynamic and an emergent property of a complex system where the focus is placed on the symbolism of leadership, meaning and the future potential that leaders see in their system (McChrystal et al., 2018). At different times, meaning will therefore imply different things. Sometimes it may take the form of driving and achieving results, and at other times, it might take the form of achieving some sense of understanding, suggesting that sensemaking will be a vital component in the system that supports collectiveness. This entails a very appropriate conceptualisation of leadership for sensemaking in complexity.

Sensemaking from social constructivism in complexity

The process of sensemaking, as part of the social construction of reality from chaos, involves several distinct but interrelated actions that, at times, involve the leader as an individual, but at the same time include his or her team collectively. Before these actions, illustrated in Figure 3 below, are discussed, it is important to consider the following observations from the literature about the role of the leader:

- Sensemaking in teams is part of the responsibility of the team leader but is always a collective and interactive process (Kolditz, 2007).
- All individuals involved in the process are exposed to chaos, uncertainty
 and volatility, and simultaneously make sense of the situation based on their
 perception of occurrence and their self-perception (Bartone, 1994).
- The leader plays a crucial role to guide the team to develop a shared purpose and action plans that will lead to immediate mission achievement and long-term team effectiveness (Bartone, 1994; Kolditz, 2007).
- The leader sets the tone of the perception that is formed of the situation and
 the direction that the team will follow either towards or away from mission
 accomplishment, depending on how the leader frames the expected outcome of
 mission success (Bartone, 1994).
- The leader always sets the tone of the way that the situation is perceived but does not necessarily need to have the solution (Kolditz, 2007).

Soldiers typically function in environments that are characterised by chaos, ambiguity and volatility (see Nuciari, 2021). This is the world view of complexity or chaos referred to above, and is represented by the darker shaded area in Figure 3 below. Concurrently, soldiers make sense of what is happening and what has happened to them, represented by the light shaded area, referred to as the 'world view of social constructivism'. The best-fit world view would then be social constructivism in complexity, which in this case would be the two indicated world views superimposed on one another as illustrated in Figure 2 above.

As depicted in Figure 3, effective performance by individuals and teams or other militaryrelevant entities in the best-fit world view can be measured against two related outcomes, each with its own timeframe.

- The first outcome is the achievement of immediate mission objectives within an
 immediate and short-term time frame; thus, from the occurrence of the event to
 the first two or three days after the event.
- The second outcome has a medium- to long-term time frame, and entails the
 long-term ability of the team to sustain mission achievement while maintaining
 team effectiveness, despite physical and mental fatigue; hence, demonstrating
 mental toughness. The medium- to long-term outcomes usually refer to four
 days and longer after the event of which individuals and teams need to make
 sense.

In general, the duration of the short, medium and long term will depend on the anticipated duration of the operation, and is about ensuring sustainability of the mission and mental health. It is therefore difficult to specify a timeline in terms of hours, days or months.

Within the superimposed world view of social constructivism in complexity, the manifesting world view of the affected soldiers will direct them towards creating conditions where they can design action plans to reach their immediate short-term goal or mission, including personal survival. However, they also have a medium- to longterm goal, which is to continue achieving mission success and sustainment, despite the physical and especially mental fatigue involved in mission achievement; thus, confirming the requirement of some form of emotional robustness. In this instance, the purpose of sensemaking is to enable the leader as an individual and as the leader of a team to achieve immediate mission success, but at the same time, long-term sustainability of team effectiveness in an environment characterised by uncertainty. In order to make sense and to help his or her subordinates with sensemaking, the leader needs to follow certain steps or phases that, in the short term, will enable immediate mission success but that will simultaneously build and develop individual and team agency, resilience and hardiness, which will enable sustained long-term mission accomplishment. 'Resilience' refers to the ability to return adaptively to baseline functioning (O'Leary & Ickovicks, as cited in Ahuja & Kumar, 2020). 'Hardiness', as a factor of resilience, is viewed as a protective factor against, for example, burnout (Bartone et al., 2022). Hardiness will therefore contribute to the resilience required to cope with stress on the battlefield.

Individual leader understanding and sensemaking of situation

As depicted in Figure 3, the first step for any leader functioning in an environment of chaos, ambiguity and volatility is to gain an understanding or perception of what is happening in the particular situation; thus, making sense of the situation on an individual level. Keeshan and Chetty (2016) emphasise that, in the first instance, leaders need to understand the specific context (situation) and the people within it. The figure depicts the process of sensemaking as part of social constructivism in complexity. It is important to note that meaning-making follows sensemaking. When mention is made of the military leader as sensemaker, both processes of sensemaking and meaning-making are included.

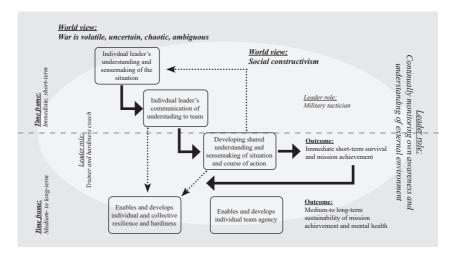


Figure 3: The process of sensemaking as part of social constructivism in complexity

Source: Researchers' own compilation

One's perception of situations is central to the way in which one forms or constructs one's reality (see Saberwal, 1996). Furthermore, one's perception of a situation and one's own abilities to deal with the demands of a situation determine to what extent one will experience either debilitating stress or enhanced confidence (see Huebschmann & Sheets, 2020; Keech et al., 2018). Therefore, two concepts are important for the leader to manage: perception and self-perception.

'Perception' refers to the cognitive processing of any sensory information in order to make sense of that information (Bar-On, 2001; Feldman, 2001; Galotti, 2008; Goldstein, 2011). In other words, the way in which any sensory information is identified, organised and interpreted to form new concepts links it to existing concepts and an understanding of the information presented or the environment. However, perception is not just the passive reception of information; it is rather an interactive process between the individual and the environment, mostly influenced by the recipient's learning, memory, experiences, expectation, attention and his or her interaction with other people. One can thus postulate that perception is formed throughout one's life in the experiences one has, based on the values that one develops, firstly in one's childhood but also later as adult, as well as the type of communities to which one is exposed. Furthermore, factors such as education, employment, socio-economic position and life-stages all play a part in forming one's perceptions.

Perception can be split into two broad cognitive processes (see Dehn, 2014; Galotti, 2008; Goldstein, 2011). The first entails receiving, analysis and processing of the sensory input (visual, auditory, smell, taste, touch), in order to link these inputs to existing concepts. The second comprises processing and transforming of the concepts that relate to someone's

ideas, past experiences and expectations (or knowledge) into concepts that are either new or which confirm the existing concepts the individual already has. This second process is what humans consciously know as sensemaking.

Perception can be defined as the way in which an individual (or team) views and reacts to information in the environment based on his or her learning, memory, experiences, expectations and attention. As seen in Figure 3, the role of the leader is to manage his or her own perceptions of situations as well as those of his or her subordinates constantly through self-awareness, self-motivation, self-regulation and reframing.

During this part of the process, the leader needs to find patterns in insight collected from multiple perspectives, which are likely to cause uncertainty. This is then followed by a process of continuously reviewing potential solutions or scenarios to determine the best approach for a particular context. This could include the development of best, worst and middle-case scenarios to be able to extrapolate from the existing information to formulate a prognosis (see CFI Team, 2022; Gospodarowicz & O'Sullivan, 2003). This will then contribute to the leader developing a narrative in terms of what is happening, and this will become a continually iterative process for understanding any unfamiliar situation (Keeshan & Chetty, 2016). These actions will assist the military leader as sensemaker to break out of a so-called 'reactive mode' into what Stern (2017) refers to as a more 'proactive mode of responsiveness'. This narrative then becomes the leaders' story, and from this story, he or she can then assist others to make sense; thus, becoming the sensemaker. In this regard, Veldsman and Johnson (2016, p. 4) say:

Through the stories they construct and share, leaders make sense of and give meaning to their leadership experiences, for themselves and others ... leadership experiences are transformed into information; information into knowledge; and knowledge into wisdom.

Although partly alluded to previously, the next step in the process is for the leader to communicate his or her understanding to the team or subordinates. This will assist the team to achieve immediate short-term survival and mission success.

Individual leader's communication of understanding to team

As the individual team members are already aware of the situation and have developed their own perception and understanding of the situation at this stage, this step is important. Furthermore, considering the hierarchical nature of military teams, subordinates look to the leader for guidance and an indication of acceptable behaviour. By using clear, unambiguous and honest communication, the leader creates trust and also reframes the situation in a manner that can either create hope (if the story and outcome of their experiences are hopeful) or despair (if the leader's story reflects hopelessness). Through the example of positive sensemaking and the coaching of individual and collective sensemaking in the team, the leader achieves trust and certainty.

In this process, the leader is not only managing the perception of reality, but is also working on the reframing, nurturing and enhancement of individual self-perceptions.

'Self-perception' (see Galotti, 2008; Goldstein, 2011) refers to the perception that individuals have of themselves. Like perception, self-perception is based on the learning, memory, experiences and expectations that a person has developed throughout the course of his or her life. From a performance point of view, 'self-perception' refers to the way in which individuals see their own abilities and limitations, and it has a significant effect on their perceived ability to deal with the demands or stressors in any given situation.

One's perception of stressors determines the level of anxiety or stress one would experience and, consequently, the level of activation. Another factor that has an influence is the relative importance that one attaches to the outcome of a situation. If the outcome is extremely important to an individual, this will increase the level of anxiety and activation. If the person has a perception that he or she can control the situation and has sufficient ability to deal with the situation, it will probably lead to eustress ('good stress') and the individual's performance will be enhanced. If the outcome is not especially important, chances are that the individual might experience low levels of activation. However, if the outcome is important, but the individual's perception is that he or she does not have sufficient ability to deal with the stressors, the level of anxiety and activation would probably lead to distress and inferior performance (see Weersing et al., 2012).

The effect of stress would therefore depend on the individual's actual and perceived capacity to cope with the relevant stressors, as well as the level of physiological and psychological readiness to do so. However, the way a person views (or perceives) situations and stressors determines to a considerable extent how he or she will react to such stressors. Should the person have a positive view of the relevant stressor (or his or her ability to deal with it effectively), he or she is likely to exhibit an attitude of learned optimism (or hardiness) (see Bartone, 1994). Should the individual have a negative perception of the situation (or his or her ability to deal with the stressors) he or she might experience an attitude of learned helplessness (see Bartone, 1994; Kiehne et al., 2011).

The above highlights the importance of perception and self-perception. The way people observe and interpret their environment and themselves determines their reactions at cognitive, physiological (affective) and behavioural level (Van den Bos et al., 2003). It also determines how such person would perform in a situation to overcome stressors. This leads to the next step, which is developing shared understanding and sensemaking of the situation and the development of courses of action.

Developing shared understanding and sensemaking of the situation and development of a course of action

In situations of uncertainty, people seek structure and a way forward for two reasons. The first is to mitigate the emotional discomfort that uncertainty brings (Naghieh et al., 2015). Secondly, this structure and way forward provide one with the certainty that there are actions – of which some can become automatic – that can be taken to deal with the situation (Wood & Quinn, 2005). The authors are of the opinion that this is where the value of leadership in general, especially leadership in extreme situations, lies – the ability to make sense by providing structure through sensemaking. The leader needs to facilitate a

common and shared understanding among team members about the way forward. This can be done through discussions, brainstorming, providing a clear plan or a combination of different techniques. However, the most important outcome from the leader's interaction with his or her subordinates should be a clear course of action indicating the way forward that is understood and supported by the whole team. In this instance the leader's role is that of military tactician to ensure short-term survival and mission achievement.

Collective sensemaking also has its advantages. Bartone (1994, 2005) suggests that collective sensemaking contributes to cohesiveness, which implies an element of social support. In military groups, this social cohesiveness contributes to health and performance when under stress, as has been proved by various research projects in the past (see Siebold, 2007; Van't Wout & van Dyk, 2015).

Referring to the abuse of prisoners in the Abu Ghraib prison in Iraq where United States personnel were involved in long-term abuse and violations of Iraqi prisoners, Bartone (2005) supports the need for positive meaning in military operations. To avoid situations such as in the Abu Ghraib prison and to ensure the long-term sustainability of individual and team effectiveness as well as mental health, it is important to develop individual and collective resilience or hardiness. In this the leader plays a key role as trainer and hardiness coach.

Consequently, as seen in Figure 3, when sensemaking that leads to mission success is repeated by the leader through deliberate coaching and positive personal behaviour (as depicted by the dotted line), this starts to build individual and team resilience and hardiness through the learning that takes place (as depicted by the dashed lines). Through this process, the leader and team individually and collectively are able to make sense of a situation or environment that is characterised by chaos and uncertainty, thereby increasing their chances of surviving and achieving mission success in the short term. The leader is thus key in providing direction to the process of sensemaking and could have a considerable influence on the management of perceptions held by the team about the situation. Through the creation and management of team perceptions, the leader is directing the team to create sense, structure and a new reality (see Conradie, 2016). To achieve the sustainability of mission achievement and mental health, the next step would be to enable and develop individual and collective resilience and hardiness.

Enabling and developing individual and collective resilience and hardiness

Although immediate mission accomplishment is highly desirable, for the majority of leaders and teams, goal or mission achievement is not a once-off short-term occurrence. When considering this continuous deployment and redeployment of soldiers, it is worthwhile to take note of the following quotation from Weick (1995, pp. 60–61):

[T]hen what is necessary? The answer is, something that preserves plausibility and coherence, something that is reasonable and memorable, something that embodies past experience and expectations, something which resonates with other people, something that can be constructed retrospectively but also can be used prospectively, something that captures both feeling and thought, something that allows for embellishment to fit current oddities, something that is fun to contrast. In short, what is necessary in sense-making is a delightful story.

Bartone (1994) further notes that the increase in the operational tempo for high-risk teams heightens the risk of individual and collective stress, which in turn could have a negative effect on individual, team and organisational effectiveness. Furthermore, prolonged exposure to stress may lead to burnout with its resultant negative influence on mental health and performance (Bartone et al., 2022; Blatnik & Tušak, 2018); thus, emphasising the importance of military leaders developing and enhancing the individual and collective resilience and hardiness of their teams. Although the two concepts are often used interchangeably, there are clear differences. 'Resilience' and 'resiliency' (see Kreuckel et al., 2020; Maddi et al., 2012; Peterson et al., 2011) refer to the plasticity of the individual, team or system and the ability to adapt to stress in order to deal effectively with the situation and then return to baseline functioning afterwards, 'Resilience' therefore refers to a state rather than the more stable personality-trait concepts of grit and hardiness that contribute to resilience and resiliency (see Bartone, 1994; Kowalski & Schermer, 2018; Smith, 2020). Whereas resilience can be seen as the relationship or manner in which the individual interacts with the external environment, hardiness mostly refers to the internal make-up of the individual that allows him or her to be resilient in the face of adversity (see Ledesma, 2014).

'Hardiness' (see Bartone, 2006; Bartone et al., 2008; Carston & Gardner, 2009; Feldman, 2001; Kreuckel et al., 2020; Maddi et al., 2012; Peterson et al., 2011) refers to an attitude that is based on an individual's self-belief that he or she has the capacity or perceived capacity to cope with the demands or stressors of the situation and to choose effective coping strategies. An overview of hardiness literature (see Bartone, 2006; Bartone et al., 2022; Maddi et al., 2012; Peterson et al., 2011) postulates that hardiness is a collection of attitudes based on the following three concepts that are interrelated and in combination predict the second-order factor of hardiness:

- Commitment refers to the belief and self-perception that an individual's life
 has meaning and purpose. This is strongly related to a belief that one's life has
 purpose and that engaging in activities with community, family and work has
 positive meaning. It is the opposite of alienation.
- Control refers to the self-perception or belief that one can change or influence the outcome of situations, especially stressful situations. People who believe in their own ability to control situations do not become helpless or passive in the face of difficulty or challenges but take action to control the situation. An important distinction to make here is that people with a keen sense of control might not always be able to control the actual situation, but still believe that they can control their own reaction to the challenge. The opposite of control is powerlessness.

Challenge, the opposite of a need for security, refers to the way in which people
choose to make sense of or 'frame' their situation where they approach difficult
situations as a challenge rather than a threat. Individuals who score high on
hardiness do not deny the presence of difficulties or problems, but rather place
these in a positive 'frame'. This allows the individual to identify the actual
problem but also to reinforce the belief that it can be overcome.

The above then confirms the key role military leaders have to play in ensuring meaning and purpose, control over the outcome of the situation, and an appropriate frame for their subordinates to make sense of what has happened, or is happening to them. Furthermore, an element of hardiness is the ability to make a distinction between those elements of a situation that the individual can control and those that cannot be controlled. By focusing on what can be controlled, individuals can prioritise their efforts and not waste time and effort on what cannot be changed. Besides, this allows the individual to learn from previous stressful situations to determine what would be the most appropriate response to a challenging or stressful event. In other words, by allowing individuals to determine where to focus their energy, hardiness allows them to make sense or reframe the situation. This allows the individual to choose the most appropriate response or set of responses to the situation. The value of hardiness is its positive effect on adaptive behaviour, resilience and performance, especially in highly stressful and potentially dangerous situations (see Hachaturova, 2013; Liu et al., 2022).

The importance of enabling and developing hardiness and resiliency at individual and team level was evident from the literature. The essence of both resilience and hardiness is the way individuals make sense of the situation, and this forms or strengthens their perception of what is happening. In this way, the leader's role is that of trainer and hardiness coach, which could exert influence constantly on both individual and team level. From the literature it seemed be safe to say that leaders of teams that function in high-risk environments are in a unique position to influence individual and team resilience and hardiness through personal example, regular 'reframing', regular training and exposure to extreme situations, followed by feedback and debriefings. The positive effects of the development of individual and team resilience and hardiness can be observed when individuals and teams have confidence in their ability to construct models to deal with adversity to ensure mission accomplishment (Fraher, 2011; Kolditz, 2007; Kreuckel et al., 2020; Maddi et al., 2012; Peterson, 2011). This confidence contributes to the ultimate step in the process of sensemaking, which is the enablement and development of individual and team agency.

Enablement and development of individual and team agency

It is worthy to note the observation by Peterson et al. (2011) that by fulfilling the role of sensemaker, leaders will provide their subordinates with the cognitive and emotional tools to make sense of operational experiences, to change their perception of the situation and to take personal responsibility for the effective management of the situation. This in turn leads to individual and team agency, where both the individual and the team assume responsibility for and control of their actions and effective functioning. Individuals

have the self-perception that what they do is meaningful, and that they have control and the ability to deal with difficulties and adversity. Adversity and difficulties are seen as opportunities to test skills and abilities and to grow on an individual and collective level. As a team, individuals take responsibility for one another and the achievement of team goals. Through growth in individual and team competence trust is cultivated, and confidence in their own abilities and those of team increases. From the current study, it was clear that this will then enable a cyclic process of sensemaking and mission accomplishment. Although success breeds success, it can also breed complacency unless the leader continually scans the effectiveness of the team. The role of leaders is to monitor their own awareness and understanding of the external environment continually, to ensure that they remain aware of changes in the environment that would necessitate a reappraisal and reframing of their own perception of reality as well as the perception of their subordinates in this regard.

Towards a military leader toolkit for sensemaking in the military context

Since time immemorial, the military have functioned in an environment that is characterised by risk, danger and adversity (Barnes et al., 2011; Kolditz, 2007). This has always been an accepted part of the job. In addition, the military must function in an environment that has become increasingly volatile, uncertain, ambiguous and complex. Military leaders willingly function in an environment of chaos and possible injuries or death and are often required to send their subordinates into situations of certain injury or death (Bering, 2011). The paradox is that military leaders are willing to risk the lives of their subordinates, people who are closer to them than family, but who are in fact strangers. Soldiers do so because of their purpose to protect those who cannot protect themselves. Grenier (1993, p. F3) captures this purpose accurately when he quotes George Orwell: "people sleep peacefully in their beds at night only because rough men stand ready to do violence on their behalf'.

This requires leaders to instil in their subordinates confidence and resilience in their own abilities and collectively in those of the teams to succeed in sometimes impossible conditions, but most importantly, the purpose will ensure that they are willing to do so (see University of Akron, 2014). Various matters relating to military leaders themselves, their subordinates and their own sensemaking on both an individual and collective level were mentioned above.

On a practical level, it is important to develop a toolkit for the military leader to deal with issues relating to sensemaking on the modern battlefield. A good point of departure for developing such toolkit would be the three functions of the military leader identified in Figure 3 above. The three functions (military tactician, trainer and hardiness coach, and reality checker) are so intertwined and interlinked that it is almost impossible to distinguish them in leadership behaviours. However, the outcomes are clearly distinct from one another, although these outcomes are again intertwined and interlinked. The first role is that of the **military tactician** who has to make sense of the tactical military situation in order to generate plausible courses of action that will enable the team to achieve its mission. The second role is that of **trainer** and **hardiness coach**. In this case, the trainer

or coach has to maintain the psychological wellbeing and resilience of subordinates. The third is that of **reality checker**, and here the leader should continuously monitor his or her own awareness and understanding of the external environment. The outcomes of all three roles are important for mission success, and the actions taken by the leader to fulfil the roles have a simultaneous effect on all three. If too much emphasis is placed on one role and the others are neglected, it will have a negative influence on all three in the long run. It is therefore important for the military leader to strike a balance between sensemaking as tactician and playing the meaning-making role at the same time. The aim is to strengthen commitment and a sense of control, and to provide purpose while continuously monitoring his or her own awareness (self-awareness) and understanding. The modern military leader as sensemaker on the battlefield must therefore have a balanced approach in terms of sensemaking and meaning-making.

Sensemaking as military tactician

Based on their experience in the private sector, Keeshan and Chetty (2016, p. 623) refer to equipping leaders with a perception toolkit that enable them to "suspend judgement and evaluate what is truly there, rather than relying on one's own unconscious bias".

In this way, the leader's so-called "de-personalised" and "monolithic" interpretation is changed into individual stories and leads to key insights through using the senses (seeing, feeling, hearing and smelling) to understand the occurrence deeply after searching for patterns emerging from his or her observations and conversations (Keeshan & Chetty, 2016, p. 623). Sensemaking therefore starts in the perceiving stage already. One way in which the military train leaders to achieve this is through appreciation and problemsolving models such as GROUND¹¹ (SA Army, 2008), OODA¹¹ (Oshin, 2019) and RPD¹² (Bushey & Forsyth, 2006), which assist the leaders, especially at tactical level, to structure information. When using these models, military leaders have a model within which they can place or structure the latest information.

Next, after garnering new insights from a better perception of the context, the leader has to deal with what was in the current study referred to as the 'sensemaking dilemma'. This dilemma is about ways to bring the different interpretations of the context together in a coherent whole characterised by an underlying system, or what Keeshan and Chetty (2016, p. 624) refer to as "hidden scaffolding", which governs norms, rules, incentives and behaviour. In overcoming the sensemaking dilemma, it would be important to identify how the system works, why things happen in the system as they do in that context and, lastly, what action would be needed to make sense from the system.

Keeshan and Chetty (2016, pp. 622, 624) emphasise that it is in the first instance difficult to overcome one's inherent "confirmation bias", which is the tendency to jump to conclusions based on a superficial understanding of the situation. It is, however, through continuous reflection and practice that a military leader will begin to perceive events and actions that may disprove engrained mental models. In this instance, the military leader needs to ask questions of the people in the context to determine the what, how, who and why of things that have happened. For example, the military leader should ask —

- What stood out as unusual from the expectations and what unique trends were found in how people acted (whether there was a discrepancy between what people said and what they did)?
- What were the interrelationships and/or interdependencies between people and institutions?
- Who was involved in the incident and/or who was responsible or affected and who was involved in the decisions made?
- How did the incident happen and how did the larger context shape people's actions?¹³
- Which logical steps should have been taken?
- What were the interrelationships and/or interdependencies between people and institutions?
- Lastly, military leaders should ask themselves whether they should move away from traditional thinking or not.

It is important that these questions be asked without any judgement on the side of the military leader. This will assist in gaining in-depth insight in how things work in an unfamiliar setting. This in turn will assist military leaders to circumvent default thinking and jumping to conclusions. It will also prevent them from allowing personal biases or old mental models to affect their sensemaking. It is important that they generate multiple hypotheses that might explain the phenomenon at hand. These hypotheses need to be tested (considered) based on collateral information, whether from testing these with various stakeholders or from seeking confirmation in the greater ecosystem in that particular context (see Keeshan & Chetty, 2016).

As seen in Figure 3, the immediate outcome of sensemaking is being able to create understanding directly at the tactical level. The role of the leader as military tactician is not only to make sense of the tactical situation, but also to communicate the understanding clearly to the rest of the team. Depending on the situation, the leader then needs to facilitate a process where mutual understanding of the situation as well as the critical mission success factors that will ensure the immediate achievement of the mission is reached. When used within the existing appreciation, problem-solving and planning models will empower the military leader and the team to develop this meaning into executable action plans that will enable the team to achieve tactical mission success. The focus of the leader is therefore not just personal sensemaking and understanding of the situation, but also communicating this to the team and ensuring mutual understanding of the course of action that will achieve immediate mission success. This leads to a second role of the military leader, namely that of trainer and hardiness coach.

Sensemaking as trainer and hardiness coach

The second role of the leader as a sensemaker is that of trainer and hardiness coach to ensure the development of individual and collective resilience and agency, which in turn will enable long-term mental health and sustainable efficiency for both the leader and his or her subordinates. As seen in Figure 3, this role is intertwined with the achievement of both immediate and long-term outcomes. Before, during and after operations, leaders are continually teaching, training and coaching their subordinates for future operations. They do this through their personal example, through the training that they provide, through self-reflection and team debriefings, through feedback and by creating a learning environment, and by enforcing the values of individual and team agency. Building confidence in individual and team competence through training and lessons learned leads to self-efficacy and strengthens the individual and collective sense of purpose, sense of control and commitment to overcome challenges.

Continually monitoring own awareness and understanding of external environment

There is a third role that the military leader has to fulfil, namely continually monitoring his or her own awareness and understanding of what is happening in the external environment. This contributes to what can be referred to as 'continuous personal awareness of the situation internal and external to the leader'. This is about maintaining ongoing awareness to affirm the leader's initial interpretation and sensemaking of the situation or event that occurred, and to make changes if necessary (see Keeshan & Chetty, 2016).

These roles can therefore be the point of departure for developing the proposed toolkit for military leaders to assist with sensemaking on the battlefield for both military leaders themselves and for the teams that they are leading.

The next section concludes this discussion by presenting recommendations for addressing sensemaking on the modern battlefield.

Recommendations and conclusion

Social constructivism in complexity seems to be the best-fit world view from which the military leader can address the identified problem of sensemaking during military operations in a VUCA world. The basic assumptions, heuristics and mental models that worked in the past in other contexts will therefore have to be adapted to develop a sensemaking toolkit for use by military leaders on the modern battlefield.

The abovementioned suggests what Veldsman (2016b, p. 585) refers to as "new angles to leadership development". This suggests new stages to be considered for leadership development, such as developing processes for perceiving and sensemaking in the role of both the military tactician and of the trainer and hardiness coach, while continually monitoring own awareness and understanding of the external environment. In the development of these roles, a number of recommendations are made by the authors.

The first part of the sensemaking toolkit should be to create awareness of the above mentioned three roles among military leaders. Furthermore, the sensemaking toolkit should include tactical appreciation and sensemaking models such as GROUND, OODA and RDP. In addition, to use these models as tactical tools, military leaders should be aware of the link between these sensemaking models on the one hand, and sensemaking

and practice on the other, and should internalise these models during training to develop various courses of action. Leaders must be able to structure information, especially in a VUCA world, where they can learn and practice using Keeshan and Chetty's (2016) 'hidden scaffolding' alluded to above. They should know how to integrate their analysis of how these systems work into one system of systems (Mitre, n.d.), understand why things happen in the system, identify possible actions, and take those actions based on situational awareness. Continuous reflection and practice of these aspects in the toolbox should include communicating their interpretation of the world to their subordinates to contribute to sensemaking and meaning-making.

For their role as hardiness coaches focusing on their subordinates' psychological wellbeing and readiness, military leaders should develop a theoretical foundation for understanding hardiness and ways to function as a trainer and/or coach in hardiness. The current study found that the theoretical foundation can be supplemented with, among other things, cognitive skills training, self-awareness training and situational awareness training. This will require what Keeshan and Chetty (2016, p. 619) refer to as the "rewiring" of the human brain. Tilman and Jacoby (2020) see this as human beings' natural inclination to avoid risk by either being impulsive or reluctant to act.

As mentioned above, most militaries school and train their leaders formally in military appreciation, problem-solving and planning models. However, the assumption is that the leaders have developed the cognitive and neurological skills that underlie the successful application of the military models sufficiently. The assumption is that critical thinking skills are developed at school and will continue to develop throughout the leader's career. However, this is often not the case. To ensure that military leaders are also critical and effective thinkers, it is suggested that critical thinking skills training programmes be developed and incorporated into the curriculums of functional military courses. Training staff should be empowered to ensure that the development of critical thinking skills forms part of the assessed outcomes of successful course completion.

Where cognitive skills training is provided, it often takes place in 'ideal' conditions, such as classroom settings. This does not teach leaders to apply their perceptive, cognitive processing and self-regulation skills in extreme situations where these matter, as observed by Bester and O'Neil (2022). It is therefore recommended that the development and training of leaders for the role of military tacticians should include classroom training to establish the skill, as well as the application thereof in extreme situations, followed by feedback to ensure that the skills can be applied in extreme situations. In this regard, a trainee can be appointed as a leader for a simulation exercise preceded by sleep deprivation and physical exercise. During the training exercise, leaders should have to deal with various scenarios that would affect their subordinates negatively. These scenarios may include loss of personnel, fake news, and experiencing problems at home, with which the appointed leader will have to deal to ensure that the mission objectives are achieved. Feedback will include how the leader fulfilled the role of sensemaker.

The function and role of sensemaking is ideally suited for mission command where authority for decision-making and the responsibility to act are delegated to the lowest

levels (Shamir, 2011), but would require the concept, process and techniques of sensemaking to be included in mission command training.

Self-awareness training integrated with situational awareness training for leaders is critical to make leaders aware of their own behaviour, reactions and cognitive processes – especially in extreme situations. This will enable them to prepare themselves better for leadership in extreme situations but also enable them, especially when combined with coaching skills, to understand and influence the perceptions of their subordinates. Situational awareness training will assist leaders with continuous awareness and interpretation of events in the external environment.

It is recommended that performance enhancement strategies that include sensemaking, reframing and hardiness training be developed and implemented for all leadership training, especially for the combat and combat support entities. This will strengthen the resilience of leaders but will also empower them to develop hardiness and resilience in their subordinates.

It is important to note that sensemaking facilitated by the military leader is not static or unidimensional, but rather a process of mutual construction and reconstruction of an event based on mutual social interactions between individuals, their leaders as well as contextual factors. It is recommended that coaching and mentoring be used for continuous leadership development in the future to address sensemaking as part of the lifelong learning programmes in military organisations. The sensemaking process depicted in Figure 3 above is a humble proposed process, but it may be used as a point of departure.

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References

- Ahuja, A. S., & Kumar, U. (2020). Shaping military leaders: Role of character strengths and virtues. In U. Kumar (Ed.), Routledge international handbook of military psychology and mental health (pp. 119–131). Routledge.
- Barnes, D. M., Banks, K. C., Albanese, M., & Steger, M. F. (2011). Meaning-making: The search for meaning in dangerous context. In P. J. Sweeney, M. D. Matthews, & P. B. Lester (Eds.), Leadership in dangerous situations: A handbook for the armed forces, emergency services and first responders (pp. 139–160). Naval Institute Press.
- Bar-On, R. (2001). Emotional intelligence and self-actualisation. In J. Ciarrochi, J. P. Forgas, & J. D. Mayers (Eds.), Emotional intelligence in everyday life: A scientific inquiry (pp. 82–97). Psychology Press.
- Barren, B., & Scott, C. (2010). Organizing ambiguity: A grounded theory of leadership and sense-making within dangerous contexts. *Military Psychology*, 22, S42–S69.
- Bartone, P. T. (1994). Increasing resiliency through shared sense-making: Building hardiness in groups. In D. Paton, J. M. Volanti, C. Dunning, & L. Smith (Eds.), Managing traumatic stress: A proactive approach (pp. 129–140). Charles C. Thomas.
- Bartone, P. T. (2005). The need for positive meaning in military operations: Reflections on Abu Ghraib. *Military Psychology*, 17(4), 314–324.
- Bartone, P. T. (2006). Resilience under military operational stress: Can leaders influence hardiness? *Military Psychology, 18*, Suppl. 1, S131–S148. https://psycnet.apa.org/doi/10.1207/s15327876mp1803s-10
- Bartone, P. T., McDonald, K., & Hansma, B. J. (2022). Hardiness and burnout in adult U.S. workers. *Journal of Occupational and Environmental Medicine*, 64(5), 397–402.
- Bartone, P. T., Roland, R. R., Picano, J. J., & Williams, T. J. (2008). Psychological hardiness predicts success in US Army Special Forces candidates. *International Journal of Selection and Assessment*, 16(1), 78–81.
- Bering, H. (2011, August/September). The perfect officer. *Policy Review*, 51–68.
- Bester, P. C., & O'Neil, J. W. (2022). The military leadership training landscape of the South African National Defence Force as related to extreme situations. [Manuscript submitted for publication].
- Blatnik, P., & Tušak, M. (2018). Efficient coping stress strategies and development of self-regulation mechanisms as prevention activities for employees in army. In A. Pešic (Ed.), Stress in the military profession (pp. 175–194). Strategic Research Institute, University of Defence, Republic of Serbia.
- Blignaut, S. (2020). Managing uncertainty, complexity and chaos in a crisis vortex. In W. Crous (Ed.), Managing organisations during the COVID-19 vortex: Comprehensive guidelines for leading your organisation through the vortex (pp. 17–22). Knowledge Resources.
- Bush, M. W., Ozkan, E., & Passmore, J. (2013). The development of meaning and identity within coaching. In J. Passmore, D. B. Peterson, & T. Freire (Eds.), *The Wiley-Blackwell* handbook of the psychology of coaching and mentoring (pp. 58–67). Wiley.
- Bushey, D., & Forsyth, M. J. (2006, January/February). The recognition-primed decision model: An alternative to the MDMP for GWOT. Field Artillery, 9–13. https://www.researchgate.net/publication/307465205_The_Recognition-Primed_Decision_Model_An Alternative to the MDMP for GWOT
- Campbell, D. J. (2012). Leadership in dangerous contexts: A team-focused, replenishment-of-resources approach. In J. H. Laurence & M. D. Matthews (Eds.), *The Oxford handbook of military psychology* (pp. 158–175). Oxford University Press.

- Carston, M. C., & Gardner, D. (2009). Cognitive hardiness in the New Zealand military. *New Zealand Journal of Psychology*, 38(3), 26–34.
- Cassidy, R. (2019, November 26). What happens when tactics takes primacy over strategy?

 Modern War Institute at West Point. https://mwi.usma.edu/happens-tactics-take-primacy-strategy/
- CFI Team. (2022). Scenario analysis: Analyzing future states of the world. https://corporatefinanceinstitute.com/resources/knowledge/modeling/scenario-analysis/
- Colman, J. M., Kahle, H. K., & Henriqson, E. (2013). Is performance variability necessary?

 A qualitative study on cognitive resilience in forestry work. *Journal of Human Performance in Extreme Environments*. 11(1), 1–6.
- Conradie, D. (2016). Leadership talent for an uncertain future. In T. H. Veldsman & A. J. Johnson (Eds.), Leadership: Perspectives from the front line (pp. 587–599). KR Publishing.
- Dehn, M. J. (2014). Essentials of processing assessment (2nd ed.). Wiley.
- Feldman, R. S. (2001). Social psychology (3rd ed.). Prentice-Hall.
- Fowler, M. (2019, November 4). The rise of the present unconventional character of warfare. Strategy Bridge. https://thestrategybridge.org/the-bridge/2019/11/4/the-rise-of-the-present-unconventional-character-of-warfare
- Fraher, A. L. (2011). Thinking through crisis: Improving teamwork and leadership in high-risk fields. Cambridge University Press.
- Galotti, K. M. (2008). Cognitive psychology (4th ed.). Thomson Wadsworth.
- Goldstein, E. B. (2011). Cognitive psychology: International edition (3rd ed.). Wadsworth Cengage Learning.
- Gospodarowicz, M., & O'Sullivan, B. (2003). Patient management scenario: A framework for clinical decision and prognosis. Seminars in Surgical Oncology, 21(1), 8–12. https://doi.org/10.1002/ssu.10015
- Grenier, R. (1993, April 6). Perils of passive sex. The Washington Times, F3.
- Gurteen, D. (2016). Conversational leadership. https://conversational-leadership.net/sensemaking/
- Hachaturova, M. R. (2013). Hardiness as a resource of personality's coping behaviour in difficult situations. Academic Journal of Interdisciplinary Studies, 2(8), 225–230. https://www.richtmann.org/journal/index.php/ajis/article/view/726
- Herberg, M., & Torgersen, G.-E. (2021). Resilience competence face framework for the unforeseen: Relations, emotions and cognition. A qualitative study. *Frontiers in Psychology*, 12, 1–24. https://doi:10.3389/fpsyg.2021.669904
- Huebschmann, N. A., & Sheets, E. S. (2020). The right mindset: Stress mindset moderates the association between perceived stress and depressive symptoms. *Anxiety, Stress & Coping*, 33(3), 248–255. https://doi.org/10.1080/10615806.2020.1736900
- Inbar, D., Solomon, Z., Spiro, S., & Aviram, U. (1989). Commanders' attitude towards the nature, causality, and severity of combat stress reaction. *Military Psychology*, 1(4), 215–233.
- Keech, J. J., Hagger, M. S., O'Callaghan, F. V., & Hamilton, K. (2018). The influence of university students' stress mindsets on health and performance outcomes. *Annals of Behavioral Medicine*, 52(12), 1046–1059. https://doi.org/10.1093/abm/kay008
- Keeshan, N., & Chetty, S. (2016). Leadership development: Principles, approaches and processes. In T. H. Veldsman & A. J. Johnson (Eds.), *Leadership: Perspectives from the front line* (pp. 619–630). KR Publishing.
- Kernic, F. (2017). Facing death: The dynamics of leadership and group behaviours in extreme situations when death strikes without warning. In M. Holenweger, M. K. Jager, & F. Kernic (Eds.), *Leadership in extreme situations* (pp. 21–40). Springer. https://doi.org/10.1007/978-3-319-55059-6

- Kiehne, A., Chappell, L., Marquis, M., & Ward, F. (2012). Learned helplessness, hardiness, and risk-taking: Factors as they relate to prescriptive authority among nurse practitioners. *Pennsylvania Nurse*, 66(4), 25–29.
- Kolditz, T. A. (2007). In extremis leadership: Leading as if your life depended on it. Jossey-Bass.
- Kott, A. (2018). Technological surprise and resilience in military systems. In B. D. Trump, M.-V. Florin, & I. Linkov (Eds.), *IRGC resource guide on resilience: Domains of resilience for complex interconnected systems* (Vol. 2, pp. 89–93). EPFL International Risk Governance Centre. https://infoscience.epfl.ch/record/262527?ln=en
- Kowalski, C. M., & Schermer, J. A. (2019). Hardiness, perseverative cognition, anxiety, and health-related outcomes: A case for and against psychological hardiness. *Current Sociology*, 122(6), 1–23. https://doi.org/10.1177/0033294118800444
- Kreuckel, O., Heidler, A., Von Luedinghausen, N., Auscheck, M., & Soest, M. (2020). Building resilience and hardiness in military leaders: Robustness training programs of the German army. In U. Kumar (Ed.), Routledge international handbook of military psychology and mental health (pp. 151–163). Routledge.
- Lampton, D. R., Clark, B. R., & Kerr, B. R. (2003). Urban combat: The ultimate extreme environment. *Journal of Human Performance in Extreme Environments*, 7(2), 56–62.
- Law, H., Ireland, S., & Hussain, Z. (2007). The psychology of coaching, learning and mentoring. Wiley.
- Ledesma, J. (2014). Conceptual frameworks and research models on resilience in leadership. SAGE Open. 4(3), 1–9. https://doi.org/10.1177/2158244014545464
- Lele, A. (2019). Disruptive technologies for the militaries and security. Springer.
- Likert, R. (1967). The human organization: Its management and value. McGraw-Hill.
- Lindsay, D. R. (2020). From the editor: VUCAH leadership. *Journal of Character & Leadership Development*, 7(2), 3–11.
- Liu, J., Cheng, X., & Li, J. (2022). Relationship between hardiness and the mental health of funded Chinese college students: The mediating role of social support and the moderating role of an only-child status. Frontiers in Psychology, 13, 1–10. https://doi.org/10.3389/fpsyg.2022.842278
- Maddi, S. R., Matthews, M. D., Kelly, D. R., Villareal, B., & White, M. (2012). The role of hardiness and grit in predicting performance and retention of USMA cadets. *Military Psychology*, 24(1), 19–28.
- Matthews, M. D. (2020). Foreword. In U. Kumar (Ed.), *The Routledge international handbook of military psychology and mental health* (pp. xxxix–xlii). Routledge.
- McChrystal, S., Eggers, J., & Mangone, J. (2018). Leaders: Myth and reality. Penguin.
- McNab, C. (2016). Military mental toughness: Elite training for critical situations. Ulysses Press.
- Miller, A. (2019, May 1). The military will soon be facing a defeat far worse than the French suffered at Agincourt. The Trumpet. https://www.thetrumpet.com/20599-former-defense-official-military-revolution-to-unseat-us-superpower
- Mitre. (N.d.). System of systems. https://www.mitre.org/publications/systems-engineering-guide/enterprise-engineering/systems-of-systems
- Mostert, M. (2020). Sense-making for decision-making: A futures thinking perspective for executives in time of crisis. In W. Crous (Ed.), *Managing organisations during the COVID-19 vortex: Comprehensive guidelines for leading your organisation through the vortex* (pp. 23–30). Knowledge Resources.
- Mukherjee, S., & Kumar, U. (2020). Military psychology in war and peace. In U. Kumar (Ed.), *Routledge international handbook of military psychology and mental health* (pp. 3–11). Routledge.

- Naghieh, A., Montgomery, P., Bonell, C. P., Thompson, M., & Aber, J. L. (2015). Organisational interventions for improving wellbeing and reducing work-related stress in teachers. Cohrane Database of Systematic Reviews, (4), 1-62. https://doi.org/10.1002/14651858. CD010306.pub2
- Nuciari, M. (2021). Preface. In M. Nuciari & E. Olivetta (Eds.), *Leaders for tomorrow:*Challenges for military leadership in the age of asymmetric warfare (pp. v-vi).

 Springer.
- Oshin, M. (2019, April 29). The OODA loop: How the greatest military strategists make decisions in the face of uncertainty. Ladders. https://www.theladders.com/career-advice/make-decisions-face-uncertainty
- Ottewel, P. (2020, December 20). *Defining the cognitive domain*. OTH. https://othjournal.com/2020/12/07/defining-the-cognitive-domain/
- Peterson, C., Craw, M. J., Park, N., & Erwin, M. S. (2011). Resilience and leadership in dangerous contexts. In P. J. Sweeney, M. D. Matthews, & P. B. Lester (Eds.), Leadership in dangerous situations: A handbook for the armed forces, emergency services, and first responders (pp. 60–77). Naval Institute Press.
- Rosinha, A. P., De Andrade, H. Jr, & De Souza, M. A. (2020). Sustainable team leadership: Social identity and collective leadership for military society. In U. Kumar (Ed.), *Routledge international handbook of military psychology and mental health* (pp. 165–179). Routledge.
- SA Army. (2008). Infantry field craft (Vol. 4, Book 2): Terrain evaluation (Pamphlet 2). Military Printing Regiment.
- Saberwal, S. (1996). On reality: Its perception and construction. *Sociological Bulletin*, 45(2), 161–188. https://doi.org/10.1177/0038022919960202
- Sagy, S., Erikson, M., & Braun-Lewensohn, O. (2015). The salutogenic paradigm. In S. Joseph (Ed.), *Positive psychology in practice: Promoting human flourishing in work, health, education, and everyday life* (pp. 61–79). Wiley.
- Shamir, E. (2011). Transforming command: The pursuit of mission command in the US, British and Israeli armies. Stanford University Press.
- Siebold, G. L. (2007). The essence of military group cohesion. *Armed Forces and Society, 33*(2), 286–295. https://doi.org/10.1177%2F0095327X06294173
- Smith, J. M. (2020). Early childhood education programs as protective experiences for low-income Latino children and their families. *Adversity and Resilience Science*, 1(3), 191–204. https://doi.org/10.1007/s42844-020-00013-7
- Steinberg, R., & Kornguth, S. E. (2009). Sustaining performance under stress: Overview of this issue. *Military Psychology*, 21, Suppl. 1, 1–8.
- Stelter, R. (2013). Narrative approaches. In J. Passmore, D. B. Peterson, & T. Freire (Eds.), *The Wiley-Blackwell handbook of the psychology of coaching and mentoring* (pp. 407–425). Wiley.
- Stern, E. K. (2017). Crisis, leadership, and extreme contexts. In M. Holenweger, M. K. Jager, & F. Kernic (Eds.), *Leadership in extreme situations* (pp. 41–59). Springer. https://doi.org/10.1007/978-3-319-55059-6
- Symonds, M. (2018, January 27). Special report: The future of war. *The Economist*, 1–16. *The Economist*. (2018, January 27). Special report: The future of war, pp. 1–16.
- Tilman, L. M., & Jacoby, C. (2020, February 24). *The most agile day*. Strategy. https://www.strategy-business.com/article/The-most-agile-day?gko=463ec
- University of Akron. (2014). Introduction to army leadership. https://www.uakron.edu/armyrotc/
 MS1/24.pdf
- US Marine Corps. (1997). Warfighting: Marine corps publication: MCDP 1. Department of the Navy.

- Van den Bos, K., Maas, M., Waldring, I. E, & Semin, G. R. (2003). Toward understanding the psychology of reactions to perceived fairness: The role of affect intensity. Social Justice Research, 16, 151–168. https://doi.org/10.1023/A:1024252104717
- Van Dyk, G. A. J. (2016). Trauma management: A holistic approach. In G. A. J. van Dyk (Ed.), Military psychology for Africa (pp. 129–147). Sun Media.
- Van't Wout, M. C., & Van Dyk, G. A. J. (2015). Managing morale on the battlefield: A psychological perspective. *Scientia Militaria*, 43(1), 127–148, https://doi.org/10.5787/43-1-1112
- Veldsman, T. H. (2016a). Leadership engagement with the context. In T. H. Veldsman & A. J. Johnson (Eds.), Leadership: Perspectives from the front line (pp. 325–340). KR Publishing.
- Veldsman, T. H. (2016b). Leadership identification, growth and development. In T. H. Veldsman & A. J. Johnson (Eds.), Leadership: Perspectives from the front line (pp. 583–585). KR Publishing.
- Veldsman, T. H., & Johnson, A. J. (2016). Leadership as strategic organisational capability and intervention. In T. H. Veldsman & A. J. Johnson (Eds.), *Leadership: Perspectives from* the front line (pp. 1–7). KR Publishing.
- Weersing, V. R., Rozenman, M. S., Maher-Bridge, M., & Campo, J. V. (2012). Anxiety, depression, and somatic distress: Developing a transdiagnostic internalizing toolbox for pediatric practice. *Cognitive and Behavioral Practice*, 19(1), 68–82. https://doi. org/10.1016/j.cbpra.2011.06.002
- Weick, K. E. (1995). Sense-making in organisations. Sage.
- Wood, W., & Quinn, J. M. (2005). Habits and the structure of motivation in everyday life. In J. P. Forgas, K. D. Williams, & S. M. Laham (Eds.), Social motivation: Conscious and unconscious processes (pp. 55–70). Cambridge University Press.

Endnotes

- ⁷ Piet Bester grew up on a farm in the Orange Free State. After matriculation, he did national service (conscription). Piet joined the South African Defence Force, attended the South African Military Academy, obtained various degrees, and completed the University of Johannesburg's Doctoral Programme: Leadership in Performance and Change. He is also a registered Industrial Psychologist and completed various military courses, including the Joint Senior Command and Staff Programme and Security and Defence Studies Programme, including a Post Graduate Diploma in the Management of Security at the University of the Witwatersrand. Piet is currently a senior lecturer at the University of Stellenbosch's Faculty of Military Science. His research interests include leadership, integrity, performance enhancement, test construction, and national security.
- 8 Johnny O'Neil is an industrial psychologist and deputy director of the SA Army Assessment Centre of the Military Psychological Institute in Pretoria. He holds a D. Phill degree in Sport Psychology from the University of Pretoria, and a master's degree in Industrial Psychology from the University of the Free State. He also recently completed a postgraduate diploma in Disaster Risk Management from the Northwest University in Potchefstroom. He has 26 years' experience in the military environment, both as psychologist and officer in the Infantry. His passion is performance enhancement and leadership performance in high-risk environments. He is married and have two wonderful children.
- ⁹ The concept of a leader as linking pin was developed by Rensis Likert who viewed supervisors or managers as the liking pin within the organisation with the dual task of supporting unity and creating a sense of belonging within the group they represent and supervise (Likert, 1967). In this context, the leader is the linking pin between the two worlds becoming one and supporting the subordinate(s) in making sense of reality.
- ¹⁰ GROUND is an acronym for a low-level tactical appreciation model used in the SANDF. It refers to a given picture, route, observation, under cover, negotiability and distance (see SA Army, 2008).
- ¹¹ OODA is an acronym for a decision-making model used by militaries worldwide and refers to observe, orient, decide and act (see Oshin, 2019).
- ¹² RPD is a planning model used in some North Atlantic Treaty Organisation (NATO) countries. It is used for problem-solving and is referred to as the recognition-primed decision model (see Bushey & Forsyth, 2006).
- ¹³ Ultimately, the military leader will discover that a particular context is surrounded by a larger eco-system that contributes to overall understanding.



Sensemaking training in preparation for effective mission command in the African battlespace

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Abstract

The South African National Defence Force (SANDF), as a member state of the United Nations, the African Union and the Southern African Development Community, has certain continental and regional responsibilities. It is foreseen that the main areas of influence and operations of the SANDF will be situated in Africa and are referred to as the African battlespace, which holds challenges for deploying military commanders. We argue that the elevated levels of complexity and uncertainty in this context make mission command, as a command approach, especially relevant. The conceptual study on which this article is based, found that mission command is highly suitable to promote a command culture that is flexible yet robust, fosters unity of command at all levels, and simultaneously provides subordinate commanders with the freedom to act decisively when new opportunities are identified. For mission command to be applied in the African battlespace, sensemaking is an important cognitive skill that should form an integral part of the psychological preparation and training of commanders. Recommendations are made for sensemaking development in the current training of commanders in the SANDF.

Keywords: African battlespace, commanders, mission command, peacekeeping, sensemaking, military training

Introduction

In 1994, the South African National Defence Force (SANDF) was established as an amalgamation of statutory and non-statutory forces from the different stakeholders involved. In this process, statutory forces from the former South African Defence Force (SADF) were integrated with forces from the Transkei Defence Force, the Bophuthatswana Defence Force, the Venda Defence Force, the Ciskei Defence Force, Umkhonto we Sizwe and the Azanian People's Liberation Army (APLA) (Garcia, 2018). Each of these forces brought with it an approach to the concept of command that reflected its unique organisational and operational requirements. One of the challenges of the newly constructed SANDF was to incorporate their different command philosophies into one that suited the new organisation. The command philosophy that was formally adopted and authorised was mission command (Republic of South Africa [RSA], 2015; South

African Army, 2010). Mission command is designed to promote a flexible yet robust command system that fosters unity of command at all levels and yet provides subordinate commanders with the freedom to act decisively when new opportunities are identified (Garcia, 2018; Vogelaar & Kramer, 2004).

We embarked on this study to establish how military commanders in the SANDF can be equipped better for mission command, specifically with the addition of sensemaking training. This necessitated a conceptual analysis of mission command. The findings of the conceptual analysis are discussed in the results section of this article. Since the African battlespace (ABS) is expected to be the principal area of influence and operations of the SANDF (Bester & Du Plessis, 2014; Grundlingh, 2016; Heinecken, 2020; Neethling, 2011), an overview of the ABS is provided in the literature review section of this article.

The African battlespace

The ABS consists of a complex confluence of factors that affect the performance of soldiers and commanders during operations (Grundlingh, 2016). The factors that affect operations depend on the region in Africa (Garcia, 2018). Factors may include but are not limited to the physical terrain of the country, its socio-economic development, political instability, religious extremism, and extreme poverty. These factors create a context within which the SANDF must operate to achieve wide-ranging objectives (Cilliers, 2018).

The African continent is associated with conflict, which is becoming increasingly violent and prolonged (Musisi & Kinyanda, 2020). Following the global trends, Africa is also experiencing a higher likelihood of intra-state conflicts rather than inter-state conflicts, increases in the role of non-state actors (i.e. warlords, militia, rebels, mercenaries) in conflicts, and a rise in international terrorism (Cilliers, 2018). In addition, soldiers deployed in Africa are also confronted by other realities, such as extreme poverty (Schoch & Lakner, 2020; The World Bank, 2020), a proliferation of small arms, child soldiers, both inter- and intra-state conflict, an elevated risk of terrorism and foreign extremist movements, poor infrastructure, famine, poaching and malaria (Garcia, 2018).

The high levels of poverty and political instability render communities and societies vulnerable to political and social unrest, ethnic and religious extremism, acts of terror, the involvement of non-state actors in conflict, high levels of international crime and cyber threats (Ero, 2021). The socio-economic and political climate in a country has a direct influence on the military operations that take place in it and is one of the major reasons why peacekeeping operations in Africa have become "extremely difficult, complex, frustrating and dangerous" (Heinecken & Ferreira, 2012b, p. 50). Experience in peace operations in the Democratic Republic of the Congo (DRC) or Sudan shows that South African (SA) soldiers might face diverse rebel forces, mistrust between peacekeeping personnel and the host country, or even a hostile government.

Generally, African governments show an inability to control and govern their countries to ensure stability (Gettleman, 2010), which further contributes to an environment of conflict. Cilliers (2018) relates the twelvefold increase in violent and non-violent riots in Africa since 2001, as well as the increase in non-state conflict, directly to poor governance.

Economic exploitation by criminals and multinationals is also common in Africa, increasing conflict along cultural, tribal or religious fault lines. This is apparent in areas such as the DRC, the Central African Republic (CAR) and Nigeria, to name a few. The current conflict in the Cabo Delgado province of Mozambique is a good example of lingering resentments along cultural, tribal and religious divides that are aggravated through poor socio-economic development, economic exploitation and poor governance (Central Intelligence Agency [CIA], 2021; Cronje, 2021; Martin, 2021).

The ABS is also known for its social complexity. Bester and Du Plessis (2014) note that variable support for foreign military forces is an added dimension of complexity, as the society may include locals who are hostile, neutral or supportive. A good example of hostile locals can be found in the case of the Battle of Bangui in 2013, during which the SANDF contingent was attacked by a large rebel force assisted by some of the locals (Heitman, 2014). The complex interaction with local populations is further complicated by what Bester and Du Plessis (2014, p. 133) call "social complexity" and what Grundlingh (2016) refers to as the nonlinearity of wars on the African continent. Members of the SANDF often have to contend with combatants who are child soldiers or female, and who are often indistinguishable from non-combatants as they are either not wearing a uniform or are wearing a mixture of uniforms and civilian attire (Heinecken & Ferreira, 2012a; Martin, 2021).

The mandates governing soldiers may also not support their mission. Heinecken and Ferreira (2012a, p. 37) note that challenges in the host country escalate when soldiers at ground level are "restrained by weak, unrealistic and confusing mandates" (i.e. rules of engagement that do not protect them from the realities they face) and when they attempt to perform their duties with "insufficient economic and human resources" and equipment that is not suitable for the operation.

The realities of operations in Africa may change very quickly (Heinecken & Ferreira, 2012b). For example, peacekeeping missions can take place under Chapter VI of the United Nations Charter to resolve conflict through peaceful resolution via "negotiation, mediation, reconciliation, arbitration and peaceful settlement", but can also move to resolution under Chapter VII, where escalating disputes become too violent to resolve without force (Shinga, 2016, p. 261).

Geographically, challenging and varied physical environments are commonplace in Africa (Heinecken & Ferreira, 2012b). These place special demands on military commanders. Bester and Du Plessis (2014) note that the varying physical terrain can range from open deserts and savannah to dense jungles, with weather conditions that may range from extremely hot and dry to cold and extremely wet.

Besides the variation in the natural terrain, Africa is also rapidly urbanising. It is foreseen that by 2050, approximately 52% of the African population will be living in urban areas, bringing unique problems from developmental, socio-economic and disaster-risk perspectives (Adelekan et al., 2015; Fraser et al., 2017; Güneralp et al., 2017). For the military commander, this would mean that the focus of military operations would shift

from rural operations to operations in predominantly urban areas. Urban terrain brings about unique challenges to soldiers and commanders in terms of limitations on visibility, mobility and firepower (Medby & Glenn, 2002).

The ABS holds some challenges for deploying military commanders (Bester & Du Plessis, 2014; Grundlingh, 2016). Although these challenges may be replicated in other battlespaces, the ABS is specifically relevant to the current discussion since it is the primary space for operations for the SANDF.

Methodology

Conceptual studies use evidence from literature to build arguments that either synthesise theory, adapt theory or build typologies or models as these studies clarify concepts and determine their defining attributes (Walker & Avant, 2011). In this study, we set out to summarise and integrate what is already understood as 'mission command'. Although mission command is a familiar concept in militaries worldwide, such as in the United States, Great Britain, Israel and South Africa, it is frequently misunderstood (Shamir, 2011). A conceptual analysis of mission command allowed us to make recommendations for the force preparation of commanders.

Procedure

We followed the concept analysis approach by Rodgers (2000), comprising seven steps:

- identifying and naming the concept of interest;
- identifying surrogate terms (if any);
- selecting the data;
- identifying the attributes of the concept;
- where possible, identifying the antecedents and consequences;
- identifying related concepts; and
- generating a model case or exemplar of the concept (Foley & Davis, 2017; Tofthagen & Fagerstrøm, 2010).

As outcome of the conceptualisation, we aimed to show how mission command is a fitting philosophy in the ABS. Step 7 above is therefore not a traditional exemplar of the concept, but rather an attempt to link the previous discussion of the ABS to the results of the conceptual analysis. This is presented as part of the discussion of the results.

Although mission command has also been applied in other contexts (see Howieson, 2012; Moilanen, 2015), we searched for and selected literature related to the military context. The objective of the study was to define the attributes of the concept in this context and for the military commander specifically. The source of data used, was published articles and papers within the military field. The inclusion and exclusion criteria specified that all the documents had to be peer reviewed, published in English and published in the last 20 years (i.e. since 2002). Searches were conducted through Academic Search Complete

(ASC), EbscoHOST (including APAS, APA PsychInfo, Eric, Humanities, and Masterfile Premier) and ProQuest central. To ensure representation of documents related to the SANDF and the SA context, other sources were added manually after the search (see Figure 1). Table 1 shows the documents selected.

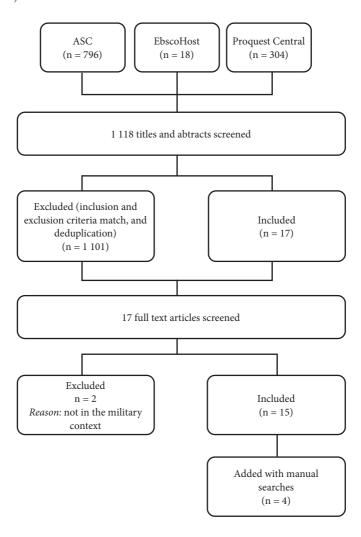


Figure 1: Overview of the process

Roger's (2000) evolutionary model of concept analysis focuses on an inductive approach to what is common. We employed a thematic analysis using ATLAS.ti 22 to identify the main attributes, antecedents and consequences of mission command.

Table 1: Included articles and documents

Author	Date	Journal	Country
Alibala	2019	Journal of Defense Resources Management	Non-specific
Ben-Shalom & Shamir	2011	Defense & Security Analysis	Israel
Carpenter	2016	Air & Space Power Journal	United States
De Vries	2013	Book	South Africa
De Vries et al.	2017	Book	South Africa
Glenn	2017	Parameters	Australia
Harvard	2013	Air & Space Power Journal	United States
Krabberød	2014	Small Group Research	Norway
Nilsson	2021	Journal on Baltic Security	Sweden
Ploumis	2020	Comparative Strategy	Greece
Ploumis & Pilalis	2018	Defence Studies	Non-specific
Rubel	2018	Naval War College Review	United States
Schoeman	2006	Management Today	South Africa
Scholtz	2012	Scientia Militaria	South Africa
Shamir	2010	Journal of Strategic Studies	Israel
Shamir	2017	Israel Affairs	Israel
Sjøvold & Nissestad	2020	Team Performance Management	Norway
Storr	2003	Defence Studies	Britain
Vogelaar & Kramer	2004	Armed Forces & Society	The Netherland

Results

In this section, we describe mission command as understood from the analysis. The section focuses on the related concepts, the characteristic of mission command, antecedents and consequences, as derived from the literature.

Mission command: related concepts and attributes

Mission command is based on *Auftragstaktik* (see Alibala, 2019; Scholtz, 2012; Shamir, 2010) and is grounded in the assumption that people want to take responsibility for organisational goal achievement and, given certain criteria, enjoy their work and do it

willingly (SA Army, 2010). Mission command refers to "a command system in which responsibilities and authorities are delegated throughout the command line in order to stimulate initiative and leadership at all levels" (Vogelaar & Kramer, 2004, p. 410). It is therefore fundamentally a decentralised system of command (Shamir, 2017; Storr, 2003). The responsibilities and authority to make decisions are delegated throughout the command line (De Vries, 2013; Scholtz, 2012). The sub-commanders, who are involved in the operations in the field, make the decisions for actions based on their initiative and situational judgement, but within the boundaries of the superior commander's intent (Sjøvold & Nissestad, 2018).

Mission command can also be understood as the opposite of *Befehlstaktik*, which refers to an approach where the commander formulates plans and issues detailed instructions to his or her subordinates, expecting them to follow orders to the letter without any room for lower-level innovation or initiative (Ben-Shalom & Shamir, 2011). In mission command, initiative at all levels of command is both encouraged and facilitated (Shamir, 2017). This assumes that the sub-commander involved in the operation is best informed and has to exploit the opportunities as they evolve on the battlefield (Vogelaar & Kramer, 2004).

Mission command is built on the realisation that "no plan survives the first contact with the enemy and therefore a good plan represents a central idea that allows maximum freedom to decide and act according to the emerging situation and changing circumstance" (Shamir, 2010, p. 646). As outcome, mission command facilitates a reduced need for communication within the hierarchy of command in the organisation (Krabberød, 2014).

Antecedents of mission command

For the successful implementation of mission command, several requirements need to be met. Firstly, there should be a clear understanding of the superior commander's intent (Carpenter, 2016; De Vries, 2013; De Vries et al., 2017; Harvard, 2013; Ploumis & Pilalis, 2018). The explanation should be clear and specific, focusing on the outcome (what) and its justification (why) (see Scholtz, 2012). Vogelaar and Kramer (2004, p. 412) note that the autonomous decision-making along the line of command –

[Is] based on the assumption that subordinates understand their commander's view, their own mission, the objectives to be met and the reason why meeting them is necessary, and the broader context of that mission in the operation of the entire unit.

Storr (2003) adds that shared understanding of the overall intent is especially important in joint operations and when working with other nations, which is commonly the case in African peacekeeping operations (Garcia, 2018). All involved in the operation should have a shared understanding of the operational environment, solutions to tactical problems in the field, clarity of the mission, and the outcome of the operation (Ploumis, 2020; Shamir, 2017; Sjøvold & Nissestad, 2020).

Secondly, successful implementation of mission command is grounded in education. Knowledge should guide both the formation of the initial plans and the changes upon implementation (or an inability thereof) (see Ben-Shalom & Shamir, 2011). Mission command requires unity of effort in common training and standardisation of drills and procedures. By standardising drills and procedures and conducting joint training exercises, leaders at all levels can execute their mission as they see fit without compromising the overall aim of the commander (De Vries, 2013; De Vries et al. 2017). Training and education ensure that commanders at all levels have the necessary skills and competence to make decisions independently (Nillson, 2021; Scholtz, 2012). Although practical operational experience is important, mission command requires a minimum standard of training in tactical skills (Storr, 2003), but also education to help them understand scenarios with which they are confronted, enable effective analysis of different possible scenarios, and develop plans for further action (Ploumis, 2020).

Thirdly, commanders at all levels should have an action-orientation and the willingness to create, identify and exploit situations and opportunities responsibly (Alibala, 2019; Storr, 2003). This implies that leaders should be risk-takers, but not be reckless (Carpenter, 2016; Ploumis & Pilalis, 2018). Commanders at all levels need to act using individual initiative without fearing the consequences of failure. This can only be achieved within an organisational culture where there is an emphasis on the implementation of an effective lesson learned system to see problems and develop more effective solutions (Nillson, 2021). Empowering autonomy requires some tolerance for well-intentioned mistakes (Shamir, 2017; Sjøvold & Nissestad, 2020).

Fourthly, commanders at all levels should display an ability to make autonomous decisions and a willingness to take responsibility for their decisions and actions (SA Army, 2010). In operations, it is often necessary for decisions to be made quickly to exploit new developments. There is therefore no time to refer up the chain of command. It is consequently vital that commanders at all levels are willing and able to make the necessary decisions promptly. It is also important to teach individual commanders to be willing and able to take responsibility for their decisions. This presumes, however, that the commanders have been allocated the means to fulfil their mission (Vogelaar & Kramer, 2004, p. 412).

Lastly, but most importantly, mutual trust is vital for mission command to succeed (Ben-Shalom & Shamir, 2011).

Superiors are expected to trust their subordinates to devise solutions and accomplish objectives in line with the commander's intent, whereas subordinates are expected to trust their superior's judgement and ability to define an optimal and realistic purpose for their activities (Nillson, 2021, p. 8).

Commanders need to relinquish their need to control and should learn to trust their subordinates instead. Training and education provide commanders and their subordinates with a sense of each other's level of competence. Trust is based on ability and competence. Ability and competence, on the other hand, are based in education, thorough training as well as experience (Shamir, 2017; Storr, 2003).

Consequences of mission command

Mission command is especially relevant to address the challenges of a rapidly changing battlefield (Alibala, 2019), as it allows for on-scene decision-making during complex, rapidly unfolding scenarios characterised by high levels of uncertainty (Carpenter, 2016). It is considered vital when there is slow communication along the hierarchy of command in time-competitive environments (Rubel, 2018). Mission command reduces the need for communication in the organisational hierarchy (see Krabberød, 2014).

Shamir (2010) as well as Sjøvold and Nissestad (2020) indicate that mission command is the most fitting command philosophy in unconventional warfare and complex military operations where autonomy of action is needed to maintain the speed of the operation. Storr (2003, p. 125) uses the complexity theory to explain why this is the case, "Complexity theory suggests that the most effective way of managing highly interrelated and dynamic problems is by the decentralisation of decision-making and action to close to the source of the complexity." Alibala (2019) and Nillson (2021) argue for the application of mission command in the modern military environment where its relevance may be undervalued. Vogelaar et al. (2010) describe mission command as a command style that has proved to be the most appropriate to deal with the uncertainty, friction and ambiguity in military operations.

Discussion

This discussion links mission command and the ABS. Within the context of force preparation, it is important to consider how commanders should be prepared for mission command in the ABS. To serve this purpose, we extend our discussion of the results to the inclusion of an important cognitive ability we identified as crucial to the commander using mission command, namely sensemaking.

Mission command in the African battlespace

From the literature review, it was evident that the ABS resembles what Dixon et al. (2017) refer to as *in extremis* environments, where the SANDF soldier may be faced with "highly dynamic and unpredictable situations", expressed by the acronym VUCA (volatile, uncertain, complex and ambiguous), where the outcome of a commander's decisions "may result in severe physical and psychological injury (or death)" (p. 296). VUCA contexts are characterised by quick and chaotic changes and a lack of standard protocols (Nowacka & Rzemieniak, 2022). In the ABS, it is not only the multiplicity of roles and operations of the SANDF soldier that increases the complexity and challenges with which the commander is faced, but also the nature of the ABS where soldiers are deployed (Cilliers, 2018; Garcia, 2018). The current and future ABS will confront the commander with operations across the spectrum (Heinecken & Ferreira, 2012a), including a diversity of conflict situations from conflict management to negotiation, mediation, arbitration and general war (Bester & Du Plessis, 2014).

Operations will mostly be conducted jointly, requiring co-operation between all arms of service and divisions under one commander with the same end state in mind, and the

possible need to function as part of a multinational and interdepartmental group (De Vries, 2013; Grundlingh, 2016; RSA, 2015). The commander must be able to work jointly with different services and in collaboration with multinational military forces, governmental organisations, and international organisations as well as the civilian population. This requires flexibility and adaptability to foster effective working relations (Heinecken, 2020). The ABS is also characterised by simultaneous operations in more than one geographical location over an extended logistical line in areas with very little or poorly maintained infrastructure, which may hinder hierarchical communication (Grundlingh, 2016).

In contrast to conventional war, operations in the ABS, such as peacekeeping and counter insurgency, are "less controllable and predictable than conventional warfare environments" (Shinga, 2016, p. 262). The increasing asymmetrical and hybrid nature of operations in the ABS (see Murray & Mansoor, 2012) requires that commanders distribute their resources in terms of time and space to meet the operational objectives. As military operations become more dispersed in terms of space, time and purpose, there is a need for command and control at tactical and operational level to become more decentralised to provide commanders at lower levels with the authority and freedom to execute the tasks entrusted to them (Cilliers, 2007; Grundlingh, 2016; Liddy, 2012). On-scene commanders must be able to make decisions and to act proactively based on the situations they face (Heinecken & Ferreira, 2012a). This context requires that the SANDF will have to adopt and implement a command philosophy and practices that ensure resilience, decentralised decision-making, freedom of action, and the ability to use initiative to execute the intent of superior commanders (Garcia, 2018; Heinecken, 2020). This approach resembles mission command.

Sensemaking as requirement for effective mission command in the ABS

Effective decision-making and action are central at all levels of mission command. For effective decision-making, commanders should be able to assess their environment constantly, improvise, and use their initiative when opportunities are identified (Couch, 2007). They need to appreciate and understand the situation on the ground, formulate action plans, and communicate this awareness to their subordinates (and superiors) (Vogelaar et al., 2010). Characteristics that are important to realise this include delegation, communication, adaptability and problem solving (see Bester & Du Plessis, 2014 for examples of the characteristics of adaptable leaders). An important aspect that is often overlooked, however, is sensemaking.

Sensemaking informs decision-making by enabling the sense-maker to understand the connections, for example between people, places and events, to anticipate future events, and to act effectively (Klein et al., 2006a). It is an active and purpose-driven search for, and analysis of, information to understand a situation or event (Sushereba et al., 2021). Although sensemaking may be implicit and taken for granted, it is recognised as an important discrete function in military decision-making (Dixon et al., 2017) as it "allows people to deal with uncertainty or ambiguity by creating rational accounts of the world that enable action" (Maitlis & Christianson, 2014, p. 64). Sensemaking will therefore be

valuable for commanders employing mission command.

Although sensemaking can be approached from both a social constructivist (see Nicolson & Anderson, 2005) and a cognitive view (see Klein et al., 2006a, 2006b), we position it as a cognitive process for interpreting stimuli (also referred to as cues or information) and constructing frames (also referred to as frames of reference, mental models or cognitive schemata). Although we agree that sensemaking can take place at various organisational levels (see Kramer et al., 2010; Weick et al., 2005), and include both collective sensemaking (see Maitlis & Christianson, 2014) and individual sensemaking, the focus of this discussion is on individual commanders making sense of an unfamiliar event, situation, issue or anomaly in their routine work (see De Graaff et al., 2019; Sandberg & Tsoukas, 2020). Unfamiliarity necessitates the commander to notice and bracket situational information or cues that show a potential threat in the battlespace (Weick et al., 2005). Noticing and bracketing imply the interpretation of the event by means of frames that the commander has acquired over years of experience in work, life and training and which guide what is recognised and how it is interpreted. The meaning of the event is then categorised or labelled so that appropriate action can be taken.

Sensemaking comprises three phases: scanning, interpretation, and action (Busch et al., 2020). Scanning involves the identification and collection of information, which is then interpreted. Interpretation is based on comparing the new information to existing frames. The frame is the perspective, viewpoint or framework with which the commander will start to try to make sense of the situation (Billman et al., 2021). The frame is recalled through the process of perception, where cues (sensory or otherwise) help one to recall a memory. That memory is interpreted through the process of apperception based on knowledge of the situation (Klein et al., 2006b).

The frame will define what counts as important information (data) to consider in the situation or event as data are mapped to a frame (Sushereba et al., 2021). "What constitutes the 'raw data' in these frameworks is inexorably linked to the perceptions of the people involved in a particular situation" (Kramer et al., 2010, p. 127). The frame will, however, change as new information is gathered and there is a shift in understanding. Klein et al. (2006b) explain that the frame will be elaborated when new details are added. If the frame for the situation or event is questioned or even rejected, the commander will need to reframe the information or find another frame by comparing "alternative frames to determine which seems most accurate" (Klein et al., 2006b, p. 88).

For sensemaking, there should be deliberate scanning for information, which indicates that the situation does not fit the current frames of reference. It is important to understand that, in the complex and dynamic situations a commander will face in the ABS, there will never be complete certainty, only workable certainty (Kramer et al., 2010). There should therefore be a continuous and simultaneous process of sensemaking and sense-discrediting (Weick, 2010). Sense-discrediting implies an active and deliberate attempt to doubt existing understandings of the situation (De Waard et al., 2013). When there is a break away from existing sensemaking frames, sense-breaking occurs.

In mission command, sensemaking allows the commander to be aware of the situation, analyse the information and decipher what is happening in the environment so that action can be taken. Action, which Weick et al. (2005, p. 414) call "enactment", is an important aspect of sensemaking, which differentiates it from mere interpretation and understanding (Maitlis & Christianson, 2014). When action is taken, new information is fed back to create new meaning. As noted by Rudolph et al. (2009, p. 734), "the best information may emerge only after taking action", whereupon the purpose of interpretation is to guide one to more effective responses.

In complex, dynamic environments, such as the ABS, rational decision-making, which requires careful and comprehensive analysis of extensive information, is not possible (see Kramer et al., 2010). Sensemaking will therefore occur retrospectively with deliberate reflection on the outcomes of actions taken. Actions create cues for further interpretation and understanding of the situation. Sensemaking is therefore a continuous process of reflecting on and evaluating the success of one's actions. This enactment fits well with mission command, which requires decisions to be made quickly to exploit new developments. Action is also taken immediately during the sensemaking process because it allows further interpretation of the situation (Weick et al., 2005). The actions taken are based on a hypothesis that is tested by the outcome (Weick, 2020). The outcome is fed back to the frame of understanding, which leads to a more comprehensive pool of information on which to draw and on which to base future understandings.

Sensemaking is important during the chaos, ambiguity and complexity of full-spectrum military operations and even more so during the asymmetrical and hybrid operations that are evident in the ABS (see Ntuen, 2008). In complex operational environments, such as the ABS, sensemaking implies the "ability to construct a coherent and shared explanation for events and circumstances", which enables operational functioning (Bartlett et al., 2013, p. 3), turning the "circumstances into a situation that is comprehended explicitly in words and that serves as a springboard into action" (Weick et al., 2005, p. 409). In conventional war, commanders can rely on their routine training. Although this still serves a purpose in the ABS, the volatility and nature of the operations often require additional skills (Heineken, 2020). In situations that cannot be dealt with based solely on routine training, sensemaking is especially important. In these situations, the commander is required to act and diagnose iteratively in an unfolding situation (see Rudolph et al., 2009). Sensemaking will therefore be relevant for mission command in the ABS where operational situations often differ from what was expected and trained for (De Graaff et al., 2019).

The meaning that commanders attribute to the current situation and the predictions they base on this, as well as the actions that they believe should be taken, must be communicated to their subordinates because a collective understanding will ensure survival and operational success. This is in accordance with mission command, which specifies that commanders need to explain the situation and their intent in such a manner that their subordinates understand the situation with clarity and know the expected outcome and the reasons for the outcome (Carpenter, 2016). In terms of the sensemaking process, commanders will not only share meaning but they will intentionally influence the sensemaking of their subordinates (Maitlis & Christianson, 2014). This involves sense-

giving in which commanders strategically influence how their subordinates understand the situation, context or event (Rom & Eyal, 2019). In life-threatening situations, which may be encountered in the ABS, sensemaking and sense-giving will take place simultaneously and faster than in other environments (Dixon et al., 2017).

Current training of commanders

The need to develop military leaders to function effectively in the chaos of operations and to make quick, adaptive decisions is globally recognised and integrated into their training (Blacker et al., 2019). In the SANDF, leadership training, especially officer training, focuses on training the officer to conduct an appreciation of the situation and to make decisions based on problem-solving models. This training starts during basic military training with the introduction of appreciation models, such as GROUND.

GROUND is an acronym used at tactical level to conduct a quick appreciation of the situation. At foundational level (officer formative) and sub-unit commander level, the problem-solving model (PS model) is introduced. Students are expected to know the theoretical principles and ways to apply them practically. From a sensemaking perspective, theoretical training is important as it allows some frame for the correct principles and procedures in different situations as well as the frame to which data will be fitted during operations (Sushereba et al., 2021). At unit commander level, the same model is used to introduce students to the brigade planning appreciation and planning cycle while the same is done at senior command and staff level, where students are expected to use the appreciation and planning process for campaign planning. The methodology ranges from presentations to case studies, sand models and group discussions, with some practical work during the practical stages of these courses. The focus is on the application of the principles of war in conventional operations.

Given the size of the course groups – they range from 80 (Senior Command and Staff Course) to 320+ students on SA Army Junior Command and Staff Course – and the number of instructors on the courses, the focus is on knowledge transfer and teaching students to find solutions to well-defined problems, such as those found in conventional operations (see Blacker et al., 2019; Dörner & Funke, 2017). Well-defined problems relate to situations in which the problem, the outcome and the context remain relatively stable, predictable and controllable. A logical-sequential reasoning process, such as the PS model, should be sufficient to solve these problems effectively (Danielsson, 2020; Klein, 2015; Liddy, 2012). However, the ABS is constantly changing. The decision-making process is therefore characterised by uncertainty and complexity, and even the process of defining the problem and the required outcome is not a certainty. Training in sensemaking would therefore be invaluable since a rational decision-making process is ineffective (Kramer et al., 2010).

Military training is also heavily reliant on skills training and drills, which are imperative and can never be replaced. The standardisation of training and drills forms the basis of mission command and ensures that commanders at all levels can execute their mission based on their specific requirements without compromising the overall aim of the commander. In terms of sensemaking, Dixon et al. (2017) note that, although

sensemaking goes beyond military drill training, instinctive reaction training may accelerate sensemaking because it allows respondents to free up cognitive space to attend to other cognitive activities required during the sensemaking process. However, Kramer et al. (2010) explain that, although drills and skills training are important for sensemaking, it could lead to an oversimplified version of reality and overconfidence in one's own capabilities, which may lead to poor sense-discrediting (Maitlis & Christianson, 2014). It is therefore important to train commanders specifically in effective sensemaking within the specific context they will encounter in the ABS. In the ABS, mistakes based on a failure to notice important cues of information may be fatal, making sensemaking specific training vitally important (Billman et al., 2021).

Recommendations for incorporating sensemaking training for commander force preparation

Sensemaking is a cognitive skill (see Ntuen & Leedom, 2007). Cognitive implies processes that involve "making decisions, making sense of situations, detecting and diagnosing problems, prioritising and trading goals, managing attention, anticipating future states and performing workarounds" (Klein et al. 2018, p. 682) whereas skills imply training to enable a higher level of expertise. Sensemaking, like other cognitive skills, can be developed through experience over time in real life and in deliberate practice. Experience over time may be problematic, and therefore other training events that can replicate experience, such as scenario-based training, are valuable in cognitive skills development. Scenario-based training allows the students to link real-life information as it unfolds realistically to their theoretical frame (Sushereba et al., 2021).

Mason (2020) proposes sensemaking training that uses deliberate practice, which involves training exercises that:

- are overseen by expert commanders who have had experience in operations in the ABS;
- require the students to engage in abilities that are advanced (one step ahead of their ability levels but not too advanced);
- are repeated so that the skills can be practised;
- · have specific goals;
- are a series of short events rather than one long event;
- · are always accompanied by feedback from the instructors; and
- where feedback is followed by immediate action.

Klein et al. (2018) used a combination of scenario-based training and deliberate practice for development of cognitive skills, where a scenario of unfolding events, specific decision points and expert feedback is used to develop cognitive skills. As explained in the previous section, scenario-based and case study training are already employed in the current commander training in the SANDF. Training is not currently focused on sensemaking per se, however. These training exercises may be tailored to focus on sensemaking so that it resembles the deliberate practice principles.

For sensemaking specifically, training can be targeted to develop key trainable elements in the sensemaking process, namely perceptual skills, situational awareness and assessment, mental modelling (or framing) and the generation and evaluation of hypotheses (see Dixon et al., 2017; Sushereba et al., 2021). Perceptual skills are related to the identification and collection of important data from the environment. Such data can be in the form of explicit or tacit cues (Bartlett et al., 2013; Ntuen, 2008). In scenario-based training, these cues should deliberately unfold at certain times to resemble the reality of the ABS. During training, the commander is taught how to look for possible cues in the specific context and how to differentiate between them.

Situational awareness has been recognised as an important aspect of command in VUCA contexts (see Nowacka & Rzemieniak, 2022). It is integral to sensemaking (Dixon et al., 2017) as it refers to "what is happening (inside and outside an organization) that could have an impact on operations, including threats, opportunities and the socio-economic and cultural context" (Krawchuk, 2018, p. 123). Situational assessment is part of the process by which situational awareness (a knowledge state) is arrived at (see Klein et al., 2006a), and involves diagnosing the situation based on the information attained and interpreting the environment (e.g. by identifying which cues in the specific context may indicate friendly, neutral or hostile situations) (McAnnaly et al., 2018). Situational assessment relies heavily on the theoretical knowledge of the commanders and their ability to match real-life cues to the theoretical conditions and the expectations of the different situations (i.e. friendly, neutral and hostile).

Development of situational awareness can only be attained if the student spends time in situations that closely resemble the VUCA environment (Krawchuk, 2018). Training time will always be limited. Given the density of the syllabus, one should train as intensively as possible within the time one has. Some training will be more beneficial than no training at all. In shorter time frames, brief targeted training may, for instance, be beneficial in developing situational awareness. Saus et al. (2006) show the benefits of brief targeted simulation exercises using shoot—don't shoot scenarios when training situational awareness in police officers. Simulation training offers the opportunity to recognise and analyse cues and patterns to make sense of a specific environment, situation or culture (Bartlett et al., 2013). Some scholars from other fields have recommended methods such as game-based training (i.e. using video games) that may also be considered (see Graafland et al., 2015)

A mental model from the sensemaking process is the frame for describing and explaining the current situation or event and predicting its future states. Effective frames help commanders to assess the situation quickly and to plan interventions effectively. Frames are based on experience, and therefore training should focus on providing probable scenarios that the commander may encounter in the ABS. Sushereba et al. (2021) note that it is important to present the cues and clusters of cues for the different situations as well as how they relate to each other in the development of frames during training. Mason (2020) refers to the development of an extensive case bank to develop expert performance. In training, students should be confronted with realistic simulations and case studies to build frames. Mason further notes that students should be exposed to many diverse

situations that will lay the foundation for recognising patterns through which frames of understanding the ABS can be developed. Flandin et al. (2018) highlight the importance of adding possible events in the training scenarios that may even be disturbing or stressful to the commanders. This will allow them to build confidence in their own abilities to function under stressful conditions.

From a cognitive perspective, hypothesis generation and evaluation of the outcomes of actions are key aspects in the process (Klein et al., 2006b). During training, students should be given the opportunity to generate hypotheses about the possible outcomes of combat interventions with a focus on cause and effect (see Sushereba et al., 2021). Training in hypothesis generation involves the recognition of 'what is going on now?' as well as operationalising the hypothesis by articulating the criteria and expectations of different possible scenarios (i.e. 'if this is going on, that will be the outcome'). This is done by linking specific cues and clusters of cues to specific possible outcomes, searching for confirming or disconfirming cues and generating alternative hypothesis that fit the data better. Similarly, Mason (2020) refers to the incorporation of deliberate practice on three levels to answer the questions:

- What do you see or hear?
- What does this mean for the mission?
- What does this mean in terms of what will happen next?

Feedback during training is imperative to indicate to students how well their frames, interpretations or hypotheses will fit the situation (Mason, 2020). Less experienced students should be able to compare their understandings with those of experienced commanders (Sushereba et al., 2021). This can be achieved through discussion between students and commanders with different levels of experience. If the students involved have different levels of experience in the field, this may be realised through the formation of groups during case-based and scenario training. This could also be supported by narratives from experienced commanders who are not directly part of the training but who might be visiting trainers or guest speakers. Feedback is further an essential element in targeted deliberate practice, where the students repeatedly engage with others who are more skilled than themselves in tasks that are one step beyond their current capabilities.

Simulation and training activities should be presented either directly after theoretical training or, in the absence of theoretical training, via different case-based scenarios presented in order of complexity to allow for scaffolding (Sushereba et al., 2021). Cognitive skills development can never be only theoretical, however. Practical training provides the student with the opportunity to apply theoretical principles, to make mistakes and, if feedback is given effectively, to develop the reflective cognitive skills that enable effective sensemaking.

It is important that all the training activities should resemble the reality in the ABS context as closely as possible (Sushereba et al., 2021). This implies a realistic representation of the possible actors, the terrain and the socio-economic and political circumstances that may be present in the ABS (Nteun & Leedom, 2007). This can typically not be attained

if based solely on lectures but should include case studies, role plays and simulations as well (Mason, 2020).

Weick et al. (2005) explain that sensemaking is essentially about the organisation of information through communication. Accordingly, Flandin et al. (2018) advocate the use of participatory sensemaking events during the training process, which may include activities such as structured debates through prospective inquiry-led exercises. During these exercises, participants are allowed to discuss a broad spectrum of behavioural options, including those that may seem unethical.

Sensemaking training relies heavily on the inclusion of realistic scenarios and simulations. A prime example of effective simulation training is the work done by the US Army Asymmetric Warfare Group that specifically focuses on the identification of real-time operational problems, the development of solutions, and the training and development of operational forces for counterinsurgency operations (Buffaloe, 2006). A similar centre for operational, cognitive and performance enhancement based on current case-based training used in commander training in the SANDF could be established in Pretoria, which is central to most promotional courses. Ideally, this centre should be staffed by psychologists and personnel from the SANDF with operational experience. Staff at such a centre would be responsible for the development and presentation of specialised courses in resilient leadership and adaptive thinking for hybrid warfare, for example, to prepare commanders for operational missions. A second responsibility would be to develop and empower instructors who train commanders. The instructors should be skilled in techniques and methodologies needed to develop sensemaking.

Conclusion

The SANDF espouses the principles of mission command. In the ABS, it is essential that the SANDF have military leaders trained and equipped to apply the principles of mission command in the operational environment. As mission command is the preferred approach to command, all leadership training should be focused on understanding, development and practical application at all levels. A theoretical presentation of courses is essential, but not sufficient to teach the required practical skills. Since sensemaking is central to mission command in the ABS, training should focus specifically on development of this cognitive skill.

Even though the SANDF does not formally address the sensemaking skills in leadership and mission command in the ABS as a focus area in its leadership training, this does not mean that its leaders are not being prepared for the ABS. The SANDF and its commanders have performed well in operations on the African continent over the last 25 years. However, we argue that sensemaking is an essential cognitive process for successful mission command in the ABS.

Sensemaking training can be added to the current training offered by specifically focusing on the presentation and engagement of students in a wide range of diverse and realistic scenarios or simulations that reflect the ABS, using expert experience during the training,

and providing detailed feedback at different decision points in the scenario or simulation. During the training, the focus should be on the identification of cues in the scenario, how these cues point to situational assessment, the possible actions that could be taken based on the assessments, the outcomes of the presented actions, and finally ways in which the students' understanding of the situation changes after the outcomes of the actions had been considered. Realistic training – specifically in sensemaking abilities – will prepare commanders better for their task of mission command in the ABS than current training that does not purposefully focus on the development of sense-making.

References

- Adelekan, I., Johnson, C., Manda, M., Matyas, D., Mberu, B. U., Parnell, S., Pelling, M., Satterthwaite, D., & Vivekananda, J. (2015). Disaster risk and its reduction: An agenda for urban Africa. *International Development Planning Review*, 37(1), 33–43. https://doi.org/10.3828/IDPR.2015.4
- Alibala, R. S. (2019). Effective innovation through military institutionalization. *Journal of Defense Resources Management*, 10(2), 145–155.
- Bartlett, K., Nolan, M., & Marraffino, A. (2013). Intuitive sensemaking: From theory to simulation based training. *Proceedings of the International Conference on Augmented Cognition* (pp. 3–10). Springer.
- Ben-Shalom, U., & Shamir, E. (2011). Mission command between theory and practice: The case of the IDF. *Defense & Security Analysis*, 27(2), 101–117. https://doi.org/10.1080/1475 1798.2011.578715
- Bester, P., & Du Plessis, A. (2014). Adaptable leaders for the South African army. In D. Lindsay & D. Woycheshin (Eds.), *Adaptive leadership in the military context* (pp. 127–155). Canadian Defence Academy Press.
- Billman, D., Zaal, P., Mumaw, R., Lombaerts, T., Torron, I., Jamal, S., & Feary, M. (2021).

 Training airline pilots for improved flight path monitoring: The sensemaking model framework. *Proceedings of the 26th International Symposium on Aviation Psychology* (pp. 403–408). CORE sholar. https://corescholar.libraries.wright.edu/isap_2021/67
- Blacker, K. J., Hamilton, J., Roush, G., Pettijohn, K. A., & Biggs, A. T. (2019). Cognitive training for military application: A review of the literature and practical guide. *Journal of Cognitive Enhancement*, 3(1). 30–51. https://doi.org/10.1007/s41465-018-0076-1
- Buffaloe, D. L. (2006). Defining asymmetric warfare. The Land Warfare papers (No. 58). The Institute of Land Warfare. https://www.ausa.org/sites/default/files/LWP-58-Defining-Asymmetric-Warfare.pdf
- Busch, T., Richert, M., Johnson, M., & Lundie, S. (2020). Climate inaction and managerial sensemaking: The case of renewable energy. *Corporate Social Responsibility and Environmental Management*, 27(6), 2502–2514. https://doi.org/10.1002/csr.1972
- Carpenter, T. R. (2016). Command and control of joint air operations through mission command. Air & Space Power Journal, 30(2), 48–64. https://apps.dtic.mil/sti/citations/AD1015705
- Central Intelligence Agency. (2021). World factbook: Mozambique. https://www.cia.gov/the-world-factbook/countries/mozambique/
- Cilliers, J. (2007). The African strategic environment 2020: Challenges for the SA Army. In L. le Roux (Ed.), South African Army Vision 2020: Security challenges shaping the future South African Army (Vol. 1; pp. 65–83). Institute for Security Studies.
- Cilliers, J. (2018). Violence in Africa: Trends, drivers, and prospects to 2023. Africa Report 12.

 Institute for Security Studies. https://media.africaportal.org/documents/Violence_in_
 Africa ISS.pdf
- Couch, D. (2007). Chosen soldier: The making of a special forces warrior. Three Rivers Press.
- Cronje, J. (2021, October 15). *Traditional terrorism could mean trouble for security forces in Mozambique*. www.defenceweb.co.za/joint/diplomacy-a-peace/samim-and-rwandan-forces-could-be-vulnerable-to-traditional-terrorism-in-mozambique/
- Danielsson, A. (2020). Knowledge in and of military operations: Enriching the reflexive gaze in critical research on the military. *Critical Military Studies*, 21(3), 356-374. https://doi.org/10.1080/23337486.2020.1835341

- De Graaff, M. C., Giebels, E., Meijer, D. J., & Verweij, D. E. (2019). Sensemaking in military critical incidents: The impact of moral intensity. *Business & Society*, 58(4), 749–778. https://doi.org/0.1177/0007650316680996
- De Vries, R. (2013). Eye of the firestorm: Strength lies in mobility. Naledi.
- De Vries, R., Burger, C., & Steenkamp, W. (2017). Mobile warfare for Africa: On the successful conduct of wars in Africa and beyond lessons learned from the South African Border War. Helion.
- De Waard, E., Volberda, H. W., & Soeters, J. (2013). Engaging environmental turbulence: Drivers of organizational flexibility in the armed forces. *European Security*, 22(4), 576–594. https://doi.org/10.1080/09662839.2013.822367
- Dixon, D. P., Weeks, M., Boland, R. Jr, & Perelli, S. (2017). Making sense when it matters most: An exploratory study of leadership in extremis. *Journal of Leadership & Organizational Studies*, 24(3), 294–317. https://doi.org/10.1177/1548051816679356
- Dörner, D., & Funke, J. (2017). Complex problem solving: What it is and what it is not. *Frontiers in Psychology*, 8(1153-1164). https://doi.org/10.3389/fpsyg.2017.01153
- Ero, C. (2021, July 20). Mozambique's insurgency requires a multi-pronged response. World Politics Review. https://www.worldpoliticsreview.com/articles/29817/a-multi-pronged-approach-to-the-mozambique-crisis
- Flandin, S., Poizat, G., & Durand, M. (2018). Improving resilience in high-risk organizations: Principles for the design of innovative training situations. *Development and Learning in Organizations: An International Journal*, 32(2), 9–11. http://doi.org/10.1108/DLO-03-2017-0027
- Foley, A. S., & Davis, A. H. (2017). A guide to concept analysis. *Clinical Nurse Specialist*, 31(2), 70–73. http://doi.org/10.1097/NUR.000000000000277
- Fraser, A., Leck, H., Parnell, S., & Pelling, M. (2017). Africa's urban risk and resilience. *International Journal of Disaster Risk Reduction*, 26, 1–6. https://doi.org/10.1016/j. ijdrr.2017.09.050
- Garcia, A. (2018). South Africa and United Nations peacekeeping offensive operations: Conceptual models. Mwanaka Media and Publishing.
- Gettleman, J. (2010). Africa's forever wars. *Foreign Policy*, 178, 73–75. https://www.proquest.com/magazines/africas-forever-wars/docview/224035045/se-2?accountid=14717
- Graafland, M., Schraagen, J. M. C., Boermeester, M. A., Bemelman, W. A., & Schijven, M. P. (2015). Training situational awareness to reduce surgical errors in the operating room. *Journal of British Surgery*, 102(1), 16–23. https://doi.org/10.1002/bjs.9643
- Grundling, A. (2016). New military leaders for new wars in Africa. In G. J. van Dyk (Ed.), *Military psychology for Africa* (pp. 323–348). Sun Media.
- Glenn, R. W. (2017). Mission command in the Australian Army: A contrast in detail. *Parameters*, 47(1), 21-30. doi:10.55540/0031-1723.2833
- Güneralp, B., Lwasa, S., Masundire, H., Parnell, S., & Seto, K. C. (2017). Urbanization in Africa: Challenges and opportunities for conservation. *Environmental Research Letters*, 13, 015002. https://iopscience.iop.org/article/10.1088/1748–9326/aa94fe/meta
- Harvard, J. W. (2013). Airmen and mission command. *Air and Space Power Journal*, 27(2), 131–146. https://apps.dtic.mil/sti/citations/ADA582411
- Heinecken, L. (2020). South Africa's post-apartheid military: Lost in Transition and Transformation. Advanced Sciences and Technologies for Security Applications Series. Springer. https://doi.org/10.1007/978-3-030-33734-6_3
- Heinecken, L., & Ferreira, R. (2012a). 'Fighting for peace': The experiences of South African military personnel in peace operations (Part II). African Security Review, 21(2), 36–49. https://doi.org/10.1080/10246029.2011.641687

- Heinecken, L., & Ferreira, R. (2012b). 'Fighting for peace': The psychological effect of peace operations on South African peacekeepers (Part III). African Security Review, 21(2), 50–60. https://doi.org/10.1080/10246029.2011.641688
- Heitman, H. R. (2014). The Battle in Bangui: The untold inside story. Parktown.
- Howieson, W. B. (2012). Mission command: A leadership philosophy for the Health and Social Care Act 2012? *International Journal of Clinical Leadership*, *17*(4), 217-225.
- Klein, G. (2015). Cognitive training to achieve overmatch in the #FutureofWar. The Strategy Bridge. https://thestrategybridge.org/the-bridge/2015/11/21/cognitive-training-to-achieve-overmatch-in-the-futureofwar
- Klein, G., Borders, J., Newsome, E., Militello, L., & Klein, H. A. (2018). Cognitive skills training: Lessons learned. Cognition, Technology & Work, 20(4), 681–687. https://doi. org/10.1007/s10111-018-0528-5
- Klein, G., Moon, B., & Hoffman, R. R. (2006a). Making sense of sensemaking 1: Alternative perspectives. *IEEE Intelligent Systems*, 21(4), 70–73. http://dx.doi.org/10.1109/ MIS.2006.75
- Klein, G., Moon, B., & Hoffman, R. R. (2006b). Making sense of sensemaking 2: A macrocognitive model. *IEEE Intelligent Systems*, 21(5), 88–92. https://doi. org/10.1109/MIS.2006.100
- Krabberød, T. (2014). Task uncertainty and mission command in a naval context. Small Group Research, 45(4), 416–434. https://doi.org/10.1177/1046496414532955
- Kramer, E. H., Van Bezooijen, B., & Delahij, R (2010). Sensemaking during operations and incidents. In J. Soeters, P. C. van Fenema, & R. Beeres (Eds.), *Managing military organisations: Theory and practice* (pp. 144–155). Routledge.
- Krawchuk, F. (2018). Design thinking: How to thrive in a VUCA world. In R. Elkington, M. van der Steege, J. L. Glick-Smith, & J. M. Breen (Eds.), Exceptional leadership by design: How design in great organizations produces great leadership (pp. 119–142). Emerald. https://doi.org/10.1108/978-1-78743-900-920181009
- Liddy, L. (2012). The strategic corporal: Some requirements in training and education. Australian Army Journal, 11(2), 139–148. https://smallwarsjournal.com/documents/liddy.pdf
- Maitlis, S., & Christianson, M. (2014). Sensemaking in organizations: Taking stock and moving forward. Academy of Management Annals, 8(1), 57–125. http://dx.doi.org/10.1080/194 16520.2014.873177
- Martin, G. (2021, June 30). Bangui was a mission too far, says former Joint Operations Chief of Staff. defenceWeb. https://www.defenceweb.co.za/featured/bangui-was-a-mission-too-far-says-former-joint-operations-chief-of-staff/
- Mason, S. (2020). Practice makes better? Testing a model for training program evaluators in situation awareness. Evaluation and Program Planning, 79, 101788. https://doi. org/10.1016/j.evalprogplan.2020.101788
- McAnally, K., Davey, C., White, D., Stimson, M., Mascaro, S., & Korb, K. (2018). Inference in the wild: A framework for human situation assessment and a case study of air combat. *Cognitive Science*, 42(7), 2181–2204. http://dx.doi.org/2181-2204.10.1111/cogs.12636
- Medby, J. J., & Glenn, R. W. (2002). Street smart: Intelligence preparation of the battlefield for urban operations. Rand Corporation.
- Moilanen, J. H. (2015). The wisdom of tacit knowing-in-action and mission command. *Adult Learning*, 26(3), 101–108. https://doi.org/10.1177/1045159515583258
- Murray, W., & Mansoor, P. R. (2012). *Hybrid warfare: Fighting complex opponents from the Ancient World to the present.* Cambridge University Press.
- Musisi, S., & Kinyanda, E. (2020). Long-term impact of war, civil war, and persecution in civilian populations: Conflict and post-traumatic stress in African communities. Frontiers in Psychiatry, 11, 1-12. https://doi.org/10.3389/fpsyt.2020.00020

- Neethling, T. (2011). The SANDF as an instrument for peacekeeping in Africa: A critical analysis of three main challenges. *Journal for Contemporary History*, 36(1), 134–153.
- Nicholson, L., & Anderson, A. R. (2005). News and nuances of the entrepreneurial myth and metaphor: Linguistic games in entrepreneurial sense-making and sense-giving. *Entrepreneurship Theory and Practice*, 29(2), 153–172. https://doi.org/10.1111/ j.1540–6520.2005.00074.x
- Nilsson, N. (2021). Mission command in a modern military context. *Journal on Baltic Security*, 7(1), 5–15. https://doi.org/10.2478/jobs-2021-0001
- Nowacka, A., & Rzemieniak, M. (2022). The impact of the VUCA environment on the digital competences of managers in the power industry. *Energies*, 15(1), 185-207. https://doi.org/10.3390/en15010185
- Ntuen, C. A. (2008). The process of sensemaking in complex human endeavors. In *Proceedings of* the 13th International Command and Control Research and Technology Symposium (13th ICCRTS) (pp. 1-46). Command and Control Research Program.
- Ntuen, C. A., & Leedom, D. (2007). Sensemaking training requirements for the adaptive battlestaff. Paper presented at the 12th International Command and Control Research and Technology Symposium (12th ICCRTS). Command and Control Research Program.
- Ploumis, M. (2020). Mission command and philosophy for the 21st century. *Comparative Strategy*, 39(2), 209–218. https://doi.org/10.1080/01495933.2020.1718995
- Ploumis, M., & Pilalis, L. E. (2018). Implementing sustainable mission command in the Hellenic Army. *Defence Studies*, 18(1), 95–112. https://doi.org/10.1080/14702436.2017.141460
- Republic of South Africa. (2015). South African Defence Review 2015. https://static.pmg.org.za/170512review.pdf
- Rodgers, B. (2000). Concept analysis: An evolutionary view. In B. Rogers & K. Knafl (Eds.), Concept development in nursing: Foundations, techniques and applications (2nd ed.; pp. 77-102). WB Saunders.
- Rom, N., & Eyal, O. (2019). Sensemaking, sense-breaking, sense-giving, and sense-taking: How educators construct meaning in complex policy environments. *Teaching and Teacher Education*, 78, 62–74. https://doi.org/10.1016/j.tate.2018.11.008
- Rubel, R. C. (2018). Mission command in a future naval combat environment. *Naval War College Review*, 71(2), 109–121. https://www.jstor.org/stable/26607048
- Rudolph, J. W., Morrison, J. B., & Carroll, J. S. (2009). The dynamics of action-oriented problem solving: Linking interpretation and choice. *Academy of Management Review*, 34(4), 733–756. https://doi.org/10.5465/amr.34.4.zok733
- SA Army. (2010). Leadership, command, management doctrine. 1 Military Printing Regiment.
- Sandberg, J., & Tsoukas, H. (2020). Sensemaking reconsidered: Towards a broader understanding through phenomenology. *Organization Theory*, 1(1), 1-34. https://doi.org/10.1177/2631787719879937
- Saus, E. R., Johnsen, B. H., Eid, J., Riisem, P. K., Andersen, R., & Thayer, J. F. (2006). The effect of brief situational awareness training in a police shooting simulator: An experimental study. *Military Psychology*, 18, Supp. 1, S3–S21.
- Schoch, M., & Lakner, C. (2020). The number of poor people continues to rise in sub-Saharan Africa, despite a slow decline in the poverty rate. World Bank Blogs. https://blogs.worldbank.org/opendata/number-poor-people-continues-rise-sub-saharan-africa-despite-slow-
- decline-poverty-rate
- Schoeman, J. (2006). Intellectual capital management: A military perspective. *Management Today*, 22(6), 44–47.
- Scholtz, L. (2012). The lessons of the Border War. Scientia Militaria, 40(3), 318–353.

- Shamir, E. (2010). The long and winding road: The US Army managerial approach to command and the adoption of mission command (Auftragstaktik). *The Journal of Strategic Studies*, *33*(5), 645–672. https://doi.org/10.1080/01402390.2010.498244
- Shamir, E. (2011). Transforming command: The pursuit of mission command in the US, British and Israeli armies. Stanford University Press.
- Shamir, E. (2017). The rise and decline of 'optional control' in the IDF. *Israel Affairs*, 23(2), 205–230. https://doi.org/10.1080/13537121.2016.1274515
- Shinga, D. N. (2016). Factors involved in combat readiness in Africa. In G. van Dyk (Ed.), Military psychology for Africa (pp. 261–287). Sun Press. http://www.iamps.org/papers/Shinga Factors%20involved%20in%20CR%20in%20Africa.pdf
- Sjøvold, E., & Nissestad, O. A. (2020). The Magellan effect: Training future naval officers for mission command. *Team Performance Management*, 26(3/4), 169–182. https://doi. org/10.1108/TPM-01-2018-0008
- Storr, J. (2003). A command philosophy for the information age: The continuing relevance of mission command. *Defence Studies*, 3(3), 119–129. https://doi. org/10.1080/14702430308405081
- Sushereba, C. E., Militello, L. G., Wolf, S., & Patterson, E. S. (2021). Use of augmented reality to train sensemaking in high-stakes medical environments. *Journal of Cognitive Engineering and Decision Making*, 15(2/3), 55–65. https://doi.org/10. 1177/ 1555 3434 2110 19234
- The World Bank. (2020). *Poverty and shared prosperity 2020*. https://worldbank.org/en/publication/poverty-and-shared-prosperity
- Tofthagen, R., & Fagerstrøm, L. M. (2010). Rodgers' evolutionary concept analysis: A valid method for developing knowledge in nursing science. *Scandinavian Journal of Caring Sciences*, 24, 21–31. https://doi.org/10.1111/j.1471-6712.2010.00845.x
- Vogelaar, A. L., & Kramer, E. H. (2004). Mission command in Dutch peace support missions. Armed Forces & Society, 30(3), 409–431. http://doi. org/10.1177/0095327X0403000305
- Vogelaar, A. L., Van den Berg, C., & Kolditz, T. (2010). Leadership in the face of chaos and danger. In J. Soeters, P. C. van Fenema, & R. Beeres (Eds.), *Managing military organisations: Theory and practice* (pp. 113–125). Routledge.
- Walker, L., & Avant, K. (2011). Concept analysis. In L. Walker & K. Avant (Eds.), *Strategies for theory construction in nursing* (5th ed., pp. 157–179). Pearson Education.
- Weick, K. E. (2020). Sensemaking, Organizing, and Surpassing: A Handoff. *Journal of Management Studies* 57(7), 1420-1431. http://doi.org/10.1111/joms.12617
- Weick, K. E. (2010). Reflections on enacted sensemaking in the Bhopal disaster. *Journal of Management Studies*, 47(3), 537–550. http://doi.org/10.1111/j.1467–6486.2010.00900.x
- Weick, K. E., Sutcliffe, K. M., & Obstfeld, D. (2005). Organizing and the process of sensemaking. Organization Science, 16(4), 409–421. http://doi.org/10.1287/orsc.1050.0133

Endnotes

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Organisational support to overcome the challenges of extended absences of officers in the SANDF

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Abstract

Generally, military members are often required to work away from home, resulting in extended absences from their families. International studies have shown the effects of extended absences to be severe and associated with long-term social, emotional and behavioural challenges. Longer and more frequent absences negatively affect member morale and could result in military members terminating their employment sooner than planned to maintain their personal relationships and to ensure the wellbeing of their families. The aim of the study on which this article reports was to explore and describe the experiences of extended absences on members of the South African National Defence Force (SANDF) with specific reference to organisational support to aid both the member and his or her family to cope with the challenges experienced before, during and after absences. In-depth interviews were conducted with 12 senior officers of the SANDF during 2019 and 2020, before the outbreak of the Covid-19 pandemic. The interviews focused on officers' lived experiences of extended absences due to deployment or military training. The findings indicated that absence generally has an adverse influence on military members, not only due to the challenges they face during the absence, but mostly due to the effect it has on their families. Organisational support is not only required in terms of preparing the military member, but should be extended to include preparation prior to their absence, care for the military members and their families during the period of absence, as well as support with reintegration after the absence. The results of this study show that little support is provided by the organisation, especially during reintegration after deployment, and especially in the case of absences due to training. Organisational support during the preparation phase, during absence and with reintegration could mitigate the stress and negative experience associated with extended absences. With the aim of strengthening the capacity of the armed forces, we propose various initiatives that could assist military members and their families to cope with the additional strain of prolonged separation.

Keywords: absence, army, deployment, family, peacekeeping operations, military, military training, occupational stressors, organisational support

Introduction

Extended absences, and consequently separation from one's family, are part of a military career (Bester & Du Plessis, 2014). In the South African National Defence Force

(SANDF), members from across the respective services and divisions are often required to work away from home either on internal or external deployments, or due to military training. Extended absence could be any time that an individual employed by the military is required to be away from home for a period, which could last anything from six weeks to a full year, where the individual often does not return home during this period.

External deployments often include military operations other than war on the African continent, and are primarily peacekeeping missions and humanitarian and disaster relief activities, under command of the African Union (AU) and the United Nations (UN). Peacekeeping operations are mandated to control disagreement between two or more conflicting countries, provide humanitarian assistance as required, and to enforce military agreements or UN mandates. According to Chapter VI of the UN Charter, peacekeeping operations are conducted with the consent of both conflicting parties and are not intended to result in active combat. However, from the peacekeeping missions in which the SANDF has been involved since 1998, it appears that such missions are increasingly becoming volatile, unpredictable and violent, and a move from peacekeeping to active combat could occur within a very short period (Arendse, 2020; Bruwer & Van Dyk, 2005; Dodd et al., 2020). Although these missions seem nonviolent and less austere than belligerent operations, they pose additional stressors to military members that may be just as taxing, if not more so.

SANDF members also deploy internally within the borders of South Africa. Recent internal operations included Operation Prosper, the joint operation between the South African Police Service (SAPS) and the SANDF to control the violence, looting and destruction by rioters in KwaZulu-Natal and Gauteng between 12 July and 12 October 2021 (Prinsloo & Cele, 2021).

Over and above deployments, all officers are required to attend long military professional courses and functional training. Military professional courses or functional training ensure that SANDF officers progress professionally and achieve competence as soldiers. Functional courses ensure that SANDF officers progress within their respective careers or occupations. Some of these courses are mandatory to progress to the next rank. Generally, military members are expected to attend these courses every four to five years. However, many senior officers will only be accepted on course once every ten years. Regardless of the time in between courses, by the time officers attend the strategic stage of the officers' learning path, they have spent a vast amount of time on formal training and considerable time away from home (Esterhuyse, 2011). SANDF officers are also required to obtain academic education throughout their military careers, as broad liberal education is the foundation of future professional military officers (Republic of South Africa [RSA], 2015). The integration of academic and military professional content in formal courses thus inevitably results in prolonged training periods.

The operational experience and skills gained during internal and external deployments as well as the military training have a positive effect on promotion and vertical and horizontal career progression (Wilén & Heinecken, 2017). It is therefore normal for officers to volunteer for courses because these absences are essential for career progression.

Despite the reason for absence, separation from one's family is seen as one of the unique occupational stressors of a military career (Bester & Du Plessis, 2014; Campbell & Ben-Yoav Nobel, 2009). "Separation, change, stress and adjustment are common events to all families; however, the demands such events place on military families are unique, especially when they emanate from either war or peace-related deployments" (Kalamdien, 2016, p. 290).

Separation is a family affair in that it has an effect on every member of the family. This is easily explained from a family systems perspective (Scholl, 2019). According to this view, a change in one aspect of the family, such as an extended absence, will have an influence on the homeostasis of the family, and members have to adjust to regain equilibrium. In terms of the outcome at organisational level, the absence of a serving member influences his or her wellbeing and work performance. When military members are emotionally distressed, they are prone to make mistakes, and judgement errors that may be life-threatening during operations (Phlanz & Sonnek, 2002). In fact, members' relationships with their families in general, and specifically their spouses, are factors directly related to combat readiness (Shinga, 2016). Support to both the military member and the family during separation is therefore paramount for the optimal performance of a soldier.

The family of the military member is crucial to the success of the operation or training as they form a core support structure not only during the absence but also during the preparation phases (Kalamdien, 2016). This article focuses on the experiences of stress due to absence and separation from one's family as these were derived from the lived experiences of senior officers in the SANDF who have participated in several sessions of training and/or deployments during their career. The study reported here specifically focused on officers' experiences and organisational support provided to them to cope with the challenges during absence.

Literature review: Stressors during different phases of separation

Stress due to absence is not only present during the absence, but starts and varies during preparation for the absence and continues after returning home (Bruwer & Van Dyk, 2005). Although our study did not solely focus on separation due to deployments, we adapted the four phases of deployments proposed by Scholl (2019). These phases explain variation in experiences during times of absence. There are different approaches to explain the phases during deployment (see Kalamdien, 2016; Esposito-Smythers et al., 2011; Pincus et al., 2001; Sheppard et al., 2010), but there are no phased approaches to explaining absence due to training. Scholl (2019) explains how deployment can be characterised by four phases: pre-absence phase (notification of and preparation for departure), absence (departure period), reintegration (preparation to return), and the postabsence phase (period after return). Although Scholl views reintegration and the postabsence period as two separate phases, Gil-Rivas et al. (2017) describe reintegration as both the preparation for return and the period after return. Accordingly, we will describe the stressors of extended absences in three phases: before absence, during the absence and during reintegration.

Stressors related to the pre-absence phase

The pre-absence phase starts as soon as the military members are informed of the operation or training that will take place and lasts until the eventual separation from the family (Kalamdien, 2016). Even though the member has not yet departed, the pre-absence period can be stressful to both the family and the military member because of pre-deployment training and preparation. During this phase, the preparatory activities often allow little time for military members to spend with their family and to make arrangements for care during their absence (Wisecarver et al., 2006).

Kalamdien (2016) notes that in this phase, both the military members and their families may have to deal with feelings of denial and the fear and anxiety associated with the anticipation of the separation. There may, for instance, be anticipation of loss, fear of harm or death, and the uncertainty of the outcome of the absence. Bruwer and Van Dyk (2005) note that, during this phase, the military members are also concerned about the safety and support that will be provided to their families when they leave.

Pre-absence preparation will largely determine the success of the operation and the well-being of both the member and the family during the separation. If not adequately prepared for the separation, the family members may show signs of maladjustment because they will not be able to cope during the absence. Kalamdien (2016) refers to examples of maladjusted spouses developing psychological complaints, such as depression or alcohol and drug use, as well as physical complaints, such as sleep disturbances or headaches and back pain. A maladjusted family will place added stress on the military member who is away.

Stressors during the absence

The existing literature describes several stressors for the member caused by the period of separation. Daily hassles include unfamiliar surroundings, uncomfortable and sometimes inhumane environmental conditions, a lack of basic needs (such as sufficient food and access to basic sanitation facilities), poor communication, isolation, uncertainty, a general lack of privacy, a lack of recognition, operational stressors (including traumatic events), unexpected extensions of deployment as well as threats to health and life. These may lead to adjustment problems. Uncertainty, confusion, boredom, frustration and limited recreation could lead to maladaptive coping, such as irritability, aggression and alcohol abuse (Buckman et al., 2011; Koopman & Van Dyk, 2012; Van Dyk, 2009). At this stage, some military members may also resort to resigning from the military (Sheppard et al., 2010).

Recent South African (SA) literature focuses on separations due to peacekeeping operations (Dodd et al., 2020; Mtshayisa & Letšosa, 2019; Zungu & Visagie, 2020). These operations have unique characteristics, with each operation resulting in its own unique stressors. These stressors comprise military members' general attitudes towards the reason for deployment, confusing communication between participating multinational countries as well as cultural alienation during external deployments. Being removed from familiar

environments and social support networks, such as friends and family, will increase the stress experienced during the operation. Furthermore, major life events, such as the illness of a child, death of a partner or even an unexpected divorce could add to severe emotional burdens (Bruwer & Van Dyk, 2005).

Kalamdien (2016, p. 296) describes the adjustment of the family during this phase as an "attempt to re-establish their equilibrium following the departure of the serving member". Heinecken and Ferreira (2012) depict the heavy burden placed on family relationships during operations in Burundi, the Democratic Republic of the Congo and Sudan. Dwyer and Gbla (2022), on the other hand, explain how problems at home are a constant worry for soldiers from Africa who cannot always rely on organisational interventions to ensure the safety and wellbeing of their loved ones.

During their absence, communication between members and their families is central to their well-being. Communication with family usually relies on the infrastructure available, and in some deployments, especially in Africa, this infrastructure is not readily or consistently available (Dwyer & Gbla, 2022; Heinecken & Ferreira, 2012). Even when infrastructure is available, the fact that one is not there to help or deal with the problems back home is very stressful. Even everyday problems of running the new single-parent household or not being able to help the family cope at home are stressful to both the family back home and the absent member. During this phase, military members often experience major stress, and this affects their ability to cope and function as required (Bruwer & Van Dyk, 2005; Heinecken, 2020; Heinecken & Ferreira, 2012).

When the family unit and spouse support the absence and it is possible for the military member to still feel part of the daily activities at home, the stress associated with the separation is not felt as severely as when there is a strong sense of alienation and not being part of the family anymore (Heinecken & Ferreira, 2012). The pinnacle of negative experiences during absences is particularly related to absence from children (Heinecken & Wilén, 2021), especially because children may experience crucial developmental milestones (i.e. first words, first steps and first day in school) during the absence.

The family at home is inevitably also concerned about the safety and wellbeing of the absent member. Even during peace operations, this is a serious consideration, as was shown in the deployment of SANDF soldiers to the Central African Republic (CAR) in 2013, which resulted in the death of 15 soldiers (Heinecken, 2020). Deployments in Africa, regardless of their nature, pose the risk of death and serious injury. In the first month of the deployment phase, the family also experiences a "sense of abandonment, loss, isolation, sadness, emptiness, pain and disorganisation" (Kalamdien, 2016, p. 296). In the months to follow, the family will usually adapt and learn to function without the military member at home. They will assume new roles and take on new responsibilities.

During extended absences, it is difficult, if not impossible, to maintain relationships with spouses and children, which could lead to separation and divorce. Mtshayisa and Letšosa (2019) confirm that the duration of absence due to deployment has an adverse effect on the marriages of SANDF members. Buckman et al. (2011) report that military members in

the United Kingdom terminate their employment early to save their personal relationships and to ensure the mental well-being of their families.

Scholl (2019) notes that the family unit is an essential factor in the well-being of children. Accordingly, the absence of the military parent also affects the well-being and development of children. Kalamdien (2016, p. 290) confirms this by noting:

[It is not only the] serving members who may lose their lives, become seriously injured or mentally scarred as a result of their deployment experience, but a frequently overlooked casualty of deployments are also their families back home. These families become psychologically and emotionally scarred by these events.

Stressors related to reintegration

Reintegration refers to the process of managing the return of a military member to civilian life (Gil-Rivas et al., 2017). In this phase, there may be intense anticipation for the reunion but, at the same time, some worry about the way the reunification would play out. Kalamdien (2016) notes the importance of preparation for the adjustment to a reunion at this point, which is just as important as the pre-absence preparation.

During reintegration, military members must return home and reintegrate into the normal everyday life of the family (Heinecken & Ferreira, 2012). Reintegration is a stressor, as both the family unit and the military member have grown and changed during the absence. Heinecken (2020) notes that homecoming is both a joyful and stressful experience. There will typically be some role confusion and negotiation to establish equilibrium in the family during this phase.

Reintegration is important after an extended absence. All military members that are deployed on a mission (regardless of the type of mission) have some extent of mission stress that will make it difficult to reintegrate into the family and civilian life (Heinecken, 2020). The stress associated with the absence often continues in this phase, with the challenge of reintegration of the absent member into the family (Carter et al., 2019; Moelker & Van der Kloet, 2006). Upon return, the military members may show symptoms of depression, anxiety, acute stress, and even post-traumatic stress disorders (Johnson et al., 2007; Sheppard et al., 2010).

Heinecken and Wilén (2021) point out that both internal and external factors influence the reintegration of the military member in the family. External factors relate to the nature of the member's duty during the absence as well as socio-economic and demographic factors of financial status, rank, and length of the deployment. Internal factors are those related to the military members themselves, and include aspects such as their family relationships and their mental state at the time of the reintegration. For the absent members, internal factors make reintegration during this phase difficult since they need to renegotiate their prior roles in the family after their absence (Kalamdien, 2016). External factors include how well the members were prepared for the reintegration as well as the duration of the absence.

Several studies have been conducted focusing on the length of deployment and its effect on the military member (Adler et al., 2005; Bøg et al., 2018; Buckman et al., 2011; Sheppard et al., 2010; Stepka & Callahan, 2016; White et al., 2011). For militaries across the globe, the typical duration of deployment ranges between six and twelve months (Bøg et al., 2018). One of the main contributing factors to operational stress is extended deployment, as it directly influences the separation from one's family (Buckman et al., 2011). Ntshota (2002) as well as Bruwer and Van Dyk (2005) found that the length of an operation was a great stressor to military members, and that the longer the absence, the more challenging it became for the member to cope. Shorter and more regular deployments have a less severe effect on members and their families, with longer deployments strongly associated with maladjustment of the children (Sheppard et al., 2010). It is, however, difficult to say what the ideal period of absence would be, since military members differ in their views: for some, three months are too long; for others, nine months are unbearable (Neethling, 2011). It is interesting to note that, despite all the challenges military members face due to extended absence, many develop mental resilience over time, and this can result in them being tolerable to longer periods of absence with fewer rest periods in between (Street et al., 2009). However, as noted by Hosek et al. (2006), although the preferred time of absence may increase, every military member has a preferred time of deployment. Should the actual time of deployment extend beyond the preferred time of deployment, the member might not want to deploy again and may even resign from the organisation.

The current study

In the current study, the aim was to explore and describe how officers in the SANDF experience extended absences, with specific reference to organisational support in aiding both the military member and the family to cope with the challenges they faced. There is a considerable amount of international literature available on the effect deployment has on members and on their families. Most of the studies refer the challenges experienced by deployed soldiers of the US military forces (see Adler et al., 2005; Carter et al., 2019; Chartrand et al., 2008; Gorman et al., 2010; Hobfoll et al., 2012; Hosek et al., 2006; Johnson et al., 2007), or the effects deployments have on children (Lyle, 2006; Pexton et al., 2018; White et al., 2011) or on spouses (Padden et al., 2011). A few studies with similar focus areas had used samples from other countries, for example the Slovenian Police Force (Lobnikar et al., 2011). Over the last couple of years, emphasis was placed on the effect of peacekeeping missions rather than combat.

Similar studies on the effect of deployments among SA military families are relatively limited with more recent studies focusing exclusively on peacekeeping missions. Koopman and Van Dyk (2012), for example, focused on the challenges experienced by SANDF soldiers during peacekeeping deployments in Sudan, while Wilén and Heinecken (2017) considered the effect of peacekeeping deployments on SANDF soldiers' perception of their career advancement, status and reintegration. Neethling (2011) studied coping during peacekeeping missions. Both national and international studies on experiences of absences assess combat or peacekeeping, omitting the challenges experienced by extended absences due to training. The current study was an initial attempt to fill this gap by focusing on the experiences of the support received from the organisation during

prolonged absences, such as during deployment and training. To understand the needs for support, it is important to highlight the challenges officers experience during their absences. The study aimed to explore and describe the challenges associated with extended absences and the experiences of organisational support before, during and after absences.

Methodology

This section introduces the qualitative method that was used, and explains the research design, the participants, as well as the methods for collecting and analysing the data.

Research approach and design

The current study utilised a qualitative, phenomenological approach since it afforded us the opportunity to explore and describe the lived experiences of the participants (Chilisa & Kawulich, 2012; Creswell et al., 2016). An explorative and descriptive aim was appropriate because, although studies focusing on organisational support to soldiers have been conducted, they focused solely on support during deployments and did not include absences due to training. Qualitative research is however inherently interpretive since the data cannot speak for itself (Willig, 2013). Our interpretation used a phenomenological lens to understand the meaning of the lived experience of absence from the point of view of the participants.

The first author conducted in-depth semi-structured interviews with 12 participants who were officers in the SANDF at the time of the study. The rich and complex data collected reflected the realities, interpretations, experiences, perceptions and narratives of the participants (Saunders et al., 2016). Since we were approaching the study through an interpretivist lens, it was important that we collected data to understand the meaning that the participants created from how they experienced the realities of the absences they experienced. To do this, emphasis was placed not only on the data directly related to the research question, but also on the context in which each absence took place. Using indepth, semi-structured interviews allowed exploration of these contextual factors (see Scotland, 2012).

At the time of the study, the first author was employed as a senior officer in the SANDF. The second author was a previous employee of the organisation, at the time of writing this article, living with a spouse working in the SANDF. It is therefore fair to describe this study as taking an insider stance. Insider research refers to research that is conducted by members of an organisation or system (see Greene, 2014; Mercer, 2007; Wilkinson & Kitzinger, 2013) as opposed to researchers joining an organisation solely for the purposes of conducting research and only for the duration of the research. Insider researchers are seen as "native to the setting" (Brannick & Coghlan, 2007, p. 60) and have insight into the lived experiences of members of such organisations. Working from an interpretivist paradigm allowed us to use our experiences to understand the lived experiences of the participants.

Although personal experience may cloud one's judgement and could lead to bias in the interpretation of participants' experiences, we consciously used a process of reflexive

awareness during the analysis of the data to articulate specific knowledge that has become deeply entrenched due to the insider's understanding of the organisation where the research was conducted. It was important to make known our own understandings and to separate these from the stories shared by the participants. In this way, although we could use our own knowledge and understanding of absence from home (or in the case of the second author, the absence of a spouse), we made sure that these experiences were not the focus of our analysis. With the SANDF, being a closed organisation with a unique culture, insider research did not only allow us first-hand insights, but also granted us easy access to rich data as we could draw on our understanding of the linguistic, emotional and psychological principles of the organisation, and our understanding of the participant during the interviews (Chavez, 2008; Wilkinson & Kitzinger, 2013).

Research participants

A purposive (judgemental) sample of 12 officers was selected (see Etikan & Bala, 2017). Based on the criteria for selection, these officers were all either married or in a life partnership during the time of their absences, they all had children and were deployed at least once, or had attended at least one long military course (Topp et al., 2004). According to Saunders (2012), the ideal sample size for semi-structured interviews is between five and thirty participants. Sample size should however not be the major determining factor in selecting a sample; the focus should be on the quality of the data and the depth of understanding of the participant experience it affords (Fusch & Ness, 2015). The ability of the participants and their willingness to share their experiences were therefore the most important considerations during sampling (Etikan, 2016; Saunders et al., 2016).

Data collection

After institutional ethical clearance had been given by the SANDF (DI/DDS/R/202/3/7, 19 November 2019), the participants were contacted to arrange the interviews. A pilot interview was conducted first but was added to the data as no changes were made to the interview guide after the interview (see Adams, 2015; Blumberg et al., 2005; Saunders et al., 2016). Face-to-face and virtual semi-structured interviews were conducted between November 2019 and February 2020. The interviews took the form of relaxed conversations where participants engaged on matters related to the absence and which were important to them (Longhurst, 2010). The conversation was guided by asking questions regarding the nature of the absences experienced, the frequency of absences, as well as the major challenges and support structures on which the participants and their families relied. Throughout the interviews, the interviewer strived to meet the participants in their natural settings and not to exert bias, surprise or excessive empathy towards any of their responses (see Creswell, 2014). Where participants could not be met in their natural settings, such as where participants were in other provinces, the interviews took place via Skype and WhatsApp video call. The interviews were recorded with the consent of the participants, which was obtained prior to the interviews.

Since the topic could have been very traumatic for some participants, the social worker at the Area Military Health Unit was available to assist if the interviews caused any distress. In planning for the unfortunate event where an emergency might occur during

an interview, the Directorate Psychology at 1 Military Hospital in Pretoria was informed of the study, and psychological support was on standby for the period during which the interviews were held. None of these services were needed during or after the interviews.

Data analysis and interpretation

The interviews were transcribed and then analysed. Qualitative data analysis involves reducing collected data to a manageable data set, developing summaries, and establishing patterns in the accumulated data (Blumberg et al., 2005; Saunders et al., 2016). We used the process of thematic analysis as proposed by Braun and Clarke (2006), which comprises six phases: familiarisation, generating codes, generating initial themes, reviewing the themes, defining and naming the themes, and reporting of the findings. The analysis comprises a cyclical process, working back and forth between themes, codes and raw data on the one hand, and the research questions on the other, to ensure thoroughness and coherence in the study (Morse et al., 2002). The initial coding was conducted in ATLAS.ti 8, and when the codes had been finalised, the categorising and thematising were conducted manually. The themes extracted firstly focused on the participants' general experiences during the absences, and specifically the challenges they experienced; and secondly, their perception of the organisational support during their absences. The major themes are discussed in the Findings section with verbatim quotations to justify and illustrate our thematising.

Data integrity

The credibility of a study utilising interviews is largely influenced by the trust relationship between the interviewer and participants. Trust, on the other hand, is influenced by the ethicality with which the study is conducted and the relationship that is established (or which exists) between the interviewer and the participant. If participants trust that the data will be used confidentially, they are inclined to provide truthful versions of their experiences. In this study, informed consent required that detailed information on the topic of the study be given to the participants when they were invited to take part. They were assured that their participation would be confidential and anonymous, and that it would not have any negative consequences for their careers in the SANDF (see Bryman & Bell, 2014). There was full disclosure of the procedures and purpose of the study (see Blumberg et al., 2005), and of how the information and content would be made available. The participants were also treated with dignity, and were ensured that they would be protected from potential physical or psychological harm (Van Zyl, 2014).

We also agree with Chavez (2008) that being an insider researcher increases the credibility of the study since the interviewer is knowledgeable about the language and shares the culture of the participants. With an insider researcher, however, there is the risk of socially desirable responses (Krefting, 1991); therefore, it was important to conduct the interviews in such a way that the participants did not experience it as threatening or judgemental. The interviewer was mindful to build trust when conducting the interviews by utilising probing questions and investigating responses related to various scenarios (Saunders et al., 2016). Techniques were applied to ensure that the participants' socially constructed realities matched the initial intent of studying their experiences during absences, for

example, an interview guide was used to ensure that questions asked were related to the research question. The interviewer also guided the conversations back to the topic when the conversations strayed.

In terms of sampling sufficiency, the study yielded rich and robust qualitative findings despite the small sample (see Young & Casey, 2019), and in all probability represented a considerable range of the experiences of senior officers in the SANDF. All the participants had been exposed to either deployment or long military courses, or both, in their military careers of fifteen years and longer. The interviews were conducted, recorded, transcribed and submitted to the participants to confirm accuracy of the content, and to make sure it was a true reflection of the interview.

We considered the confirmability of this study by consulting:

- journal articles of recent SA studies (see Mtshayisa & Letšosa, 2019; Neethling, 2011; Ntshota, 2002);
- the work of fellow researchers (see Bruwer & Van Dyk, 2005); and
- peer debriefings with colleagues in the SANDF, who had performed similar studies in the past, and who were considered able to relate and corroborate their findings to be consistent to the findings of this study. This was done in an informal way, by means of continuous conversations throughout the duration of this study.

Findings

Table 1 provides a summative description of the biographical and demographic particulars per participant. Most of the participants self-identified as female (*f*=8), white (*f*=5), Afrikaans (*f*=8), lieutenant colonel (*f*=9), with more than 20 years' experience serving in the SANDF. Many of the participants were from Gauteng (*f*=7), with five from the Free State, two from KwaZulu-Natal, one from North West, and one from the Western Cape.

Table 1: Summary of the biographical details of the participants in this study

Participant	Gender	Race	Home language	Military rank	No. of years in the military	Marital status	No. of dependants	Ages of dependants
1	Female	White	Afrikaans	Lt Col.	> 20 years	Life partner	1	14
2	Female	White	Afrikaans	Lt Col.	> 20 years	Married	2	8, 6
3	Female	White	Afrikaans	Lt Col.	> 20 years	Married	3	7, 5, 5
4	Male	White	Afrikaans	Lt Col.	> 20 years	Married	1	11
5	Female	White	Afrikaans	Major	> 20 years	Married	2	9, 7

Participant	Gender	Race	Home language	Military rank	No. of years in the military	Marital status	No. of dependants	Ages of dependants
6	Female	African	Sesotho	Lt Col.	> 20 years	Divorced	2	19, 8
7*	Male	African	isiXhosa	Lt Col.	> 20 years	Married	4	19, 9, 2, 2
8	Female	Coloured	English	Lt Col.	> 15 years	Married	2	5, 2
9	Male	Coloured	Afrikaans	Major	> 20 years	Married	3	21, 16, 4
10	Female	Coloured	Afrikaans	Col.	> 20 years	Married	2	13, 10
11	Male	African	isiZulu	Lt Col.	> 15 years	Married	3	8, 4, 2
12	Female	Coloured	Afrikaans	Lt Col.	> 20 years	Divorced	2	16, 13

^{*}It is interesting to note that Participant 7 fathered twins, who 2 years old at the time of the interview

The reasons for absence cited by the participants were due to both deployments and training. The duration of absences ranged from three months to one year, for any absence, with limited opportunities to return home during those periods. Table 2 illustrates the type of absence (i.e. training or deployment) per participant, and the longest duration of such an absence.

Table 2: Time periods, durations and reasons for absence

Participant	Deployment	Duration of Military deployment course		Duration of course	
1	No	N/A	Yes	One year	
2	Yes	One year	Yes	One year	
3	No	N/A	Yes	Six months	
4	No	N/A	Yes	One year	
5	Yes	Six months	Yes	One year	
Participant	Deployment	Duration of deployment	Military course	Duration of course	
6	Yes	One year	Yes	One year	
7	Yes	Six months	Yes	One year	
8	No	N/A	Yes	One year	
9	Yes	One year	Yes	Six months	
10	No	N/A	Yes	One year	
11	Yes	One year	Yes	One year	
12	Yes	One year	Yes	One year	

Although the participants acknowledged the fact that the absences put strain on them and their families, many of them volunteered for monetary reasons, or for the prospect of career advancement. Many SANDF members want to enjoy financial freedom, and they can easily reach that with funds earned through deployments. Training opportunities also have indirect monetary value in promotional opportunities. The attendance of training is an explicit requirement for SANDF members to complete certain developmental courses in order to be found competent on their level of functioning, or to be eligible for promotion. Upon successful completion, such training will most probably lead to rank promotion and result in a salary increase. As Participant 1 noted:

Eventually it boils down to a salary, I mean, it's your progression in the organisation. And the fact that you do decide to go, it will mean progress as promotion, it means more money. It means you can actually have a career path hopefully a little bit better. So, it's a conscious decision you take, you know you are going to sacrifice quite a lot. If it was not a promotional course and it was only for development, I would not have done it.

Training opportunities also have a direct financial implication due to the daily allowances that attendees receive for compulsory live-in courses, which they receive in addition to their monthly salaries. One may find that, in the instance where the duration of a course is one year (theory and practical phases), one may earn substantial amounts in course, danger, deprivation and subsistence and travel (S&T) allowances.

Some participants, however, also attended training courses to learn a new skill. Participant 2 for instance said:

There's a lot of people that say they only do the course for promotion. And I think that is 95% of the people that go for that. My take was that I actually wanted to learn something (on the course).

The duration and frequency of absences are factors that contribute to the stressors military members experience (Hosek et al., 2006). All the participants had been on extended absences from home due to numerous deployments or training opportunities, or both. One participant noted:

The last one (absence) was due to training, though most of those prior to that were deployments. (I was absent) almost every year, except for 2018. And it even goes further back than five years actually, but in the last five years, almost every year (Participant 11).

Participant 11 had experienced so many absences in his military career that he failed to recall the exact number.

Experiences and challenges during extended absences

Although the focus of this study was on the organisational support that the members had

¹ Please note that all quotations below are reproduced verbatim and unedited.

experienced during their absence, it is important to highlight the emotional experiences and challenges to contextualise the support that is needed. The participants all agreed that extended absence brings about stress in the lives of members and their families. Participants reported experiencing the absences as emotionally strenuous and associated with considerable negativity. Participant 12 said:

It was quite hard, I must admit, I cried a lot, especially over weekends when all the students are going home who are staying in Pretoria, and I have to stay behind. So yes, it was hard.

Many of the negative experiences were associated with family events and milestones that they could not attend. Some extracts from the data that highlight this are:

You were not there when your child won his tennis match. You missed out on that. You were not there when your partner experienced a compliment from a senior officer, and he could share that with you. You were not there when they had a bad day (Participant 1).

It wasn't nice. I hated leaving. Honestly, I hated leaving. And I knew exactly what I am going to miss while I was gone, so it made it worse. It was the end of the year, and all the concerts and everything, so it's terrible (Participant 3).

Things like, I will never have my daughter's first high school day. I will never experience it with them. It doesn't matter what I say, it doesn't matter what I do; I wasn't there. And I think, for me, it's more guilt that will keep on coming back (Participant 10).

The negative emotional experiences were not only related to being away but also to the damaging effect it had on participants' families. Military families are unique in the sense that they deal with stress far more frequently than their civilian counterparts, caused by the possible relocation due to transfers and promotions, absence of one or both parents due to deployment or training, and trauma due to challenges associated with the demands of the military (Palmer, 2008). Children, regardless of age, experience the absence of a military parent as taxing (Knobloch & Wilson, 2014). For example, Participant 4 shared:

Eventually when the course was done, I said we can't believe eleven months are gone, but during the eleven months, it was too long. I think you do a lot of damage to a normal family, a happy family by separating them for such an extended period. A lot of people say it's a good thing because if you can withstand that, that's utter nonsense. We are a very close family, and we live for each other. That's it. That's my reason for living. So, by now separating such a family, it's tough. So, for me it was tough, it was really not an easy ride, eleven months. It was tough.

During the interviews, the participants found it particularly difficult to speak about the emotions associated with leaving their families. They vividly remembered actual scenarios, actual discussions with their spouses and partners, and conflict between them and their families prior to or on their return after the absence. They remembered the days they had to bid their families farewell, and the hurt they saw in their children's eyes.

If I had to go away, it was not easy. I was crying up until the first tollgate [...] and ja, I think there was a bit of insecurity. He [the son] always wanted to know, when must you go away again (Participant 4).

We went for counselling and stuff, but the counselling also opened a lot of wounds. Because you have to talk about things that you don't want to talk about (Participant 8).

The absence further puts a constant strain on the work-life balance of military members.

Within my emotional state of mind, I have experienced a feeling of worthlessness. I lost my value. As a businesswoman, I continue because I am climbing the ladders. But as a mother and as a wife, it feels as if I'm losing there (Participant 5).

[I felt] helpless and angry, because personally, I didn't feel that being away from your house for so long was actually worth it. You literally feel like you are not welcome in your own home. And the strain on your marriage, it's terrible (Participant 2).

The challenge of an extended absence is not only the absence itself, as the challenge starts before the absence and continues after the return. The most noticeable challenge for participants during the absence was that they could not support their families. Participant 11 summarised it as follows:

It's not easy (being absent from one's family), it really is not. In recent times, you worry when you are away because the level of security in the country is not good. So, you just think, when you are not there when they are on their own, what is going to happen to them? So, it was not a good experience; however, somebody has to do it.

Since they were not at home to fulfil their parental tasks, they often had to request assistance from family or friends. This is similar to findings by Dwyer and Gbla (2022) who note that, especially in poorer African countries, soldiers will tend to worry about the well-being and survival of their families. In African countries, the military member is often the sole breadwinner in an extended family of dependants.

Due to the long periods of absence associated with the already emotional situation, participants reported that they often missed large parts of their children's lives, and from their perspectives, it had lasting effects on them and their families.

I was dependent on other parents to be the transport for my child with his sports coaching, driving him up and down to tennis matches. I also had a meeting with the teachers, to notify them of my long absence, and that I would not be

available as I would under normal circumstances, that I will not be so much involved in my son's schoolwork, checking for homework (Participant 1).

Some participants said they often experienced feelings of helplessness and frustration, especially when it came to their children. From the interviews, it was evident that the participants were committed parents who would move mountains to provide for and care for their children. However, due to their absence, they were unable to provide the physical and psychological support their children needed at times. They had the following to say:

As a mother, children getting sick. Because before I went, while I was on the course in 2016, my daughter was very sick. I got a call, they have to rush her to hospital, because she can't breathe properly, and stuff like that. So, that was my biggest challenge, what if something serious happens to her while I am in Bloemfontein (Participant 8).

Not being part of their educational processes was a challenge for me, as a mother. And not being there for special times in their lives, like their birthdays, and their achievements. I felt like an outsider, because I couldn't share it with them, or they couldn't share it with me. Not being able to assist my son with his school projects (Participant 12).

Contact with family is also reliant on the infrastructure available at the place of their absence. One participant was confronted with being away from home over the festive season. The deployment period was extended without warning, which caught the member and his family off guard. At a time when families are together after a year of hard work, he had to leave his family behind due to deployment to another country. He explained the experience as follows:

We've flown out on the tenth of December. So, we had to spend Christmas in Congo. So ja, it's in a different country, it's not what you are used to. So ja, we are singing Christmas carols but ja, you're not home and there are no telecommunications, there was no communication. But ja, as a person without the family that you are connected to, it's always difficult. It's difficult (Participant 9).

One of the biggest stressors to a serving member during an absence is a mismatch between the expected time of return and the actual time of return, as was the case with Participant 9. This could be due to an extended operation, or due to logistical challenges. Whatever the reason, a mismatch between timings has a severe adverse effect on military members and their families (Buckman et al., 2011). When these members were, for example, expected to remain in the deployment area, it negatively affected their wellbeing.

He [husband] was frustrated, especially with the fact that I would tell him the Friday that we are coming home. And then, quarter to four [on Friday] they would tell us we cannot go home, for some ridiculous reason (Participant 2).

A contributing factor to this adversity is found when the organisation does not prepare the members and their families for the possibility of unexpected extensions of absence. Families often did not understand why the member did not return home on the said date. The participants found it difficult to maintain their relationships during the absences. Both the family and the participant had to adapt to functioning individually. As noted by Participant 10:

You know, there are days when I want to scream, because I'm having, she's [referring to the spouse] not a teenager anymore. She's a girl that knows what I want and how I want to do things. And now suddenly I come back and I'm making everything to be messed up ... It's actually sad, because now I had to realise ... Now you must back off, these people must get used to you.

Often, during the absence of the military members, the primary caregiver is solely responsible for the wellbeing of his or her family, looking after the psychological, emotional and physical needs of their children, all while protecting their children from the stress the absence presents (Stepka & Callahan, 2016). The primary caregivers must take full responsibility for the children and look after their emotional and behavioural needs, and should simultaneously strive to maintain the daily routine, while they are also confronted with their own stress in how to deal with the absence of their spouse or partner. In many cases, this resulted in a family growing in independence and learning to function effectively without the military member.

[I]f you're a father, you are taken as the head ... imagine when you are away for a long period of time, they try their own way of doing things ... when I come back, reunion becomes difficult (Participant 11).

After an extended absence, the participants often felt as though there was no place for them in the family unit on their return, or as noted by Kelley et al. (1994), being out of sync with their families. As noted by Participant 8:

On the marital side also, your husband gets used to you not being there, and he starts having his own friends. It's an adjustment because you would say, but I'm on course, but he will say, but I'm alone, so I needed to make friends.

Upon return, there is also a period of adaptation in which the family as a unit needs to adapt to the return of the absent member. Reintegration into civilian life may inevitably be a strenuous, challenging and complex problem, for both the serving member and the family. The military member is returning to a world much different from the one he or she had left behind (Macintyre et al., 2017). During the interviews, many participants mentioned that they were returning to a household where the primary caregiver had established new routines, and where children had grown up, both physically and emotionally. As much as military members often do not return home as the same person, they often find a different household on their return. As a result, in many cases, the reintegration of such military members into their families result in conflict and stress – for both parties.

Unfortunately, in some cases, the family unit struggles to return to a fully functioning unit. This may result in separation or even divorce. Participant 12 shared that she found out her husband was having an affair while she was on course in 2017. Upon her return, this resulted in separation and eventually divorce after 19 years of marriage:

I then found out that he had an affair with a woman since 2017. I went to the home where he was staying with his girlfriend, asking him to come home so that we can work on our relationship. He came home for a while, but we never spoke. He eventually moved out of the house.

For participants, the absences due to training were not different from absences due to deployments. The experiences of the participants were generally similar to those found in previous studies discussed in the literature review of this article.

Experiences of organisational support

Participants were prompted about their experiences of organisational support. The findings are presented here as experiences of support before the absence, support during the absence, and support after the absence. Kalamdien (2016) describes the influence of resilience on military family wellbeing as a core aspect of being able to cope sufficiently with the absence of the military member. This is echoed by many international scholars (see for example Mancini et al., 2018). Resilient families will not experience less risk or adversity but will have the ability to adapt to the changing circumstances. Support in well-being and resilience is therefore "paramount to any military" (Kalamdien, 2016, p. 300). In this context, resilience is seen as the ability of both the individual as well as the family to bounce back in the face of adversity and return to a relatively normal level of functioning (Mancini et al., 2018). Efforts of organisational support may therefore ensure that both the member and the family are resilient. In this section, we turn our attention to the experiences of organisational support from the military member's point of view.

Support before the absence: preparation for the absence

Preparation of military members for operations is ingrained in every member's training, from basic military training to mission readiness training. Support prior to a deployment is seen by Kalamdien (2016) as the planning phase of support that should include psychological, spiritual, financial and security concerns, and should function at both individual and family level. Preparatory training programmes may present one way of organisational support in assisting members to deal with the absence. This training may include anything from mission readiness training to wellness and resilience development (i.e. resilience training). The resilience training presented by the SANDF is a training programme that intends to promote mental health; develop emotional, physical, mental and behavioural toughness; prevent the development of physical and/or emotional distress; and enhance adaptation in dealing with possible adjustment problems. However, when the participants were asked whether they or their families had received any training that prepared them psychologically for being absent from home for an extended period, the following responses were provided:

The one girl [a social worker] just came and said, you have to be spiritually strong and your marriage must be strong, and you must be strong and that was pre-counselling – if you can say that (Participant 2).

There was no [formal] programme that prepared us [for absence due to training], so we had to use the two months prior to the course to, you know, just to get used to the idea. Yes. And to say how we are going to handle this. We did not really have the answers (Participant 4).

Some participants experienced a comparable programme, not necessarily called a preparatory programme, but an effort from the SANDF to prepare them for the absence. They mentioned these initiatives:

While I was working there [in Bloemfontein] as part of the preparation for external deployment, there was continuous interaction from the unit with the social workers because as they do the resilience [programme] with me, at the end of the day when you are not around, they [the social workers] have to go and confirm that these things are in place [at your home] (Participant 9).

We had a programme to start to know the people that are going with you (overseas). They will teach you about the norms, culture, everything like that. So, in a certain way, they prepare you to know that this country, this is how the country operates. But in terms of preparing you how to cope while you are there, it's not happening (Participant 10).

Other participants did not agree. They did not participate in any formal preparatory programme. They said they would have appreciated an intervention that would have prepared them for the stressful event that lay ahead and which would have aided them in preparing their families on how to cope with their absence.

There was no formal programme to prepare the family. We tried from our side to make sure that everyone knew what was expected or what was going to happen. But nothing you can do, nothing can prepare you completely for what awaits you (Participant 2).

No. That time we didn't have such things [formal preparatory programmes]. But if maybe there was a session to say, this is going to happen and what are you then going to do, so that by the time we say yes, I can go and be deployed, then we know our families are okay. Maybe then we would not divorce (Participant 6).

Training that will benefit specifically the family would include a focus on the meaning of the absence. As noted by Participant 5, some aspects of military absences may not make sense to civilians. This participant had attended a training course in Pretoria, and she was absent from her family in Bloemfontein for almost one year. Teaming up with other students on the programme, they tried to travel to Bloemfontein over weekends as often as they could. However, as she explained, the travels were not always allowed, nor was staying at the unit often understood by the family.

When I'm on course, I have to attend a bar function almost every Friday evening, so now they [my family and friends] want to know why I am going to the bar every Friday evening, why can't I come home! It's part of course tradition, it's part of military culture. So, it's not just a matter of "sorry guys, I'm a party pooper, I'm not going to the bar, I rather want to go home", because I must form part of the cohesion group of the course as well. And at the end of the day, for esprit de corps, on course as well, you must take part in things which is not understandable necessarily at home. So, somebody may say my husband is a staff member; he understands that. But for the bigger picture, for those who do not understand, it looks as if I'm having a jolly time on the other side, while they are sitting at home, waiting for me to come home. And those types of traditions and things need to be explained, because how does it work if I can leave early every Wednesday, but I cannot leave early on a Friday. So why don't they swop the two around, things like that that need to be explained? Because it's only me telling them that. It might be that I'm now just making up stories to make it look good while as I'm busy with other things.

Research on peacekeeping deployments indicates that military members have a strong need for their families – and the larger society – to perceive their efforts during the deployments as meaningful (Heinecken, 2020). Soldiers want to believe in the value of the sacrifices they make and the good they are contributing when deploying. It is thus important for soldiers that their experiences are viewed in a positive light (Bartone 2005). Supportive families and spouses also reduce the stressors experienced during deployments (Adler et al., 2003). As reported by some of the participants and in multiple studies, having a family that understands the meaning of a military culture will support the military members' efforts even during training.

Although preparatory sessions appeared to be more readily available for military members deploying, this seemed not to be the case for members leaving home for training opportunities. In the case of deployments, such as peacekeeping operations, members are timeously informed of imminent deployments in the SANDF. It is safe to say that SANDF members are aware of when they are going to be deployed, as the majority of members volunteer for deployment. However, training opportunities, such as developmental training, are announced unexpectedly, sometimes a few days prior to commencement of training. This often results in very little time for preparation opportunities on the side of the organisation and of the individual going on training, and his or her family unit. The participants also noted that preparatory opportunities might benefit the family as a whole.

I just think, if something similar [preparation programme] could have been done for my son and my wife, that would be awesome. Specifically, for a little boy that doesn't understand, you know, to have this explained to them (Participant 4).

If there was a programme, they [the family] would have benefitted from it. I will try to present my resilience programme at home. But from the unit or the DOD [Department of Defence], your family is on their own. If there is any

resilience programme that they require, you as the head of that family, you will decide what they require, and you will do your own. The DOD does not go to family and say, be prepared. No, they don't (Participant 7).

You will come home, and you will tell your family, the country [overseas] is this, and it is like that. But in terms of preparing them how to cope, it's [preparation programme] not there. If it [preparation programme] would have been a family thing, it would have been so nice (Participant 10).

When asked whether the families would benefit from such a preparatory programme, participants suggested that a new well-structured programme, with age-appropriate information for the children and knowledge and skills for the spouse, would serve a purpose. It would potentially strengthen the hand of the member who needs to prepare a family for his or her absence. Participant 1 had the following to say on the matter:

Maybe just to have a contact person that can give you some points or hints, let's say advice as to, listen, did you think of this, did you think of that? Do you have a support system in place if, in case of emergency, or just the daily things that you don't necessarily think of? I think that would definitely be beneficial.

The organisation plays an important role in ensuring readiness for the military family. Readiness is described as "the state of being prepared to effectively navigate the challenges of daily living experienced in the unique context of military service" (Meadows et al., 2016, p. 2). Families who are 'ready', are equipped with the necessary knowledge and skills to deal with the challenges effectively and they are aware of the resources provided by the organisation. In the SANDF, military members undergo pre-deployment training to prepare them for deployment and to deal with being away from their families. However, the participants in the current study expressed their concerns about the absence of preparatory training for their families that would assist them to cope with the absence.

The only information military members are able to relay to their families is what they are being taught during pre-deployment sessions and through years of work experience. Unfortunately, this is not sufficient information to prepare the spouse and children remaining behind. Participants all commented that they had to prepare their own families for their absence, not always knowing what to say or how to communicate the expectations. It was evident from the responses of all participants that the SANDF does not provide any preparatory programme for families to equip them with the required skills and knowledge to deal with the challenges the absence may bring.

Both readiness and resilience development are important in preparing families for separation. Resilience refers to the individual's ability to 'bounce back' after experiencing stress or stressful events, and is the ability to withstand, recover from and grow in the face of stressors and changing demands. Organisations, such as the SANDF, can help military families experience readiness by developing and nurturing resilience. The SANDF has a vast amount of expertise in the South African Medical Health Service (SAMHS), in its static Military Health Support Capabilities, where they render health sustainment to military members and their families, and any other eligible forces (RSA, 2015). These

capabilities can provide mental health training to families prior to, during and after deployment or long training opportunities.

Support during the absence

Some participants felt that the support they received from the unit and direct colleagues during the absence was adequate:

I know I can phone any of my colleagues and say, listen here, my husband is having a problem, please do this, or help him with this, and they would have helped (Participant 3).

Unfortunately, not so much [support] from the military side, there was not a lot although she [the participant's wife] knew all my colleagues; so, if she needed something, she, there was somebody that she could have asked (Participant 4).

It seemed from the responses that, from the unit side, the officer commanding (OC) has an influence on the support that members receive. For example, while Participant 9 was on course, he received news that his wife was in labour. The OC sent a chaplain to provide his wife with transport and psychological support, and ensured that the participant attended the birth of his child:

No, the OC had to organise and liaise with Infantry School commander. To say there is a situation. So, yes, he must attend [the] practical [phase of the course], but he needs to attend the birth for two days. A chaplain was tasked to take my wife to the hospital while I'm on my way from Oudtshoorn in a bus. When they took my wife in for labour, I was at the door. And here stands the chaplain (Participant 9).

It does however not seem as though there is a consistent culture of support at all units, or throughout the levels of the organisation. Participant 11 explained it as follows:

The only thing, [you are] just on our own, the organisation, we don't receive much from them. I don't know how to explain in terms of who is supposed to do what exactly. But not even a card from the unit, or something that would show that somebody is thinking of you.

Participant 8 also noted:

Because after this course [reason for extended absence], a lot of people get divorced. A lot of people's lives just go the wrong way. Preparing people, and also talking to them throughout the year, will assist. Because we were just left. Resilience [resilience training prior to the absence] and then we carried on through the year, and nobody actually checks on you, are you still in the right state of mind to continue on this course.

Support after the absence: reintegration into the family unit

Reintegration initiatives could have a considerable effect on military members and their families in understanding possible conflicts that may arise on their return after extended absence. The function of a reintegration initiative is to assist the member and his or her family with the re-entry and effective functioning after return from an absence at both personal and societal level (Heinecken & Wilén, 2021). This may take the form of a training programme or an individual member from the helping professions, such as a psychologist, social worker or chaplain, who assists in the reintegration process.

With regard to the reintegration programmes offered by the SANDF, the participants noted that, although an effort is being made on the side of the organisation to assist with the reintegration, it is either too little or not present at all:

I mean, the reintegration so-called programme that we had, was a chaplain that spoke to us for half an hour. But there was nothing that you could take back that you could say, I am going to do these steps, you know, when you get home, how do you handle it? Step by step (Participant 2).

You know, what they normally do [to make a reintegration effort after deployments], they will call the psychologists. But I don't think that is enough ... Maybe afterwards, they were supposed to have, like maybe a month, or weeks, to prepare us [for the reintegration]. And it is still not happening. Until today. The Defence Force doesn't do that (Participant 6).

The timing of the reintegration services offered is also crucial according to the participants:

[W]hen we arrive [after a deployment] at De Brug (Bloemfontein], we want to go home. Even if you [the helping professional] can talk to me, I don't listen (Participant 6).

[We] had a very small debriefing exercise with only the deployed members, which was more or less a day to get your feelings and try to normalise things. But I'm telling you, of all the people that went, if you go through that programme, the guys will not remember that they went through it. Your head is already at home. If that thing can be presented, while you are down there in the deployment area, before you get home, it will maybe have a better effect (Participant 7).

The efforts from the organisation seemed to be focused mainly on pre-absence training. Participant 9 stated that they (the military members) were given guidelines to assist them when returning from deployment and upon reintegration with their families as part of the resilience training that they received.

When I came back [from deployment], I worked on those guidelines that they gave [during resilience training] to say, if you come back, remember you were not in charge for one year. When you come back, you cannot just forcefully

come in, meaning you have to come in progressively. That worked, that actually worked, although there was no formal programme. But the information, I used it and it worked.

Although the reintegration guidelines from the resilience training may be effective, it is the responsibility of the military member to work through the notes and apply it.

Participants who are absent due to training within the borders of South Africa do not receive any form of reintegration. When a course is presented overseas, there is supposed to be a reintegration course but, according to Participant 10, this does not always realise:

They promised us ... before we leave, that this will happen [reintegration programme]. It never happened. And you know what, I'm home for four months now, I'm still not reintegrated in my family (Participant 10).

The participants mentioned that reintegration initiatives should be extended to their families and not only focus on the military member. From the data, it was evident that this was not the case:

No, nothing [no reintegration initiative for the family] (Participant 8).

Discussion and conclusion

Although different military missions may have different effects on the military members and their families (Segal & Segal, 2006), our study found that extended absences pose several challenges, regardless of the reason for the absence (i.e. training or deployments). The common stressor associated with the extended absences seemed to be family separation. Family separation is noted as one of the most significant challenges military members face during combat missions (Kavanagh, 2005) or peacekeeping missions (Dwyer & Gbla, 2022). As was found in the current study, family separation is also a main stressor for extended absence due to training and internal deployments. This is in agreement with Wisecarver et al. (2006) who describe the stress of family separation due to training.

Our study found that military members participate in training or deployment despite the associated challenges. This concurs with the expected utility model of deployment and retention developed by Hosek et al. (2006). This model indicates that most military members prefer some deployment to no deployment (where deployment might include various situations that result in separation from one's family). How often an individual is willing to separate from his or her family will depend on income generated from the separation, time spent at home, and time spent away from home. Participants in our study noted that they participated in training and deployments due to the work requirements for upward mobility in the organisation, financial gain, as well as personal and career development. Most of the participants had been absent from home several times during their careers.

The participants in this study indicated that they often participated in the absences on a voluntary basis, largely for financial gain. Family separation may however have negative financial effects (Hosek et al., 2006), such as increased costs related to childcare due to one parent being absent, increased travel, and communication costs. The financial gains of the absence may not outbalance the unforeseen costs (Behnke et al., 2010). As noted by the model of Hosek et al. (2006), at some point, financial gain from the absence may no longer be a motivating factor to separate from one's family.

Kavanagh (2005) argues that military members remain in the organisation despite the stress and challenges faced due to family separation because they are committed to the organisation. Based on the long military careers of some of our participants, and the number of extended absences over the period of employment, our data also point to committed military members who are serious about their careers. As shown by our data, the commitment of members does not negate the negative effect the extended absences have on their work experiences (such as lower job satisfaction, higher turnover and negatively affecting member wellbeing, to name but a few) (see Behnke et al., 2010; Castro et al., 2001; Wisecarver et al., 2006). The members' commitment to the organisation should be fostered by the organisation by providing better support to retain committed members in the organisation. Organisational support has a direct effect on employee commitment (Baran et al., 2012).

It was also clear from our study that all the phases of the absence are taxing, and they affect members and their families differently at different stages (Lyle, 2006; Pincus et al., 2001). The different challenges experienced by the military members and their families agree with the experiences discussed in the literature review presented earlier. Organisational support should be provided across all the phases of the deployment (prior to, during and after the absence) in accordance with the challenges that can be expected (Doyle & Peterson, 2005). From the current study, it was evident that formal support efforts are mostly concentrated on the period before the absence, in the form of resilience training to military members. In absences due to peacekeeping operations, the resilience training was perceived as valuable, especially in terms of the input it provided regarding the reintegration phase after the deployment (Heinecken, 2020; Heinecken & Wilén, 2021).

From our findings, it seemed that resilience training has some limitations. Firstly, such training is only presented to members who deploy on missions (i.e. peacekeeping missions), and not also to those who will be absent due to training. Secondly, it does not provide support across the different deployment phases. Thirdly, it only includes the military member, and not the family.

Extension of resilience training to all extended absences

Currently, resilience training is presented to members who deploy, rather than those who will be absent due to training. Since the same issues of reintegration are experienced by those who attend military training, it would be valuable if a similar effort is available also to attendees of national and international training efforts that will result in an extended

family separation. In fact, besides stressors related to the possibility of injury or death (which may not be experienced during training), concerns are also experienced during training, such as:

- · uncertainty about the date of return;
- concerns related to financial matters at home;
- concerns related to children and the spouse coping with the absence;
- possible infidelity; and
- problems experienced during the reintegration phase of the absence (Hosek et al., 2006; Kavanbag, 2005).

Any family separation over an extended period will have consequences for the family unit and the military member. The fact that any family separation – regardless of the reason for the separation – will have severe effects, can be explained by applying the conservation of resources (COR) theory (Hobfoll et al., 2012). Based on the COR theory, people strive to "obtain, retain, foster and protect those things they centrally value" (Hobfoll et al., 2018, p. 104). Family separation in itself is seen as a critical change event that drains the family resources (Behnke et al., 2010). It is therefore imperative that family support be provided to the family during separation, regardless of the reason for such separation.

Extending organisational support efforts to include all the phases of the absence

Some support efforts noted by our participants included resilience training before the absence (if the absence was due to deployment) and a military health professional being available after deployment. Proper support during and after the absence (for both absences, whether training or deployment) was not often offered or was not accessible to members. The results confirm the findings by Heinecken and Wilén (2021) that the SANDF should provide better support during all phases of the absence. It may also be that, despite the services being offered, members do not take part in the support services for various reasons, including the stigma associated with counselling and therapy (Hosek et al., 2006)

To be able to provide comprehensive support, the organisation should ensure that a multi-disciplinary team is available to support the members before, during and after their absence (Kalamdien & Van Dyk, 2009; Sheppard et al., 2010; Sipos et al., 2014). Based on our data, it seemed that support during the absence sometimes took the form of a single social worker or a caring commander. Although support to help the member deal with the challenges while absent is important (i.e. counselling during the absence to cope with the stressors), other aspects, such as being connected to one's family, are also important. During the absence, the separation from one's family is one of the major stressors (Wisecarver et al., 2006). Establishing channels of communication between the military member and the family would be invaluable and would allow the member to remain connected to family members and have a degree of participation in important events back home, albeit virtually.

Support during the reintegration phase should be extensive and comprehensive, and should be provided at the right time. All participants agreed on the need for reintegration programmes, as they were confronted with various conflicting issues on their return. Some participants mentioned that they had to facilitate the process of reintegration as best they could with their knowledge from resilience training (if they had received resilience training).

Reintegration training is critical for workplace reintegration (Sipos et al., 2014), but also for the return to family life (Hosek et al., 2006). Such training will prepare members with the necessary knowledge, skills and attitudes to deal with conflicting situations and to anticipate possible situations and reactions after their return from extended absence. Reintegration training should also provide families with support and access to services after the period of absence. These findings are consistent with studies by Scherrer et al. (2014) and Sipos et al. (2014).

Providing family support

One of the limitations of organisational support identified in this study is the fact that the family is not included in the training efforts. Our results show very little organisational support focused on families. It is widely acknowledged that the well-being of the family is essential for the optimal functioning of military members, and therefore it is crucial that the organisation considers interventions to support the soldiers as well as their families during all the phases of an absence (Andres et al., 2012). Hosek et al. (2006) argue that the job satisfaction of military members is influenced by the attitude of the spouse towards military life and military careers, whereas the attitude of the spouse is in turn influenced by the amount of support they receive from the organisation.

Although support to the family throughout deployments is a key feature of militaries of Global North countries (e.g. US and UK armed forces), it is not a feature of militaries in poorer countries in the Global South (Dwyer & Gbla, 2022). Smaller budgets for military forces in poor countries may not allow the establishment of comprehensive services focused on families specifically.

Organisational support has however been proposed for the SANDF specifically. For example, Kalamdien (2016) proposes a comprehensive model for organisational support to families and military members in South Africa. Similarly, Shinga (2016) suggests the use of family readiness groups, rear detachment commanders (i.e. members of the deployed unit who remain at the home base) and utilising a multi-disciplinary team of caring professionals (i.e. military psychologists, social workers, medical doctors and chaplains) to provide support to the family. The family readiness group is a formal support group for the family that meets once a month on the military base, and which provides information and support to the spouse. Heinecken and Wilén (2021) indicate that, although there are support groups available to SANDF families of deployed members, these are mostly attended by spouses who live on the base, which leaves a considerable part of military families excluded from any support systems.

During the absence, the rear detached commander or the home unit and unit commander has a crucial role to play in providing support to the family (Charles-Walters, 2010). The base commander (i.e. rear detached commander) should work closely with family support groups and the multidisciplinary team to ensure that the families of absent members are sufficiently supported. From the experiences shared by our participants, this type of unit support is not formally enforced in the SANDF, and seems to be based on the initiative of the Officer Commanding (OC).

The home unit and OC play an important role before, during and after the absence. Lobnikar et al. (2011) argue that support from the unit to the family prior to and during the absence is essential for force preparation and combat readiness. Pexton et al. (2018) indicate that there are heightened levels of stress for family members during the actual deployment. In this phase, the unit is crucial in providing information to the family members and communicating with them when the military member is unable to contact the family directly. Concurring with our own findings in this study, Heinecken and Wilén (2021) also found that the organisation does not provide sufficient information to families at home. This is disappointing when one takes into account the lack of infrastructure in most African countries where SA military members deploy (Dwyer & Gbla, 2022). Without information from the unit, the families are left to rely on information shared in the media and on social media that may be inaccurate or biased.

Doyle and Peterson (2005) highlight how, besides providing information during the absence, the rear detached unit and commander can support families for better reintegration with training and information in the form of formal training sessions, takehome and posted information regarding what families can expect during the homecoming of the military member. With the current information and communication technology (ICT) available, support to families can also be provided using digital platforms (e.g. online forums, telephone applications, blogs, online magazines and social media support) (Eklund, 2017).

Our results echo the need for the practical application of the comprehensive models proposed by Shinga (2016) and Kalamdien (2016). We argue, however, that organisational support is much more deep-seated than the resources and care that the organisation can provide. Such support also refers to a need for leadership accountability that will enforce support to both military members and their families (Macintyre et al., 2017). An organisational culture that values care for and support of both the family and its members should be cultivated (Danish & Antonides, 2013).

Important components of a caring military organisation are unit cohesion and military community support (Shinga, 2016). Unit cohesion is not only important for military members but also relates to the families of military members. It is important that the family identifies with and belongs to the unit. As noted by Mancini et al. (2018, p. 551), "[m] ilitary spouses, regardless of the service member's branch and affiliation, share universal military life challenges associated with duty requirements and periodic family separations, as well as the requirements of frequent family relocation." O'Neale et al. (2020) found that military community connections helped both the military members and their families

to deal with the demands of the organisation, such as extended absences. Being part of a military community will also enable members and their families to utilise the formal and informal social networks established for support during absences. A military community with strong cohesion may provide opportunities for support to military members during the different phases of the absence. Hosek et al. (2006) noted, for example, how military members preferred talking to colleagues who have had similar experiences for support rather than seeking help from military health professionals.

Limitations

The current study focused primarily on the officers' perspective. Although participant shared their insights of the effect their absence might have had on their families, we did not include data from participants other than the military members. It was clear that the families faced significant challenges while the members were absent. It would be valuable to invest in research that considers the experiences of family members also.

Although our sample comprised both males and females, and represented different racial groups, our analysis did not allow any comparisons between subgroups. Experiences may vary between these groupings, especially female officers with children might have unique challenges, coping mechanisms and experiences due to absences. Future studies could focus on exclusive groups.

Recommendations for organisational support and force preparation

It was clear from this study that absence is woefully taxing on soldiers and their families, and that suitable programmes for pre-deployment or pre-departure training, the period during absence, and reintegration of members and their families would benefit both the soldiers and their families. A good starting point may be to build on the work of Kalamdien (2016) and Shinga (2016) who propose that a multi-disciplinary team of psychologists, counsellors, chaplains, social workers and other helping professions coordinate efforts to provide the necessary support prior to, during and after separation to both the military member and his or her family.

In terms of possible interventions for families of members on deployment, and absence that cannot be avoided, the SANDF should establish support groups for the families staying behind. These support efforts should also be available to families that do not live on the base and could take the form of virtual support groups.

Community involvement plays an integral role in the lives of the families that remain behind when the military member deploys or goes on extended training courses. It will be valuable if the spouse and children could be connected to social networks for information and support. This support will aid the family when they require any form of assistance.

During reintegration, it is imperative that the unit and community show appreciation to the returning member, especially after deployment. A starting point would be for the larger society to understand the reasons for deployments and training and for society to

be made aware of the success stories of the units and/or members. This is a culture that should be created, starting in the units.

Generally, it would be helpful if absences could be better planned, the timeous communication of the call for duty be better planned, and if the planned periods are adhered to. This could help members and their families cope better. Certainty about the exact timing of absences is crucial, as opposed to being notified during deployment, or on training, that the period is extended. Even in the case where the precise dates or duration are unknown, it is still preferable to have an estimate of the period, compared to uncertain lengths of absence (Hosek et al., 2006).

The SANDF could do much to support communication between deployed members and their families as this would assist both the military member and his or her family in dealing with the separation. This is particularly relevant during life events, such as birthday parties, anniversaries and social gatherings. With increasing availability and affordability of technology, communication with their families through video calls could be enabled with the necessary infrastructure planning (Pincus et al., 2001). "Whereas letters and the occasional phone call were the only means of communication a few years back, many militaries now provide a stable internet connection on missions, which allows soldiers to have daily contact with home" (Heiselberg, 2018, p. 1484). Ollier-Malaterre et al. (2019) reported that, during 2013 and 2014, about half of all deployed soldiers from the United States had daily contact with their families. The internal conflict that members face during separation can be partly alleviated if they are able to stay connected with their families. When individual family communication is not possible, general SANDF-facilitated communication that gives assurance about the wellbeing of members and families on both sides could be a worthy second option.

Adopting a blended learning approach for training that requires extended absences may result in shorter absences. Partial distance or online learning combined with physical presence might result in SANDF members pursuing a career of life-long learning, as training is inevitably linked to career progression and personal development. If this suggestion to introduce a more contemporary training delivery methodology is adopted by the SANDF, it could lead to more responsible and accountable members taking ownership of their personal development. In addition, it could lead to less emotional damage to members and their families, as these members will be home more often, without compromising the integrity of their overall functioning.

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References

- Adams, W. C. (2015). Conducting semi-structured interviews. In K. E. Newcomer, H. P. Hatry, & J. S. Wholey (Eds.), *Handbook of practical program evaluation* (4th ed., pp. 492–505). Jossey-Bass.
- Adler, A. B., Huffman, A. H., Bliese, P. D., & Castro, C. A. (2005). The impact of deployment length and experience on the well-being of male and female soldiers. *Journal of Occupational Health Psychology*, 10(2), 121–137. https://doi.org/10.1037/1076-8998.10.2.121
- Adler, A. B., Litz, B. T., & Bartone, P. T. (2003). The nature of peacekeeping stressors. In T. W. Britt & A. B. Adler (Eds.), *The psychology of the peacekeeper: Lessons from the field* (pp. 149–167). Praeger/Greenwood Publishing Group.
- Andres, M., Moelker, R., & Soeters, J. (2012). The work–family interface and turnover intentions over the course of project-oriented assignments abroad. *International Journal of Project Management*, 30(7), 752–759. https://doi.org/10.1016/j.ijproman.2012.01.006
- Arendse, D. (2020). A psychological well-being model for South African military students. In N. M. Dodd, P. C. Bester, & J. van der Merwe (Eds.), Contemporary issues in South African military psychology (pp. 51–72). African Sun Media.
- Baran, B. E., Shanock, L. R., & Miller, L. R. (2012). Advancing organizational support theory into the twenty-first century world of work. *Journal of Business and Psychology*, 27(2), 123–147. https://doi.org/10.1007/s10869-011-9236-3
- Bartone, P. T. (2005). The need for positive meaning in military operations: Reflections on Abu Ghraib. *Military Psychology*, 17(4), 315–324. https://doi.org/10.1207/s15327876mp1704 5
- Bartone, P. T., Adler, A. B., & Vaitkus, M. A. (1998). Dimensions of psychological stress in peacekeeping operations. *Military Medicine*, 163(9), 587–592. https://doi.org/10.1093/milmed/163.9.587
- Behnke, A. O., MacDermid, S. M., Anderson, J. C., & Weiss, H. M. (2010). Ethnic variations in the connection between work-induced family separation and turnover intent. *Journal of Family Issues*, 31(5) 626–655. https://doi.org/626-655.10.1177/0192513X09349034
- Bester, P., & Du Plessis, A. (2014). Adaptable leaders for the South African army. In D. Lindsay & D. Woycheshin (Eds.), Adaptive leadership in the military context (pp. 127–155). Canadian Defence Academy Press.
- Blumberg, B., Cooper, D. R., & Schindler, P. S. (2005). *Business research methods*. McGraw-Hill.
- Bøg, M., Filges, T., & Klint Jørgensen, A. M. (2018). Deployment of personnel to military operations: Impact on mental health and social functioning. *Campbell Systematic Review*, 6, 11–22. https://doi.org/10.4073/csr.2018.6
- Brannick, T., & Coghlan, D. (2007). In defense of being "native": The case for insider academic research. *Organizational Research Methods*, 10(1), 59–74. https://doi.org/10.1177%2F1094428106289253
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. https://doi.org/10.1191/1478088706qp063oa
- Bruwer, N., & Van Dyk, G. A. D. (2005). The South African peacekeeping experience: A comparative analysis. *South African Journal of Industrial Psychology*, *31*(2), 30–39. https://hdl.handle.net/10520/EJC89047
- Bryman, A., & Bell, E. (2014). Research methodology: Business and management contexts. Oxford University Press.

- Buckman, J. E., Sundin, J., Greene, T., Fear, N. T., Dandeker, C., Greenberg, N., & Wessely, S. (2011). The impact of deployment length on the health and well-being of military personnel: A systematic review of the literature. *Journal of Occupational and Environmental Medicine*, 68(1), 69–76. https://doi.org/10.1136/oem.2009.054692
- Campbell, D. J., & Ben-Yoav Nobel, O. (2009). Occupational stressors in military service: A review and framework. *Military Psychology*, 21, Suppl. 2, S47–S67. https://doi.org/10.1080/08995600903249149
- Carter, S. P., Renshaw, K. D., Curby, T. W., Allen, E. S., Markman, H. J., & Stanley, S. M. (2019). Protective buffering by service members during military deployments: Associations with psychological distress and relationship functioning. *Family Process Journal*, 59(3), 1261–1274. https://doi.org/10.1111/famp.12426
- Castro, C. A., Adler, A. B., & Huffman, A. H. (2001). Senior leaders in the US Army, Europe. In *The human in command: Peace support operations* (pp. 264–275). Mets & Schilt.
- Charles-Walters, H. L. (2010). Resiliency in the rear detachment: Using the rear detachment (provisional) as an integral part of building resiliency in units at the brigade and below for current and future deployments (Master's thesis). Upper Iowa University.

 Army Command and General Staff, Form Leavenworth. https://apps.dtic.mil/sti/citations/ADA537084
- Chartrand, M. M., Frank, D. A., White, L. F., & Shope, T. R. (2008). Effect of parents' wartime deployment on the behavior of young children in military families. *Archives of Pediatrics and Adolescent Medicine*, 162(11), 1009–1014. https://doi.org//10.1001/archpedi.162.11.1009
- Chavez, C. (2008). Conceptualizing from the inside: Advantages, complications, and demands on insider positionality. The Qualitative Report, 13(3), 474–494. https://doi.org/10.46743/2160-3715/2008.1589
- Chilisa, B., & Kawulich, B. (2012). Selecting a research approach: Paradigm, methodology and methods. In C. Wagner, B. Kawulich, & M. Garner (Eds.), *Doing social research:* A global context (pp. 51–61). McGraw-Hill.
- Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.). Sage.
- Creswell, J. W., Hanson, W. E., Clark Plano, V. L., & Morales, A. (2016). Qualitative research designs. *The Counseling Psychologist*, 35(2), 236–264. https://doi.org/10.1177/0011000006287390
- Danish, S. J., & Antonides, B. J. (2013). The challenges of reintegration for service members and their families. *American Journal of Orthopsychiatry*, 83(4), 550–558. https://doi.org/10.1111/ajop.12054
- Dodd, N. M., Bester, P. C., & Van der Merwe, J. (2020). *Military psychology and the SANDF:*Contemporary issues in South African military psychology. African Sun Media.
- Doyle, M. E., & Peterson, K. A. (2005). Re-entry and reintegration: Returning home after combat. Psychiatric Quarterly, 76(4), 361–370. https://doi.org/10.1007/s11126-005-4972-z
- Dwyer, M., & Gbla, O. (2022). 'The home stress': The role of soldiers' family life on peacekeeping missions,the case of Sierra Leone *International Peacekeeping*, 29(1), 139–164.https://doi.org/10.1080/13533312.2021.1996237
- Eklund, F. (2017). The 'self-enterprising care taker' on 'home deployment': Contesting constructions of femininity in extended military family deployment support in Sweden (Master's thesis). Lund University. https://lup.lub.lu.se/luurdownload?func=downloadFile&recordOId=8910658&fileOId=8910673
- Esposito-Smythers, C., Wolff, J., Lemmon, K. M., Bodzy, M., Swenson, R. R., & Spirito, A. (2011). Military youth and the deployment cycle: Emotional health consequences and recommendations for intervention. *Journal of Family Psychology*, 25(4), 497–507. https://doi.apa.org/doi/10.1037/a0024534

- Esterhuyse, A. (2011). Educating for professionalism: A new military for a new South Africa. *Scientia Militaria*, 34(2), 21–43. https://doi.org/10.5787/34-2-22
- Etikan, I. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4. https://doi.org/10.11648/j.ajtas.20160501.11
- Etikan, I., & Bala, K. (2017). Sampling and sampling methods. *Biometrics & Biostatistics International Journal*, 5(6), 1–3. https://doi.org/10.15406/bbij.2017.05.00149
- Fusch, P. I., & Ness, L. R. (2015). Are we there yet? Data saturation in qualitative research. *The Qualitative Report*, 20(9), 1408–1416. https://doi.org/10.46743/2160-3715/2015.2281
- Gil-Rivas, V., Kilmer, R. P., Larson, J. C., & Armstrong, L. M. (2017). Facilitating successful reintegration: Attending to the needs of military families. *American Journal of Orthopsychiatry*, 87(2), 176–184. https://doi.org/10.1037/ort0000201
- Gorman, G. H., Eide, M., & Hisle-Gorman, E. (2010). Wartime military deployment and increased pediatric mental and behavioral health complaints. *Official Journal of* the American Academy of Pediatrics, 126(6), 1058–1066. https://doi.org/10.1542/ peds.2009-2856
- Greene, M. J. (2014). On the inside looking in: Methodological insights and challenges in conducting qualitative insider research. *The Qualitative Report*, 19(29), 1–13. https://doi.org/10.46743/2160-3715/2014.1106
- Heinecken, L. (2020). South Africa's post-apartheid military. Advanced Sciences and Technologies for Security Applications. Springer. https://doi.org/10.1007/978-3-030-33734-6 3
- Heinecken, L., & Ferreira, R. (2012). 'Fighting for peace': The psychological effect of peace operations on South African peacekeepers (Part III). African Security Review, 21(2), 50–60. https://doi.org/10.1080/10246029.2011.641688
- Heinecken, L., & Wilén, N. (2021). No place like home? Postdeployment reintegration challenges facing South African peacekeepers. Armed Forces & Society, 47(3), 415–434. https://doi.org/10.1177%2F0095327X19894719
- Heiselberg, H. (2018). Operation 'long distance parenting': The moral struggles of being a Danish soldier and father. *Gender, Place & Culture*, 25(10), 1471–1491. https://doi.org/10.108 0/0966369X.2018.1489784
- Hobfoll, S. E., Halbesleben, J., Neveu, J.-P., & Westman, M. (2018). Conservation of resources in the organizational context: The reality of resources and their consequences. *Annual Review of Organizational Psychology and Organizational Behavior*, 5(1), 103–128. https://www.annualreviews.org/doi/10.1146/annurev-orgpsych-032117-104640
- Hobfoll, S. E., Vinokur, A. D., Pierce, P. F., & Lewandowski-Romps, L. (2012). The combined stress of family life, work, and war in Air Force men and women: A test of conservation of resources theory. *International Journal of Stress Management*, 19(3), 217–237. https://doi.org/10.1037/a0029247
- Hosek, J., Kavanagh, J., & Miller, L. (2006). How deployment impact service members. Rand Corporation.
- Johnson, S. J., Sherman, M. D., Hoffman, J. S., James, L. C., Johnson, P. L., Lochman, J. E., Magee, T. N., & Riggs, D. (2007). The psychological needs of U.S. military service members and their families: A preliminary report. American Psychological Association Presidential Task Force on Military Deployment Services for Youth, Families and Service Members. http://www.apa.org/about/policy/military-needs
- Kalamdien, D. J. (2016). A psychological model to support military families during deployment. In G. van Dyk (Ed.), *Military psychology for Africa* (pp. 289–309). Sun Press.
- Kalamdien, D. J., & Van Dyk, G. (2009). Psychological support for peacekeeping soldiers and their families: A preliminary model. *Journal of Psychology in Africa*, 19(2), 281–286. https://doi.org/10.1080/14330237.2009.10820292

- Kavanagh, J. (2005). Stress and performance: A review of the literature and its applicability to the military. Rand Corporation. https://apps.dtic.mil/sti/pdfs/ADA439046.pdf
- Kelley, M. L., Herzog-Simmer, P. A., & Harris, M. A. (1994). Effects of military-induced separation on the parenting stress and family functioning of deploying mothers. *Military Psychology*, 6(2), 125–138. https://doi.org/10.1207/s15327876mp0602_4
- Kgosana, C. M. (2010). An explanatory study of family stability under conditions of deployment (Master's thesis). Stellenbosch University. http://scholar.sun.ac.za/ handle/10019.1/4183
- Knobloch, L. K., & Wilson, S. R. (2014). Communication in military families across the deployment cycle. In L. H. Turner & R. West (Eds.), *The Sage handbook of family communication* (pp. 370–384). Sage.
- Koopman, R., & Van Dyk, G. A. (2012). Peacekeeping operations and adjustment of soldiers in Sudan: Peace in the minds and hearts of soldiers? *African Journal on Conflict Resolution*, 12(3), 53–76.
- Krefting, L. (1991). Rigor in qualitative research: The assessment of trustworthiness. *The American Journal of Occupational Therapy*, 45(3), 214–222. https://doi.org/10.5014/AJOT.45.3.214
- Laser, J. A., & Stephens, P. M. (2011). Working with military families through deployment and beyond. *Clinical Social Work Journal*, 39(1), 28–38. https://doi.org/10.1007/s10615-010-0310-5
- Ledberg, S. K., & Ruffa, C. (2020). Military families: Topography of a field. In A. Sookermany (Ed.), *Handbook of military sciences* (pp. 1–16). Springer. https://doi.org/10.1007/978-3-030-02866-4 35-1
- Lincoln, A. J., & Sweeten, K. (2011). Considerations for the effects of military deployment on children and families. *Social Work in Health Care*, 50(1), 73–84. https://doi.org/10.1080/00981389.2010.513921
- Lobnikar, B., Vesek, S., & Banutai, E. (2011). The psychodynamic processes related to the involvement in peacekeeping missions: Experiences of Slovenian police officers. VARSTVOSLOVJE, Journal of Criminal Justice and Security, 13(4), 444–462.
- Longhurst, R. (2010). Semi-structured interviews and focus groups. In N. Clifford, S. French, & G. Valentine (Eds.), *Key methods in geography* (pp. 143–156). Sage.
- Lyle, D. S. (2006). Using military deployments and job assignments to estimate the effect of parental absences and household relocations on children's academic achievement. *Journal of Labor Economics*, 24(2), 319–350. https://doi.org/10.1086/499975
- Macintyre, A., Lagace-Roy, D., & Lindsay, D. R. (2017). Global views on military stress and resilience. Canadian Defence Academy Press.
- Mancini, J. A., Walker O'Neal, C., Martin, J. A., & Bowen, G. L. (2018). Community social organization and military families: Theoretical perspectives on transitions, contexts and resilience. *Journal of Family Theory and Review*, 10(3), 550–565. https://doi.org/10.1111/jftr.12271
- Mashatola, N. J. (2020). Conscientiousness, work-family-study conflict and general work stress amongst employed non-residential South African Military Academy students (Master's thesis). Stellenbosch University. http://scholar.sun.ac.za/handle/10019.1/108280
- Mattocks, K. M., Haskell, H. G., Krebs, E. E., Justice, A. C., Yano, E. M., & Brandt, C. (2012). Women at war: Understanding how women veterans cope with combat and military sexual trauma. *Social Science & Medicine*, 74(4), 537–545. https://doi.org/10.1016/j.socscimed.2011.10.039
- McMillan, J. H., & Schumacher, S. (2010). Research in education: Evidence-based inquiry (7th ed.). Pearson.

- Meadows, S. O., Beckett, M. K., Bowling, K., Golinelli, D., Fisher, M. P., Martin, L. T., Meredith, L. S., & Osilla, K. C. (2016). Family resilience in the military. *Rand Health Ouarterly*, 5(3), 1–17.
- Mercer, J. (2007). The challenges of insider research in educational institutions: Wielding a double-edged sword and resolving delicate dilemmas. *Oxford Review of Education*, 33(1), 1–17. https://doi.org/10.1080/03054980601094651
- Moelker, R., & Van der Kloet, I. (2006). Military families and the armed forces. In G. Caforio (Eds.), *Handbook of the sociology of the military* (pp. 201–223). Handbooks of Sociology and Social Research. Springer. https://doi.org/10.1007/0-387-34576-0 12
- Morse, J. M., Barrett, M., Mayan, M., Olson, K., & Spiers, J. (2002). Verification strategies for establishing reliability and validity in qualitative research. *International Journal of Oualitative Methods*, 1(2), 13–22. https://doi.org/10.1177/160940690200100202
- Mtshayisa, V. E., & Letšosa, R. (2019). Practical guidelines to ameliorate the effects of internal and external deployments on the marriages of soldiers. *Theological Studies*, 75(4), 1–7.
- Neethling, W. G. F. (2011). Coping with deployment during peacekeeping operations: A narrative perspective by caregivers in the SANDF (Doctoral thesis). University of Pretoria. https://repository.up.ac.za/handle/2263/30216
- Ntshota, N. (2002). Challenges facing married couples in the deploying units of South African National Defence Force (Doctoral thesis). University of Cape Town. https://open.uct.ac.za/handle/11427/6942
- Ollier-Malaterre, A., Jacobs, J. A., & Rothbard, N. P. (2019). Technology, work, and family:
 Digital cultural capital and boundary management. *Annual Review of Sociology*, 45(1),
 425–447. https://doi.org/10.1146/annurey-soc-073018-022433
- O'Neal, C. W., Richardson, E. W., & Mancini, J. A. (2020). Community, context, and coping: How social connections influence coping and well-being for military members and their spouses. *Family Process*, 59(1), 158–172. https://doi.org/10.1111/famp.12395
- Padden, D. L., Connors, R. A., & Agazio, J. G. (2011). Stress, coping, and well-being in military spouses during deployment separation. Western Journal of Nursing Research, 33(2), 247–267. https://doi.org/10.1177/0193945910371319
- Palmer, C. (2008). A theory of risk and resilience factors in military families. *Military Psychology*, 20(3), 205–217. https://doi.org/10.1080/08995600802118858
- Pexton, S., Farrants, J., & Yule, W. (2018). The impact of fathers' military deployment on child adjustment. The support needs of primary school children and their families separated during active military service: A pilot study. Clinical Child Psychology and Psychiatry, 23(1), 110–124. https://doi.org/10.1177/1359104517724494
- Phlanz, S., & Sonnek, S. (2002). Work stress in the military: Prevalence, causes, and relationship to emotional health. *Military Medicine*, 167(11), 877–882. https://doi.org/10.1093/milmed/167.11.877
- Pincus, S. H., House, R., Christenson, J., & Adler, L. E. (2001). The emotional cycle of deployment: A military family perspective. https://www.west-point.org/parent/wppc-st_louis/Deployment/TheEmotionalCycleofDeployment.pdf
- Prinsloo, L., & Cele, S. (2021, July 14). South African riot deaths hit 117 as army starts restoring calm. *Bloomberg News*. https://www.bloomberg.com/news/articles/2021-07-14/extra-army-troops-help-quell-deadly-riots-south-africa-says
- Republic of South Africa. (2015). South African Defence Review 2015. https://static.pmg.org. za/170512review.pdf
- Richie, E. C. (2001). Issues for military women in deployment: An overview. *Military Medicine*, 166(12), 1033–1037. https://doi.org/10.1093/milmed/166.12.1033

- Russotti, J., Hathaway, A., Metzger, J., & Cerulli, C. (2016). The impact of deployment on attachment relationships. *Military Behavioral Health*, 4(2), 168–177. https://doi.org/10.1080/21635781.2015.1133347
- Saunders, M., Lewis, P., & Thornhill, A. (2016). Research methods for business students (7th ed.). Pearson.
- Saunders, M. N. (2012). Choosing research participants. In G. Simon & C. Cassell (Eds.), The Sage handbook of qualitative organizational research: Core methods and current challenges (pp. 35–52). Sage.
- Scherrer, J. F., Widner, G., Shroff, M., Matthieu, M., Balan, S., Van den Berk-Clark, C., & Price, R. K. (2014). Assessment of a postdeployment Yellow Ribbon Reintegration Program for National Guard members and supporters. *Military Medicine*, 179(11), 1391–1397. https://doi.org/10.7205/MILMED-D-14-00094
- Scholl, C. (2019). Effective social work practice with military youth during deployment (Doctoral thesis). Walden University. https://scholarworks.waldenu.edu/cgi/viewcontent.cgi?article=9013&context=dissertations
- Schuh, A. L., Kees, M., Blow, A., & Gorman, L. (2016). The special case of civilian service members: Supporting parents in the National Guard and Reserves. In A. Gewirtz & A. Youssef (Eds.), Parenting and children's resilience in military families: Risk and resilience in military and veteran families (pp. 93–107). Springer. https://doi.org/10.1007/978-3-319-12556-5 6
- Scotland, J. (2012). Exploring the philosophical underpinnings of research: Relating ontology and epistemology to the methodology and methods of the scientific, interpretive, and critical research paradigms. *English Language Teaching*, 5(9), 9–16. https://doi.org/10.5539/elt.v5n9p9
- Segal, M. W., & Segal, D. R. (2006). Implications for military families of changes in the armed forces of the United States. In G. Caforio (Ed.), *Handbook of the sociology of the military* (pp. 225–223). Springer. https://doi.org/10.1007/0-387-34576-0 13
- Segal, M. W., Smith, D. G., Segal, D. R., & Canuso, A. A. (2016). The role of leadership and peer behaviors in the performance and well-being of women in combat: Historical perspectives, unit integration, and family issues. *Military Medicine*, 181, Suppl. 1, 28–39. https://doi.org/10.7205/MILMED-D-15-00342
- Sheppard, S. C., Malatras, J. W., & Israel, A. C. (2010). The impact of deployment on U.S. military families. *American Psychologist*, 65(6), 599–609. https://doi.org/10.1037/a0020332
- Shinga, D. N. (2016). Factors involved in combat readiness in Africa. In G. van Dyk (Ed.), Military psychology for Africa (pp. 261–287). Sun Press.
- Sipos, M. L., Foran, H. M., Wood, M. D., Wright, K. M., Barnhart, V. J., Riviere, L. A., & Adler, A. B. (2014). Assessment of an alternative postdeployment reintegration strategy with soldiers returning from Iraq. *Psychological Services*, 11(2), 185–191. https://doi.org/10.1037/a0033308
- Stepka, P., & Callahan, K. (2016). The impact of military life on young children and their parents. In A. Gewirtz & A. Youssef (Eds.), *Parenting and children's resilience in military families* (pp. 11–26). Springer International. https://doi.org/10.1007/978-3-319-12556-5
- Street, A. E., Vogt, D., & Dutra, L. (2009). A new generation of women veterans: Stressors faced by women deployed to Iraq and Afghanistan. Clinical Psychology Review, 29(8), 685–694. https://doi.org/10.1016/j.cpr.2009.08.007
- Topp, L., Barker, B., & Degenhardt, L. (2004). The external validity of results derived from ecstasy users recruited using purposive sampling strategies. *Drug and Alcohol Dependence*, 73(1), 33–40. https://doi.org/10.1016/j.drugalcdep.2003.09.001

- Van Dyk, G. (2009). The role of military psychology in peacekeeping operations: The South African National Defence Force as an example. *South African Journal of Military Studies*, 37(1), 113–135. https://doi.org/10.5787/37-1-62
- Van Zyl, L. (2014). Research methodology for the economic and management sciences. Pearson Education.
- White, C. J., De Burgh, H. T., Fear, N. T., & Iversen, A. C. (2011). The impact of deployment to Iraq or Afghanistan on military children: A review of the literature. *International Review of Psychiatry*, 23(2), 210–217. https://doi.org/10.3109/09540261.2011.560143
- Wilén, N., & Heinecken, L. (2017). Peacekeeping deployment abroad and the self-perceptions of the effect on career advancement, status and reintegration. *International Peacekeeping*, 24(2), 236–253. https://doi.org/10.1080/13533312.2016.1215247
- Wilkinson, S., & Kitzinger, C. (2013). Representing our own experience: Issues in "insider" research. *Psychology of Women Quarterly*, 37(2), 251–255. https://doi.org/10.1177/0361684313483111
- Willig, C. (2013). *Introducing qualitative research in psychology* (3rd ed.). McGraw-Hill Education.
- Wisecarver, M. M., Cracraft, M. L., & Heffner, T. S. (2006). *Deployment consequences: A review of the literature and integration of findings into a model of retention*. U.S. Army Research Institute for the Behavioural and Social Sciences.
- Young, D. S., & Casey, E. A. (2019). An examination of the sufficiency of small qualitative samples. Social Work Research, 43(1), 53–58. https://doi.org/10.1093/swr/svy026
- Zungu, D., & Visagie, N. (2020). All eyes on Sudan: The journey of female psychologists in the theatre of operation. SA Journal of Industrial Psychology/SA Tydskrif vir Bedryfsielkunde, 46(1), a1739. https://doi.org/10.4102/sajip.v46i0.1739

Endnotes

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Comparing deployment experiences of South African National Defence Force personnel during peace support missions: Sudan vs Democratic Republic of Congo

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Military Psychological Institute: Human Factor Combat Readiness Section

Abstract

The South African National Defence Force (SANDF) has operational responsibilities in Africa regarding peace support operations. These deployments are the bread and butter of the SANDF and members are therefore frequently deployed for extended periods. These deployments are unique environments with taxing circumstances, which place various psychological demands on the soldier. The psychological impact of these demands originates not only from combat and the consequent clinical effect thereof, but also from organisational factors and the contribution of family stressors. The study reported here endeavoured to examine the positive and negative subjective deployment experiences of soldiers in two different mission areas. The data are compared and further utilised to provide a framework of two proposed matrices, namely booster and stressor matrices, which may affect the optimal psychological functioning of soldiers. The study adopted a survey design utilising qualitative data focusing on retrospective data. The data stems from the Psychological Demobilisation Questionnaire developed by psychologists in the SANDF and amended by the authors. Data were collected from both combat service support and combat forces, from two different missions in different countries, both missions were one year in duration. Data revealed both positive and negative experiences correlating with the context of operations. These themes were categorised in terms of the sphere of functioning (organisational, family and clinical) from the deployment experience. The booster and stressor matrices provide a practical and accessible framework to military commanders on how to 'boost' or mitigate some of the experiences of their deployed force, as the commanders play a key role in the deployed soldier's experience and the impact of such experiences in the theatre of operation.

Keywords: peace support operations, SANDF, deployment experiences psychological impact of operations.

Introduction

The SANDF commenced its contributions of personnel to peace support operations (PSOs) in 1998, and has been involved in various deployments, reaching 14 missions altogether in 2013 (Lotze et al., 2015; Wilén & Heinecken, 2017). These missions – which can be seen as the 'bread and butter' of the SANDF – present the soldiers with a myriad of psychological demands (Britt & Adler, 2003). These demands on the soldiers occur specifically during and after deployment. Two distinct theatres of operation in which the SANDF have served are Operation Cordite (in the Darfur region of Sudan) and the Force Intervention Brigade (FIB) (in north-eastern Kivu, a province in the Democratic Republic of Congo [DRC]).

Tools that are useful for screening large groups, specifically related to post-traumatic stress in military samples, have been explored to address the time and personnel constraints that regular health assessments place on the South African Military Health Service (SAMHS) (Van Wijk et al., 2013). Most of these needs are centred on the negative experiences or impact of the PSO on the wellbeing of our soldiers, with most of the adverse effects focused on the clinical functioning of soldiers (Raju, 2014; Van Wijk, 2011). These are imperative to mitigate any long-term effects of deployment.

An exploration into factors that contribute to the overall deployment experience of the soldier whilst deployed for 12 months was however lacking at the time of this research. The current study therefore provides a snapshot to understand the possible influence of these experiences on the soldier's overall deployment wellbeing, together with the notion that such understanding could provide the organisation with valuable information for future deployments.

This study examined the positive and negative self-reported experiences of SANDF personnel during two different missions, and the data are compared. The descriptions of the deployment experiences provided an understanding of the deployment experiences in terms of themes. These themes were furthermore categorised into three distinct spheres of functioning, and a tripartite model is presented to understand the impact these deployment experiences had on our soldiers. The themes were gleaned from the positive and negative deployment experiences.

Peace support operations

The SANDF is trained for conventional warfare; however, mostly conducts PSOs. These missions have been described by South African researchers such as Wilén and Heinecken (2017) as challenging for various reasons. One of these challenges is characterised as no clearly defined foe. Soldiers therefore have to rely on skill sets other than their conventional warfare training, such as negotiation, diplomatic skills, observation and strategies in order to avoid conflict. Peacekeepers also face difficulty or are accused of contravening the principle of impartiality, a core value of peacekeeping alongside the consent of the parties and the non-use of force except in situations of self-defence (Salaun, 2019). These unique challenges of PSOs, which are not inherent in traditional warfare,

have a direct influence on the deployment experiences of personnel that have to negotiate or establish the status quo.

According to the SANDF (2006, p. 23):

PSO is a military term used to denote multi-functional and multinational operations conducted in support of a UN mandate, focused on activities to restore peace within war-torn countries/regions. These operations include all civil and military organisations and may involve diplomatic efforts, humanitarian actions and military deployments. Outside military circles, the term 'Peacekeeping' is often used erroneously to embrace all PSO, including PE [peace enforcement].

Furthermore, when consent for and compliance with a PSO is high, peace enforcement (PE) and peace keeping (PK) forces will adopt similar approaches. Both PK and PE are designed to achieve the same end-state, which is a secure environment and a self-sustaining peace. In the first instance, a PK force bases its operations on the consent of the parties, and is not capable of exercising force beyond that required for self-defence. Such a force would find its freedom of action considerably more constrained than a combat-capable PE force, should consent be uncertain or withdrawn (SANDF, 2006, p. 24).

A lightly armed PK force, therefore, should not be given, nor attempt to conduct, enforcement tasks that may provoke hostile reactions that are beyond its ability to manage and that may escalate to war. Only a PE force prepared for combat and capable of effective coercion should be deployed into a potentially hostile environment" (South African Army, n.d., p. 24 par 4).

Operations Cordite and the Force Intervention Brigade

The only constant in all missions to which our soldiers deploy is the soldier. Operations differ in their history, belligerents, mandates and environment. These differences have a role to play in the experience of the peacekeeper, and the subsequent outcome of the experience.

Operation Cordite

The mission in Darfur in the Sudan was originally a PK mission authorised under Chapter VI of the UN Charter, and commissioned under the African Union (AU) as the African Union Mission in Sudan (AMIS). AMIS initially had an observer mandate, implying that the PK forces were mandated to 'observe and report' and the use of force was authorised only in self-defence. The PK force was soon increased, and the mandate adapted to include aspects such as the separation of belligerent factions, assurance of freedom of movement, and enforcement of the ceasefire agreement, but the use of force was still restricted to self-defence and to prevent the blatant perpetration of atrocities (E.Visagie, personal communication, 12 October 2021). The mandate of AMIS was continually amended and forces expanded as the situation in Darfur developed and worsened. This continued until 2007, when the United Nations Security Council passed Resolution 1564, which paved

the way for the replacement of AMIS with UNAMID. UNAMID was the African Union—United Nations Hybrid Operation in Darfur. This was a joint PK mission commissioned by the United Nations Security Council (UNSC) after the passing of Resolution 1769, but still under Chapter VI of the UN Charter. The peacekeepers were, under this new mandate, allowed to use force in self-defence and to protect civilians and humanitarian operations. Both AMIS and UNAMID were therefore always under Chapter VI of the Charter and no offensive military operations were ever mandated. The PK forces were there to observe and report and to monitor and enforce the peace agreement and ceasefire agreement. Operation Cordite was the SANDF operation under which South Africa contributed forces to both AMIS and UNAMID (E Visagie, personal communication, 12 October 2021).

From Operation Mistral to FIB

Operation Mistral is the SANDF operation that contributed forces to MONUC and later to MONUSCO in the DRC. MONUC was the original UN mission, mandated by UNSC Resolution 1291, to observe and report on the compliance with peace accords by the belligerent factions in the DRC until 2010, after which MONUSCO was established with the passing of UNSC Resolution 1925 (E. Visagie, personal communication, 12 October 2021) Both MONUC and MONUSCO are mandated under Chapter VII of the UN Charter, authorising them to take action in order to –

- protect UN personnel, facilities, installations and equipment;
- ensure the security and freedom of movement of its personnel; and
- protect civilians under imminent threat of physical violence.

Unlike the AMIS and UNAMID forces, the MONUSCO forces are therefore authorised to use force to execute its mandate, although offensive military operations are not allowed.

The Force Intervention Brigade (FIB) was conceived at an international conference where the failure of MONUSCO to end the violence in the DRC featured prominently on the agenda (E. Visagie, personal communication, 12 October 2021). The FIB is not the first instance where the UNSC has authorised the use of force, but it was the first time in UN history where a PK force was established and authorised to use offensive military operations to 'neutralise and disarm' groups or factions threatening peace and security. Although still under Chapter VII of the Charter, the mandate of the FIB is purely offensive, allowing it to plan and execute targeted offensive operations in order to attack and destroy rebel and militia groups. Its first operations were conducted against the M23 Militia group in Eastern DRC, which was attacked and defeated. Several bases of the ADF have been attacked and destroyed by the FIB in the period after that (E Visagie, personal communication, 12 October 2021).

The Cordite and Mistral deployments therefore differed mainly in mandate. Whereas Operation Cordite forces were severely hampered by mandate restrictions, Operation Mistral, and specifically the FIB, had a much more robust and offensive mandate, giving it much more freedom to act militarily.

A comparison of the operations is presented in Table 1 for some additional contextual information. The type of area as well as the nature of the mission contributes greatly to the experience of the soldier (Martin, 2019). The two areas are compared for an understanding of the mission-specific and geographical differences or similarities that may affect SANDF personnel during their tour of duty.

Table 1: Comparison of Operation Cordite and FIB PSO

	Operation Cordite	FIB
Start of mission	2007	2013
Responsible authority	United Nations Hybrid Mission in Darfur (AU and UN)	UN mission, tri-nation soldiers from Malawi, Tanzania and South Africa
Changes to the mission	AMIS from 2004	MONUC from 1999
Mandate of mission	PK force, but observer mission, observe and report, use of force only for self-defence	PK. Offensive mandate, neutralise rebel groups
Length of mission	1 year plus 5 months desert warfare training before deployment	1 year plus 5 months of jungle warfare training before deployment
Topography	Flat with featureless plains, hot desert conditions, edge of the Sahara	Tropical rainforest criss-crossed by rivers, high mountains are found on the eastern borders
Geography and history	Covers a large area, 493 180 square kilometres, and land unsuitable for developing large and complex civilisations	The largest country of sub- Saharan Africa, covering 2 344 858 square kilometres
Conflict	Ethnic tensions, Arab herders and sedentary Fur and other agriculturalists. Conflict since the 1980s	Congo Wars: 1996–1997 and 1998–2003 and Kivu conflicts (eastern) 2004 till present, between the military of DRC (FARDC) and Hutu groups (FDLR)
Monetary allowances	UNAMID on-time payment and adequate	On-time payments and adequate
Mission-specific stressors	Ambushes Skirmishes	Frequent planned offensive military operations
	Danger	Support
	Long duration of deployments Support	Combat

Note: Adapted from IndexMundi (n.d.).

During 2015, some 2 200 SANDF personnel were deployed on PK duties. During that time, a total of 18 000 troops were either deployed, being prepared for deployments, or coming back from deployments. The heavy burden of deployments on the SANDF and its personnel and the varying nature of the deployments are highlighted by Table 1. This could have contributed negatively or positively to the psychological wellbeing of soldiers (Martin, 2019).

Deployment experiences of soldiers associated with PSO

A vast body of literature documents stressor experiences associated with soldiers and military deployments (Bartone et al., 1998; Kgosana & Van Dyk, 2011; Raju, 2014). Little literature regarding the positive experiences of soldiers during deployments is available (see Runge et al., 2020). Over the years, the SANDF has contributed to this body of literature, focusing on exploring the experiences of specific groups during deployment, such as military psychologists, airborne section leaders, as well as a PK mission in DRC (Bruwer & Van Dyk, 2005; Williamson, 2015; Zungu & Visagie, 2020).

PSO operations place demands on deploying soldiers that heavily overlap with stressors found in traditional work settings, such as role-related stressors, time and workload stressors, relationship stressors, change stressors, physical and environmental stressors as well as organisational culture stressors. However, deployment environments also have military-specific stressors, such as mission ambiguity, engagement rules of engagement, leadership climate stressors as well as cultural and situational ambiguity (Campbell & Nobel, 2009, Van Dyk, 2009).

According to Chambel and Oliviera-Cruz (2010), soldiers on a PKO develop a perception of mutual obligations between themselves and the organisation about the mission. By deciding to deploy to a mission, soldiers accept the obligations of such deployments and have expectations related to the obligations of the organisation toward them. This may include aspects such as financial reward, support, upkeep of their wellbeing as well as career opportunities.

A breach of psychological contract occurs when workers (in this case, soldiers) feel that the organisation (i.e. the SANDF) have failed them in compliance with its obligations (Chambel & Oliviera-Cruz, 2010). This results in a lack of predictability and control, a sense of deprivation, and even emotionally strong responses, which all contribute to reduced job engagement as well as possible burnout (Vermetten et al., 2014). An even greater concern for the organisation is that these responses, coupled with the demanding work environments, may also be conducive to counterproductive work behaviour and indiscipline (Campbell & Nobel, 2009; Chambel & Oliviera-Cruz, 2010; Tucker et al., 2009).

When a soldier deploys, it inevitably entails separation from his or her family. The process of establishing the parent as a reliable source of comfort and reassurance can be affected and the security of the parent–child relationship may be compromised (Paley et al., 2013).

Considering the current nature of PSO where soldiers are frequently involved in ambushes or attacks, families may experience heightened stress, which would normally be associated with combat-related deployments (Hollingsworth, 2011; Williamson, 2015). Just as deployments affect relationships at home, stressors could serve as a distraction for members, which may compromise their effectiveness and safety (Ferero et al., 2015). The length of the deployment serves as a further indicator of the influence of deployment on families: the longer the deployment, the more ingrained the additional roles and responsibilities, and the greater the accumulation of worries, fears and resentment (Paley et al., 2013).

Some positive experiences reported in studies are aspects such as close relationships with local people by working together and sharing knowledge, feeling connected to the bigger picture to which the soldier contributes, comradeship amongst the soldiers and officers of the unit as well as feeling rewarded by doing good for the local people (see Runge et al., 2020; Schok et al., 2008). Other positives are access to healthcare for the whole family, the opportunity for advancement of the career of a soldier, which will result in increased pay benefits, which also positively influences the family (Schok et al., 2010). Furthermore, members who can find meaning in processing deployment events report more self-confidence, express greater appreciation for family and friends, and also believe that the experience had expanded their horizons and personal growth (Schok et al., 2010; Schok et al., 2008); thus, all placing the individual and the family in a better position than before the deployment.

Combat-related stressors and military operations are synonymous with the term 'post-traumatic stress disorder' (PTSD), as well as the high prevalence of major depressive disorder, generalised anxiety disorder, alcohol misuse, dependence and suicidal ideation (MacDonald et al., 1999). Most of the literature generated in the SANDF and other militaries is focused on the exposure to hazards and the influence of traumatic events during deployments (see Litz, 2004; Runge et al., 2020; Van Wijk & Martin 2021).

Soldiers who are exposed to death, destruction and harm toward powerless populations are at a great risk of developing symptoms of distress (Bramsen et al., 2000). Furthermore, feelings of powerlessness as a result of the mandate of a mission could also affect soldiers' emotions negatively when they are faced with witnessing atrocities against the local population where they have no mandate to intervene (Rosebush, 1998; Shigemura & Nomura, 2002). An example of soldiers being subjected to the suffering of the local population is, for instance, incidents in the Darfur region, where small children – often malnourished – have to walk with their mothers for long hours in the heat to fetch water.

The SANDF has also made a call for more women to be part of front-line operations, which places women at a greater risk of developing PTSD together with the unique stressors that women face in military operations (Chaumba & Bride, 2010). In research, these unique stressors can be categorised as intrinsic, extrinsic and organisational dimensions. Examples of these are gender violence dimensions, family dimensions, cultural dimensions, physiological dimensions, psychological dimensions and sexual dimensions (Hoge et al., 2007; Tarrasch et al., 2011; Walsh, 2009). Various angles toward

the scourge of PTSD in militaries therefore have to be re-evaluated, as the notion used to be that mostly men develop PTSD in militaries (Crum-Cianflone & Jacobson, 2014).

Together with the unique challenges of PSO and the psychological impact on soldiers, these operations also offer circumstances for psychological growth (Newby et al., 2005). Post-traumatic growth is not resilience, which is a person's ability to bounce back after adversity; rather, post-traumatic growth refers to the process (which usually takes a long time) during which people are faced with adversity and endure psychological struggles that challenge their being (Collier, 2016). After this process, people usually have learnt new insights about themselves and the way they view the world, which translates to psychological growth (Park et al., 2021).

In addition, the underutilised term "peacekeeper stress syndrome" (Weisaeth & Sund, 1982 in Britt & Adler, 2003, p. 218) has uniquely been coined within the context of PKOs. 'Peacekeeper stress syndrome' was first described in 1979 in a Norwegian PKO and, since then, it has been reported in more than 10 multinational UN PKOs (Shigemura & Nomura, 2002). What sets a PKO apart from the trauma experienced by war is the cognitive processing of soldiers during these types of operations, namely humanitarian assistance, restoration and promotion of sustainable peace (Raju, 2014). Soldiers' thinking about the rationale of PKO operations versus that of conventional warfare is different, and therefore stressors are experienced differently, which adds to the experience of the soldier on a cognitive and emotional processing level, which in turn facilitates psychological growth.

Aim

The aim of the study was twofold, namely firstly, to explore and compare the positive and negative subjective deployment experiences of SANDF soldiers during two distinctly different mission areas; and secondly, to provide a guiding framework based on these experiences, which could be utilised to by the organisation to predict soldiers' deployment experiences in terms of three spheres of functioning. This novel framework of *booster* and stressor matrices provides the organisation with a valuable tool for informing interventions about the human factor during PSOs, and therefore contributing to the optimal functioning and psychological wellbeing of soldiers during deployment.

Methodology

The study adopted a survey design utilising a qualitative approach focusing on retrospective data. The data stemmed from the Psychological Demobilisation Questionnaire (PDQ) developed by psychologists in the SANDF and amended by the authors. This questionnaire has been utilised in its amended form for the past 12 years; therefore, the same version of the PDQ was administered to respondents in both missions. The questionnaire is circulated as part of the demobilisation process before soldiers return from the mission area. The current data were collected from SANDF members from both combat service support and combat forces from two different mission areas, namely Operation Cordite and the FIB. The deployments were both one year in duration.

Survey

The PDQ was developed to explore the psychological dynamics of deployment. Questions tap into different aspects, which may potentially have a psychological impact on deployed soldiers and consequently influence individual and group functioning. For the purposes of the study, only the demographical information provided as well as two open-ended questions were utilised. Individuals were asked to report in writing on what they felt was best (i.e. boosted their experience) and worst about the deployment. No limitation was placed on the number of responses the individual could provide.

Sample

A total of 1 046 soldiers participated in the study. Tables 2 and 3 below illustrate the composition of the sample from Operation Cordite (n=525) and FIB (n=521) missions respectively.

Table 2: Demographic breakdown of sample

	DRC		SUDAN		
	N	%	N	%	
Race					
African	436	83.7	462	88.0	
Coloured	68	13.1	48	9.1	
White	10	1.9	13	2.5	
Indian	1	0.2	1	0.2	
Asian	0	0.0	0	0.0	
Incomplete	6	1.2	1	0.2	
Gender					
Male	477	91.6	430	81.9	
Female	41	7.9	88	16.8	
Incomplete	3	0.6	7	1.3	
Rank					
Private	272	52.2	297	56.6	
Lance corporal	40	7.7	43	8.2	
Corporal	80	15.4	78	14.9	
Sergeant	57	10.9	35	6.7	
Staff Sergeant	21	4.0	26	4.9	

	DRC		SUDAN		
	N	%	N	0/0	
Warrant Officer	7	1.3	12	2.3	
Lieutenant	14	2.7	13	2.5	
Captain	19	3.6	13	2.5	
Major	7	1.3	0	0.0	
Lieutenant Colonel	3	0.6	0	0.0	
Colonel	0	0.0	0	0.0	
Chaplain	1	0.2	0	0.0	
Incomplete	0	0	8	1.6	
Marital statu	ıs				
Single	242	46.4	282	53.7	
Married	218	41.8	189	36.0	
Divorced	8	1.5	6	1.1	
Life partner	47	9.0	38	7.2	
Incomplete	6	1.2	10	1.9	

Table 3: Age distribution across deployments

	DRC			SUDAN		
	Min	Max	Mean	Min	Max	Mean
Age	21	58	34.3	22	62	33.5
Years of service	0	35	12,5	0	42	11.8

Analyses

The data for the study were analysed by means of thematic analysis. The survey data were recorded, coded and analysed. Open coding was utilised. Following the initial coding process, labels were assigned to the various codes. These labels were consequently analysed and grouped according to the main themes identified within the data. The main themes were firstly compared in terms of similarity as well as uniqueness for each mission based on simple content comparison. The main themes are presented as percentages to gain insight into the frequency of the themes. These frequencies provide the profile of the negative and positive deployment experiences of each mission. Please note that all responses are reproduced verbatim and unedited.

Results

The results for both mission areas will be presented, firstly the positive deployment experiences will be considered, followed by the negative experiences.

Table 4: Positive deployment experiences – 1-year deployments

DRC 1-YEAR DEPLOYMENT – POSITIVE DEPLOYMENT EXPERIENCES			
Theme	%	Quotes	
		It gave us the soldier's experience in making contact with rebels, not just peacekeeping mission.	
Combat	21.2	Experiencing contact for the first time within such a little time of my service.	
experience**		The invaluable learning experience with regards to battle handling in a real battle situation.	
		Getting combat experience.	
		The best was the experience.	
Experience	17.1	Personally, it was the whole experience of this deployment.	
Experience	17.1	The experience I got, there is no one that can take it away from me.	
		Unity within the sections.	
		Unity amongst members.	
Unity	11.5	We supported each other and looked after each other.	
		Cohesion and teamwork.	
		The bond between the guys got stronger.	
		To achieve the aim of the FIB in DRC, we managed to neutralise and disarm the illegal armed groups.	
Mission		Best is to cover our mission goal.	
success	8.2	The fact that we achieved our objective of defeating the opposition.	
		Seeing that M23 was defeated.	
Equipment*		Weapons were serviceable and ammunition was more than enough.	
	5.4	We had enough vehicles and ammo so we were prepared.	
		Having a Rooivalk in support. My first-time having air	

support in a deployment.

		All of us returning home safely.
No casualties*	4.2	We didn't lose a soul.
cusuaries		We didn't lose any of our members through any contacts.
		Making new friends from other units.
Meeting new people	4.2	To see DRC and meet soldiers from other units and countries.
people		Seeing my old friends and making new ones.
		LTU [leisure time utilisation] kept us busy.
		Sports.
LTU activities	3.6	Gym.
		Physical training was best cause we had time to train.
		When we were having functions in the base.
		To have the opportunity to serve my country in DRC.
		I think we contributed well to the safety of people of DRC.
Pride	3.6	To put up my country in a good way.
		Making a difference to better the living conditions of the citizens of Congo.
Other	11.9	
Incomplete	8.5	
SUDAN 1-YEA EXPERIENCE		PLOYMENT – POSITIVE DEPLOYMENT

		The experience in mission area for 1 year.
Experience	24.7	The experience of learning about yourself and another lifestyle of the country.
		Experiencing new things and real-life behind soldiering.
		Teamwork was the best thing I ever experienced.
Unity	8.2	Cohesion amongst my colleagues.
		Support that I got from the members of the team sites.
		Doing my work.
Work experience	7.6	Managed to get some experience about my job.
		It developed my skills how to work in a desert environment.
		The experience I gained in my field.

Meeting new people		Interaction with new and old characters.
	4.6	People I met were very friendly.
		To know other people.
		I managed to save a lot of money.
Allowances*	4.4	Money.
		Money was good.
		We do sports and activities.
LTU activities	3.4	LTU's and functions.
		The best is physical training.
		Helping those in need.
Pride	2.1	Having to help out the locals, school, hospital etc, that were less fortunate.
		Protect civilians.
		The success we had as a battalion.
Mission success	2.1	We finished the mission on a high note.
		Completing the mission in the mission area.
Other	10.8	
Incomplete	31.9	

^{*} Unique themes *

Table 4 indicates themes, along with typical responses associated with the theme, about positive deployment experiences of deployment. When comparing the data for both theatres of operation, seven main themes were evoked. These were:

- 'Experience' (related to the deployment experience in general)
- 'Unity'
- 'Work experience'
- 'Meeting new people'
- 'LTU activities'
- 'Pride' in the mission'
- 'Mission success'.

^{*}FIB-specific combat component to work experience

It is important to note that in terms of the FIB, 'Work experience' includes combat-related experience due to the mandate of the mission.

Unique positive deployment experiences were evident in both data sets. Within the FIB, these were:

- 'No casualties'
- · 'Equipment'
- · serviceable equipment
- · different types of weapons
- serviceable and available vehicles.

In this regard, the deployment and availability of the "Rooivalk attack helicopter" (Participant D56) in the mission area were specifically highlighted as a positive contributor to soldier morale. Operation Cordite respondents highlighted 'Allowances' as the only unique positive aspect during this deployment. Considering the varying nature of the two deployments, these unique themes may be attributed to the mandate of the deployment as well as specific incidents or occurrences during the deployment period.

Table 5 highlights themes, along with responses associated with negative experiences during one year deployments, unique responses are indicated by the asterisk.

Table 5: Negative deployment experiences – 1-year deployments

DRC 1-YEAR DEPLOYMENT – NEGATIVE DEPLOYMENT EXPERIENCES		
Theme	%	Quotes
		Support from SANDF was very poor.
		Lack of support from RSA and limited resources.
Lack of support	19.2	The support from RSA in terms of our sustainment in DRC.
		The fact that RSA support was missing and the feeling of being unwanted.
		Living conditions and food.
	17	To stay in tents that were full of holes.
Base-related concerns		Shortage of food in the operation.
		Living conditions and the tents that are unserviceable.
		Not having proper bathroom facilities when we arrived at this new base.

		Reduction of our allowances.
Smaller	10.7	Having our allowance reduced and taxed even though we were chapter 7.
allowances*		Working for less allowances in dangerous conditions.
		Cutting our money and not saying why.
		Arriving in the mission area receiving U/S [unserviceable] weapons, vehicles and ammunition.
		Equipment not fitting to the terrain of operation.
Eminor	10.1	Our uniform cannot last for a year.
Equipment	10.1	Lack of communication equipment, fax, telephone, internet etc.
		Communication because our radios are old.
		Having not enough vehicles for almost 8 months.
		Deploying constantly within the range of enemy weapons.
Combat	7.6	After how many deployments this was the first-time bombs falling 50 m from me.
experience*		When the base was under attack and we were not allowed to retaliate.
		It was a war, not peacekeeping.
	3.4	When we don't get support from our commanders.
Command and control		Most of the operations were not properly planned.
Common		Not to have trust in my Commander.
		Communication breakdown at some stages.
Lack of	2.0	Not knowing the intelligence picture at times.
communication*	2.9	On a mission no comms to the base.
		There was no communication.
		The higher ranks visiting us, promising but they don't fulfil their promises.
Promises*	2.4	Generals promising us things but they never deliver.
		Shortage of everything despite promises by JOPS [joint operations]'.

Country-related concerns	2.4	Being deployed in a place where there is no signal like Pinga and Niyobiyondo. Some areas we deployed in that didn't have network. The area is always raining. The roads of DRC are very bad and discouraging.
Lack of LTU activities*	2.4	Not to go freely on LTU as usual because of the security situation. They did not give us freedom of movement and LTU.
Other	12.3	
Incomplete	8.8	

SUDAN 1-YEAR DEPLOYMENT - NEGATIVE DEPLOYMENT EXPERIENCES

	11.6	When we lost one of our members in an ambush.
Losing a		When we lost a soldier in combat.
member*		Losing our member.
		Losing our brothers and others injured.
		Poor unserviceable equipment.
Equipment	8.3	Old equipment that was using including vehicles.
		Operating with damaged or unserviceable equipment and no protective gear, i.e. bullet vests.
		Weather conditions during operation.
Country-related	7.9	Hot weather.
concerns		People of Sudan are not friendly.
		Roads were bad.
Repatriations*	5	Our member get RTU [return to unit] early.
Repatriations		Repatriation of many members.
		Missing loved ones at home.
Family*	4.8	Missing home, Missing my family.
		Separation from my family.
		Support from JOPS.
Lack of support	4.1	Sustainment flight failing to come
		Support from RSA.

	4.1	One year is too long.
Duration*		The duration.
		Being away for a year.
Base-related concerns	3.3	Water and electricity problems.
		Eating the same food all the time
Command and control	2.7	Leadership.
		Command and control.
		The command structure.
		Leadership was worst in this deployment.
Work-related stressors*	2.5	Getting stuck on the sand and sleeping outside without water and food.
		Guard duty.
Other	12	
Incomplete	33.6	

^{*}Unique deployment experiences

When comparing the negative deployment experiences of soldiers, five main themes for both theatres of operation were identified as presented in Table 5:

- 'Lack of support'
- 'Equipment'
- 'Base-related concerns'
- 'Country-related concerns'
- 'Command and control'.

Similar concerns for both theatres emerged concerning base-related aspects in terms of the food that was received, accommodation, and base facilities. Similarly, country-related aspects also manifested as negative experiences across both theatres of operation, with each country presenting challenges in terms of the environment and infrastructure, such as travelling to areas of responsibility on poor roads where vehicles break frequently.

Greater variance was evident in terms of the unique themes related to the negative deployment experiences of soldiers as opposed to the positive deployment experiences. Within the DRC unique themes were:

- 'Smaller allowances'
- 'Promises' and perceived lies from higher structures in the SANDF
- 'Lack of communication'
- 'Lack of LTU activities'.

In contrast, within the Darfur deployment, the pertinent unique themes centred on:

- 'Losing a member'
- · 'Repatriation'
- 'Family'
- 'Duration'
- 'Work-related stressors'.

Whilst a strong collation between the general stressors was found in both deployment areas, distinct incidents during each of the missions contributed significantly to the varying nature of the experience of soldiers.

Discussion

This study compared the positive and negative deployment experiences of SANDF members during two different missions. The types of positive and negative deployment experiences were similar to those reported on in previous research across various countries and missions (see Runge et al., 2020). It was found that the majority of the positive experiences of deployed personnel were consistent across both the DRC and Darfur deployments with minor variations in its perceived weighting to members. According to the main themes, the respondents valued the work and combat experience, the experience of deployment, the unity, mission success, meeting new people, the leisure time utilisation (LTU) activities. They furthermore had a sense of helping and reported pride in the execution of their duties during both deployments.

These findings are in keeping with PSO research (see Karney & Crown, 2011; Morris-Butler et al., 2018; Raju, 2014), which found that contrary to the popular narrative that deployment is a harmful experience, there are significant positive experiences reported by deployed military personnel. Focusing on the positive experiences associated with military service, which are often under-reported, furthermore validates the sense of meaning derived from military deployment by soldiers. The identification of positive experiences can be seen as part of a meaning-making process. This sense of meaning-making furthermore serves as a protective factor from the negative effects of stressors among deployed soldiers (Seol et al., 2020).

Unique positive experiences associated with the DRC mission were combat experience, ample and serviceable equipment, the support of the 'Rooivalk' attack helicopters from South Africa, and the fact that no casualties were suffered during the deployment. It is perhaps surprising that these are a reflection of the FIB, which had a robust offensive mandate. Our findings are thus consistent with the view that a soldier is truly at peace during 'wartime' where they know what is expected of them and they have trained accordingly. In contrast to this, increased logistical, financial and operational support is associated with a traditional military mandate, such as PSOs. This operational support, in turn, contributed significantly to reported positive deployment experiences.

Positive deployment experiences during the Darfur mission were associated with 'Remunerative rewards' as a unique main theme. A specific association with the nature of the operations is evident, as the financial benefit is consistent with previous findings associated with PKO (see Raju, 2014). The unique positive experiences indicate a relationship with the nature of the operation, PE or PK. This could also be indicative of the unique requirements of deployed personnel during missions with different mandates. Psychological requirements during PE are specified as mental toughness, channelled aggressiveness, physical fitness; and during PK, self-discipline, diplomacy, negotiation skills, tolerance for boredom, and understanding of the conflict (Densmore, 2004).

In line with previous research, participants across both theatres of operation reported negative deployment experiences related to support, living conditions, vehicles and equipment, a lack of information as well as a lack of command and control (Bartone et al., 1998; Coll et al., 2011; King et al., 2006; Van Dyk, 2009). The duration of the deployment can furthermore be seen as a catalyst that served to amplify the negative experiences of soldiers during deployment.

The themes of positive and negative experiences can be categorised in terms of the sphere of functioning within which the deployment experience has an impact. A positive deployment experience can therefore be described as a 'booster' during deployment whereas a negative deployment experience can be described as a 'stressor'. The design of a 'booster' and 'stressor' matrix based on the findings of this research is presented in Tables 6 and 7. These matrices provide a practical and accessible guiding framework to military commanders on how to 'boost' or 'mitigate' some of the experiences of their deployed force.

Table 6: 'Booster' matrix

BOOSTER MATRIX					
ORGANISATIONAL SPHERE	CLINICAL SPHERE	RELATIONSHIP SPHERE			
Mission success	Experience	• Unity			
Work experience	• Pride	Meeting new people			
• Allowances	• No casualties*				
 LTU (leisure time utilisation) activities 					
• Equipment*					

Table 7: 'Stressor' matrix

STRESSOR MATRIX					
ORGANISATIONAL SPHERE	CLINICAL SPHERE	RELATIONSHIP SPHERE			
Lack of support	Losing a member*	• Family*			
Base-related concerns	Combat *	• Duration*			
• Equipment	 Duration* 				
 Command and control 					
Country-related concerns					
• Smaller allowances*					
• Lack of communication*					
• Promises*					
 Lack of LTU activities* 					
• Repatriations*					
• Duration*					

^{*}The asterisk indicates unique themes gleaned from the data.

In the examination of the booster (Table 6) and stressor (Table 7) matrices, it is clear that the majority of the positive and negative themes are rooted in the organisational sphere of functioning. Whilst this may be the case, it is important to note that the spheres are not mutually exclusive. Elements within one sphere may have a direct influence on other spheres (see Figure 1). The duration of the deployment presents an example of this. Whilst the duration of the deployment is prescribed by the organisation and the tenets of mission requirements, the outcome of a 1 year deployment may have a marked effect on the clinical sphere of functioning of the individual as well as on his or her relationships with family and friends, and therefore the relationship sphere of functioning.

The matrices thus merely provide a vigorous demarcation of the various 'boosters' and 'stressors', which may have an effect on the psychological wellbeing of soldiers within the various spheres of functioning.

A deeper interrogation of the underlying categorisation of the themes reveals that these can be distilled into a multi-dimensional psychological model of functioning (see Figure 1 below) as a result of the deployment experiences. The model is conceptualised by categorising the positive and negative deployment experiences of respondents in this research article in terms of three spheres of functioning. These spheres categorise the deployed soldier's deployment experiences in these three spheres, which are not mutually exclusive but can overlap as seen in the data. These spheres of functioning are the

organisational, clinical and relationship spheres. Through this categorisation of the themes, the tripartite model assists with the practical application (planning, intervention) of these findings within the deployment context. In this configuration, the tripartite model provides a novel tool for commanders and the force employer to strategise and plan for experiences the soldier may encounter.

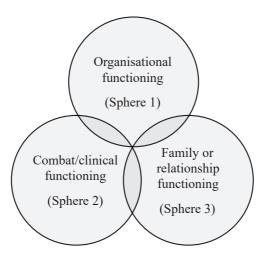


Figure 1: A proposed tripartite psychological model of functioning (PSF)

Source: Authors' own compilation

The organisational sphere accounted for the majority of both positive and negative deployment experiences of soldiers. This challenges popular convictions that the majority of studies focus on peacekeepers' wellbeing through analyses of post-traumatic stress disorder (PTSD) (see Vasterling et al., 2015). In this sphere, most elements are under direct control and influence of the military commander. The focus areas should be good leadership, command and control, effective communication, payment of financial rewards, ensuring serviceable vehicles and base-related concerns (create conditions conducive to living and food). These factors are nothing new, and are already on the radar of the commander.

The contribution of the proposed model lies in the subjective data of soldiers presented as evidence to commanders of how important these aspects are to them. Within the **organisational** sphere, the psycho-social team has a role to play through the implementation of a structured programme of functions and LTU activities. The role of the military commander would be to instil a sense of pride, to emphasise and 'boost' the contribution his or her contingent is making, and in essence to highlight the difference his or her troops are making in the community. This gives evidence of the phenomenon of intrinsic rewards, which is viewed as the most powerful predictor of overall work satisfaction across occupational groups (see Lang et al., 2010; Renard & Snelgar, 2016).

The **clinical** sphere is characterised by the elements of loss and absence (Maguire et al., 2013), and personnel are typically shielded from these elements by using internalisation of positive experiences, which serves as a protective element in terms of psychological wellbeing. Clinicians and psycho-social teams should take cognisance of these themes. The clinical sphere is expected to have a significant influence during the post-deployment phase, where the protective hold of the 'booster' elements will start to wane.

The unity, cohesion and teamwork within the **relationship** sphere play a significant role in keeping the force together. Soldiers typically rely on their social network of family and friends to serve as a support network at home. In the absence of friends and family, the stimulation of new relationships and unit cohesion provides the social structure and support, which is a basic human need. The influence of this sphere during deployment is more apparent when the social support structure in the form of unit cohesion is absent. Furthermore, in accordance with existing literature, the influence of this sphere is likely to increase as soldiers engage in reintegration with their families after deployment (Esposito-Smythers et al., 2011). Family members should be educated and informed about the role that they can play in reducing stress during military deployments, and interventions should be tailored to fit the soldiers' context (Ferero et al., 2015).

Conclusion

This research studied the deployment experiences of SANDF personnel across two different missions. Positive and negative deployment experiences were examined, and these experiences were found to be consistent across both missions. The positive deployment experiences were found to be 'Experience related to deployment', 'Unity', 'Work experience', 'Meeting new people', 'LTU activities', 'Pride' in the mission, 'Mission success' and 'Allowances'.

The negative deployment experiences related to 'Lack of support', 'Equipment', 'Baserelated concerns', Country-related concerns', 'Lack of LTU' and 'Command and control'. The novel contribution of this research lies within the revelation that military commanders have a significant sphere of influence and control over the experiences (positive and negative) of the deployed PSO force.

This study provides military leaders with information and practical strategies to 'boost' the mental readiness of deployed members across operations and to plan for or mitigate possible negative outcomes utilising the 'stressor' matrix. The matrices should be included during the deployment planning phase to ensure that the focus is on reducing stressors during deployment as well as planning for the inclusion of 'booster' items, such as projects to help the local community and interactions with new people from other serving forces. The main spheres of influence are the organisational, clinical and relationship spheres. It is critical to focus on all three spheres during all phases of deployment to enhance and sustain the mental readiness of deployed personnel. Military leaders at all levels have a key role to play in the deployed soldier's experience within the theatre of operation.

Limitations

The study relied on a cross-sectional survey design where data were collected during a specific phase of deployment. The findings are therefore specific to the late deployment phase and should not be generalised to other phases of deployment. Future research could add to an understanding of these stressors over time, by introducing a time lag during assessment to measure the experiences of soldiers during different phases of deployment, to extend the current scope of the current research, and ultimately add more value to the wellbeing of soldiers.

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References

- Bartone, P. T., Adler, A. B., & Vaitkus, M. A. (1998). Dimensions of psychological stress in peacekeeping operations. *Military Medicine*, 163(9), 587–593.
- Bramsen, I., Dirkzwager, A. J. E., & Van der Ploeg, H. M. (2000). Predeployment personality traits and exposure to trauma as predictors of posttraumatic stress symptoms: A prospective study of former peacekeepers. *American Journal of Psychiatry*, 157, 1115–1119.
- Britt, T. W., & Adler, A. B. (Eds). (2003). The psychology of the peacekeeper: Lessons from the field. In *Psychological dimensions to war and peace*. Praeger. https://doi. org/10/1163/18754112-90000046
- Bruwer, N., & Van Dyk, G. A. J. (2005). The South African peacekeeping experience: A comparative analysis. *SA Journal of Industrial Psychology*, *31*, 30–39.
- Campbell, D. J., & Nobel, O. B. Y. (2009). Occupational stressors in military service: A review and framework. *Military Psychology*, 21(2), 47–67.
- Chambel, M. J., & Oliveira-Cruz, F. (2010). Breach of psychological contract and the development of burnout and engagement: A longitudinal study among soldiers on a peacekeeping mission. *Military Psychology*, 22, 110–127.
- Chaumba, J., & Bride, B. E. (2010). Trauma experiences and posttraumatic stress disorder among women in the United States military. *Social Work in Mental Health*, 8(3), 280–303.
- Coll, J. E., Weiss, E. L., & Yarvis, J. S. (2011). No one leaves unchanged: Insights for civilian mental health care professionals into the military experience and culture. *Social Work* in Health Care, 50(7), 487–500. https://doi.org/10.1080/00981389.2019.168480
- Collier, L. (2016). Growth after trauma: Why are some people more resilient than others and can it be taught? *American Psychological Association: Monitor on Psychology*, 47(10), 48.
- Crum-Cianflone, N. F., & Jacobson, I. (2014). Gender differences of postdeployment posttraumatic stress disorder among service members and veterans of the Iraq and Afghanistan conflicts. *Epidemiologic Reviews*, 36(1), 5–18.
- Densmore, M. C. (2004). Warfighter-peacekeeper psychological aptitude: Assessing the soldier's psychological aptitude for effective performance in combat or traditional peacekeeping operations [Unpublished master's thesis]. The College of William and Mary in Virginia.
- Esposito-Smythers, C., Wolff, J., Lemmon, K. M., Bodzy, M., Swenson, R. R., & Spirito, A. (2011). Military youth and the deployment cycle: Emotional health consequences and recommendations for intervention. *Journal of Family Psychology*, 25(4), 497–507. https://doi:10.1037/a0024534
- Ferero, A. M., Springer, P., Hollist, C., & Bischoff, R. (2015). Crisis management and conflict resolution: Using technology to support couples throughout the deployment. Contemporary Journal of Family Therapy, 37(1), 281–290. https://doi:10.1007/ s10591-015-9343-9
- Forbes, D., Pedlar, D., Adler, A. B., Bennet, C., Bryant, R., Busuttil, W., Cooper, J., Creamer, M. C., Fear, N. G., Heber, A., Hinton, M., Hopwood, M., Jetly, R., Lawrence-Wood, A., McFarlane, A., Metcalf, O., O'Donnell, M., Phelps, A., Richardson, J. D., Wessely, S. (2019). Treatment of military-related post-traumatic stress disorder: Challenges, innovations and the way forward. *International Review of Psychiatry*, 31(1), 95–110. https://doi.org/10.1080/09540261.2019.1595545
- Hoge, C. W., Clark, J. C., & Castro, C. A. (2007). Commentary: Women in combat and the risk of post-traumatic stress disorder and depression. *International Journal of Epidemiology*, 36, 327–329.

- Hollingsworth, W. G. (2011). Community family therapy with military families experiencing deployment. *Contemporary Family Therapy*, 33(3), 215–228.
- IndexMundi. (N.d.). Sudan vs. Democratic Republic of the Congo. https://www.indexmundi.com/factbook/compare/south-sudan.democratic-republic-of-the-congo
- Karney, B. R., & Crown, J. S. (2011). Does deployment keep military marriages together or break them apart? Evidence from Afghanistan and Iraq. In S. Wadsworth & D. Riggs (Eds.), Risk and resilience in U.S. military families (pp. 23–45). Springer. https://doi:10.1007/978-1-4419-7064-0 2
- Kgosana, C. M., & Van Dyk, G. (2011). Psychosocial effects of conditions of military deployment. *Journal of Psychology in Africa*, 21(2), 323–326.
- King, L. A., King, D. W., Vogt, D. S., Knight, J., & Samper, R. E. (2006). Deployment risk and resilience inventory: A collection of measures for studying deployment-related experiences of military personnel and veterans. *Military Psychology*, 18(2), 89–120.
- Knobloch, L. K., Pusateri, K. B., Ebata, A. T., & McGlaughlin, P. C. (2014). Communicative experiences of military youth during a parent's return home from deployment. *Journal* of Family Communication, 14(4), 291–309.
- Lang, J., Bliese, P. D., Adler, A., & Holzl, R. (2010). The role of effort-reward imbalance for reservists on a military deployment. *Military Psychology*, 22(4), 524–541. https://doi:10.1080/08995605.2010.521.521730
- Litz, B. T. (2004). The stressors and demands of peacekeeping in Kosovo: Predictors of mental health response. *Military Medicine*, 169, 198–206.
- Lotze, W., De Coning, C., & Neethling, T. (2015, September 9). Contributor profile: South Africa. International Peace Institute. https://www.ipinst.org/wp-content/uploads/2020/05/ipi-pub-ppp-South-Africa.pdf
- MacDonald, C., Chamberlain, K., & Long, N. (1999). Posttraumatic Stress Disorder (PTSD) and its effects in Vietnam veterans: The New Zealand experience. New Zealand Journal of Psychology, 24(2), 63–68.
- Maguen, S., Litz, B. T., Wang, J. L., & Cook, M. (2004). The stressors and demands of peacekeeping in Kosovo: Predictors of mental health response. *Military Medicine*, 169(3), 198–206.
- Maguire, K. C., Heinemann-LaFave, D., & Sahlstein, E. (2013). To be so connected, yet not at all: Relational presence, absence, and maintenance in the context of wartime deployment. Western Journal of Communication, 77(3), 249–271. https://doi:10.1080/ 10570314.2012.757797
- Martin, G. (2019, April 24). SANDF peacekeeping efforts continue in Africa. defenceWeb. https://www.defenceweb.co.za/joint/diplomacy-a-peace/sandf-peacekeeping-efforts-continue-in-africa/
- Morris-Butler, R., Jones, N., Greenberg, N., Champion, B., & Wessely, S. (2018). Experiences and career intentions of combat-deployed UK military personnel. *Occupational Medicine*, 68(1), 177–183. https://doi:10.1093/occmed/kgy024
- Newby, J. H., McCarroll, J. E., Ursano, R. J., Zizhong, F., Shigemura, M. D., & Tucker-Harris, Y. (2005). Positive and negative consequences of a military deployment. Military Medicine, 170(10), 815–819.
- Paley, B., Lester, P., & Mogil, C. (2013). Family systems and ecological perspectives on the impact of deployment on military families. *Clinical Child Family Psychology*, 16, 245–265.
- Park, J., Lee, J., Kim, D., & Kim, J. (2021). Posttraumatic growth and psychological gains from adversities of Korean special forces: Consensual qualitative research. *Current Psychology* [Advance online publication]. https://doi.org/10.1007/s12144-021-02308-z
- Raju, M. S. V. K. (2014). Psychological aspects of peacekeeping operations. *Industrial Psychiatry Journal*, 23(2), 149–156. https://doi:10.4103/0972-6748.151693

- Renard, M., & Snelgar, R. J. (2016a). How can work be designed to be intrinsically rewarding?

 Qualitative insights from South African non-profit employees. *SA Journal of Industrial Psychology*, 42(1), a1346. https://dx.doi.org/1-.4102/sajip.v42i1.1346
- Renard, M., & Snelgar, R. J. (2016b). Measuring positive, psychological rewards: The validation of the Intrinsic Work Rewards Scale. *Journal of Psychology in Africa*, 26(3), 209–215.
- Rosebush, P. A. (1998). Psychological intervention with military personnel in Rwanda. *Military Medicine*, 163(8), 559–563.
- Runge, C. E., Waller, M. J., Moss, K. M., & Dean, J. A. (2020). Military personnel ratings of a deployment and their positive and negative deployment experiences. *Military Medicine*, 185(9), 1615–1623. https://doi.org/10.1093/milmed/usaa109
- Salaun, N. (2019). The challenges faced by UN peacekeeping missions in Africa. The Strategy Bridge. https://thestrategybridge.org/the-bridge/2019/10/
- Schok, M. L., Kleber, R. J., & Boeije, H. R. (2010). Men with a mission: Veterans' meaning of peacekeeping in Cambodia. *Journal of Loss and Trauma*, 15(4), 279–303. https://doi.org/10.1080/15325020903381873
- Schok, M. L., Kleber, R. J., Elands, M., & Weerts, J. M. P. (2008). Meaning as a mission:

 A review of empirical studies on appraisals of war and peacekeeping experiences.

 Clinical Psychology Review, 28, 357–365. https://doi: 10.1016/j.cpr.2007.04.005
- Seol, J. H., Park, Y., Choi, J., & Sohn, Y. W. (2021). The mediating role of meaning in life in the effects of calling on posttraumatic stress symptoms and growth: A longitudinal study of navy soldiers deployed to the Gulf of Aden. Frontiers in Psychology, 11, 599109. https://doi:10.3389/fpsyg.2020.599109
- Shigemura, J., & Nomura, S. (2002). Mental health issues of peacekeeping workers. *Psychiatry and Clinical Neurosciences*, 56(5), 483–491.
- South African Army. (N.d.). Joint warfare publication 106 Part 2: Peace support operations. Author.
- Sun-tzu, & Griffith, S. B. (1964). The art of war. Oxford: Clarendon Press.
- Tarrasch, R., Lurie, O., Yanovich, R., & Moran, D. (2011). Psychological aspects of the integration of women into combat roles. *Personality and Individual Differences*, 50(2), 305–309. https://doi.org/10.1016/j.paid.2010.10.014
- Tucker, J. S., Sinclair, R. R., Mohr, C. D., Adler, A. B., Thomas, J. L., & Salvi. A. D. (2009). Stress and counterproductive work behavior: Multiple relationship between demands, control and soldier indiscipline over time. *Journal of Occupational Health Psychology*, 14(3), 257–271. https://doi.org/10.1037/a0014951
- Van Dyk, G. A. J. (2009). The role of military psychology in peacekeeping operations: The South African National Defence Force as an example. *Scientia Militaria*, *37*(1), 113–135. https://doi.org/10.5787/37-1-62
- Van Wijk, C. H. (2011). The Brunel Mood Scale: A South African norm study. *South African Journal of Psychiatry*, 17(2), 44–54.
- Van Wijk, C. H., & Martin, J. H. (2021). Promoting psychological adaptation among navy sailors. Scientia Militaria, 49(1), 23–34. https://doi:10.5787/49-1-1260
- Van Wijk, C. H., Martin, J. H., & Hans-Arendse, C. (2013). Clinical utility of the Brunel Mood Scale in screening for post-traumatic stress in a military population. *Military Medicine*, 178(4), 372–374. https://doi.org/10.7205/MILMED-D-12-00422
- Vasterling, J. J., Taft, C. T., Proctor, S. P., MacDonald, H. Z., Lawrence, A., Kalell, K., Kaiser, A. P., Lee, L. O., King, D. W., King, L. A., & Fairbank, J. A. (2015). Establishing a methodology to examine the effects of war-zone PTSD on the family: The Family Foundations Study. *International Journal of Methods in Psychiatric Research*, 24(2), 143–155. https://doi:10.1002/mpr.1464

- Vermetten, E., Greenberg, N., Boeschoten, M. A., Delahije, R., Jetly, R., Castro, C. A., & McFarlane, A. C. (2014). Deployment-related mental health support: Comparative analysis of NATO and allied ISAF partners. *European Journal of Psychotraumatology*, 5(1), a23732. http://doi:10.3402/ejpt.v5.23732
- Walsh, B. (2009, January 13). When Mommy comes marching home: Women in the military are developing PTSD at alarming rates. BU Today. https://www.bu.edu/2009/when-mommy-comes-marching-home
- Weisæth, L., & Sund, A. (1982). Psychiatric problems in UNIFIL and the U.N. soldier's stress syndrome. *International review of the Army, Navy and Air Force Medical Services, 55*, 109-116.
- Wilén, N., & Heinecken, L. (2017). Peacekeeping deployment abroad and the self-perceptions of the effect on career advancement, status and reintegration. *International Peacekeeping*, 24(2), 236–253. https://doi.org/10.1080/13533312.2016.1215247
- Williamson, E. (2015). *The experiences of airborne section leaders during peacekeeping operations: A South African perspective* [Unpublished master's dissertation]. University of Johannesburg.
- Zungu, D., & Visagie, N. (2020). All eyes on Sudan: The journey of female psychologists in the theatre of operation. SA Journal of Industrial Psychology, 46(1), a1739. https://doi.org/10.4102/sajip.v46i0.1739

Endnotes

- ¹⁹ Lt Col Nicolette Visagie has served in the SANDF for the past 18 years. She is a trained clinical psychologist but a soldier at heart. She was the first psychologist to volunteer to deploy for more than three months in Sudan. She deployed to the Congo and Burundi numerous times and formed part of the mission to repatriate citizens from Wuhan. She headed a small section of specialist, psychologists for 11 years. The section's work has been invaluable to the SANDF. She is now responsible for managing psychologists in theatres of operation, as well as operationalising the hostage negotiation capability.
- ²⁰ Maj RA du Toit holds a Master's degree in Research Psychology from the University of the Western Cape. Having joined the Military Psychological Institute in 2011, he has developed a passion for the operational environment and has been a member of the Human Factor Combat Readiness section. He had the privilege of deploying to the DRC in both 2013 and 2014 to conduct operational research in the field both prior to and with the deployment of the first Force Intervention Brigade. His main areas of interest include behavioural permutations and stress models during Peace Support and Peacekeeping missions, the design and implementation of selection tools for specialist selections and specialist/operational research.
- 21 Stephanie Joubert is an Industrial Psychologist working at the Human Factor Combat Readiness Section of the Military Psychological Institute. Her work focuses specifically on providing psychological interventions, services, training, and research that is necessary to contribute to the wellness of deploying soldiers. Stephanie has a passion for the military environment as well as an interest in optimising both organisational and individual functioning within this setting. She has presented and published academic research related to this field. She is currently focusing her efforts on optimising organisational functioning through strategic management and planning processes.
- ²² David Schoeman is an Industrial Psychologist at the Military Psychological Institute, where he is staffed in the Human Factor Combat Readiness department since 2012. His work is mostly focused on operational aspects that influence the functioning of internal and external deployed military personnel. Furthermore he is completing his PhD on performance psychology characteristics of SANDF military personnel. He is also a qualified paratrooper and has conducted numerous research projects within the airborne environment. His passion lies in the development of individuals in order to reach their fullest potential. He also has a passion for wildlife, and values experiences above possessions.
- ²³ Didi Zungu is an Industrial Psychologist at the Military Psychological Institute within the South African National Defence Force. This placement included an external operational deployment to Sudan (Darfur) which she completed during 2013. She received a bachelor's degree in Human Resource Management from the University of Pretoria, an honour's and master's degree in Industrial and Organisational Psychology from the University of South Africa. Her research fields of interest are within operational psychology, military deployment experiences as well as the impact of military deployments on relationships and families.



Safe and optimistic: Experiences of military members after the first repatriation of South Africans during the Covid-19 pandemic

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Abstract

The Covid-19 pandemic presented a period of unprecedented uncertainty. The repatriation of South African citizens from Wuhan was a first for the South African government. These special circumstances of risk presented a unique opportunity to explore experiences of military members who were at the frontline. The primary aim of this study was to investigate the experiences of South African National Defence Force (SANDF) members involved in the first South African repatriation of its citizens due to the Covid-19 crisis. This included aspects such as possible stigma, perceptions and emotions towards Covid-19, repatriation, and quarantine experienced by the SANDF members. A quantitative research approach was adopted for this study. The exploratory study used purposive sampling to include only military members involved in the first South African repatriation and quarantine procedure for the Covid-19 pandemic. The research sample comprised 13 SANDF regular force members of whom 85% had tertiary qualifications. These military members were asked to complete informed consent forms and a newly created questionnaire, the Stigma and Related Matters Questionnaire. A reliability, correlation and frequency analysis was performed through SPSS. Cronbach's alpha indicated high reliability and several strong relationships among the statements. The findings indicated that the military members involved in the return and quarantine of repatriated South Africans, were mostly positive and supportive of virus containment measures and lockdown practices. Military members did not report holding any stigmatising or discriminatory beliefs around Covid-19. These responses are in contrast with literature from other countries where people reported experiencing severe discrimination. The current responses however also support literature that reports positive perceptions on virus containment measures. More research is recommended as the Covid-19 pandemic persists in South Africa.

Keywords: Covid-19, South Africa, repatriation, stigma, South African National Defence Force.

Introduction

The SANDF undertook mercy missions to repatriate our citizens abroad, who were fearful and wanted to be reunited with their families ... you have

demonstrated that the SANDF can be relied on in good and bad times, in times of peace and times of war, in times of stability and prosperity, and in times of crisis (Ramaphosa, 2021, n.p.).

The Covid-19 pandemic presented a period of unprecedented uncertainty and a wave of social issues. Months after Covid-19 had first appeared in Wuhan, China (Kawuki et al., 2021); South Africa was faced with the Covid-19 pandemic within its borders. For this reason, South Africa chose to act, and decided to impose a national lockdown and to repatriate its citizens from abroad. This national lockdown was implemented to decrease the spread of infections and to prepare the health care system to accommodate advanced cases of the virus. This national lockdown took a phased approach, which comprised five levels depending on the severity of Covid-19 infections. Part of the national lockdown was the repatriation of South Africans from Wuhan (Kawuki et al., 2021).

Covid-19 placed a considerable strain on society and all facets of life (Lohiniva et al., 2021). The practices of quarantine and self-isolation and the national lockdown were all implemented in order to contain Covid-19. Such practices could however cause psychological distress because of the fear, anxiety and uncertainty they impart (Lohiniva et al., 2021). Repatriation was regarded as important because it would alleviate South Africans of the psychological effect of Covid-19 and a strict lockdown imposed by Wuhan. It was also seen as a means by which the South African government could protect its people and bring them home to safety and their loved ones. Through the repatriation, trust and belief in the South African government was sparked as similar actions were taken by other countries across the world (Kawuki et al., 2021). Although repatriated persons and health care workers. These consequences include stigma, discrimination, social exclusion, mockery and insults (Kawuki et al., 2021).

The Human Sciences Research Council (HSRC) conducted studies in 2020 at the start of the Covid-19 pandemic in South Africa. The focus of these surveys was on the knowledge and awareness South Africans had of Covid-19 as well as on assessing the effect that the national lockdown had on South Africans (Dukhi et al., 2020; HSRC, 2020; Turok & Visagie, 2020). Some of their findings indicated that the lockdown affected individuals in predominately informal settlements who suffered from hunger and a lack of income due to an increase in unemployment. Additionally the lockdown restricted informal businesses from generating an income (Dukhi et al., 2020; HSRC, 2020; Turok & Visagie, 2020). Overall, despite the problems above, the research found that most people had positive attitudes towards self-isolation, and they adhered to the national lockdown regulations (Dukhi et al., 2020; HSRC, 2020).

A different study by De Quervain et al. (2020) considered the influence of the lockdown on the mental health of Swiss people. Their findings indicated that the lockdown had created numerous burdens, such as school and work changes, problems with childcare, people living alone, thinking about the future, limited free movement, increased reliance on digital media and class teachings, and a decrease in socialising. The effect of these burdens led to an increase in stress for individuals (De Quervain et al., 2020).

The impact of Covid-19 on mental health was also investigated in China (Wang et al., 2020). It was found that a large number of people suffered from depression and anxiety, with a few individuals experiencing severe depression and anxiety due to Covid-19 (Lohiniva et al., 2021; Wang et al., 2020).

Another study found that, in extreme cases, there were a few suicide cases due to the Covid-19 pandemic (Thakur & Jain, 2020), with cases including –

- a man from India who had incorrectly diagnosed himself with Covid-19 (Goyal et al., 2020);
- a man from Bangladesh who was avoided by community members due to his confirmed Covid-19 status (Thakur & Jain, 2020); and
- a couple from Chicago, where the man killed himself and his girlfriend because he suspected that they both had Covid-19 (Griffith, 2020).

When considering this, the issue of vicarious trauma becomes particularly relevant. Vicarious trauma can be understood as the experience of trauma-like symptoms brought about by working closely and for extended periods with traumatised victims (Li et al., 2020). The role that SANDF members played during repatriation and the national lockdown might have made them susceptible to vicarious trauma. Li et al. (2020) however found that individuals who were not frontline workers and normal civilian individuals in China experienced higher levels of vicarious trauma compared to the frontline nurses. The acute vicarious trauma experienced by civilian individuals and non-frontline workers was ascribed as due to their lack of psychological preparedness for the Covid-19 pandemic, their empathy towards Covid-19 patients and their lack of knowledge regarding the Covid-19 pandemic (Li et al., 2020).

An important mental health issue related to Covid-19 is stigma. Stigma is simply understood as the discrimination against individuals based on them having undesirable characteristics (Lohiniva et al., 2021; Budhwani & Sun, 2020; World Health Organization [WHO], 2020). In a study by Hasan et al. (2020), four societal groupings were identified in both Bangladesh and India as suffering from stigma and discrimination, namely

- individuals who were Covid-19 positive and who required quarantine'
- frontline health care workers;
- · law enforcement officers; and
- workers who were generally subject to discrimination, such as domestic workers (Hasan et al., 2020).

Similar social exclusion due to Covid-19 was observed during an Iranian study (Dehkordi et al., 2020). In China, people from Wuhan, the place associated with the Covid-19 outbreak, experienced stigma and discrimination from other parts of China – a form of xenophobia – and were refused entry into hotels. Those from Wuhan were also forced to undergo a medical check before entering other parts of the country (He et al., 2020). In the digital sphere, Chinese people were also victim to stigma and discrimination.

This took the form of people tweeting that Covid-19 was a "Chinese virus" or "China virus" (Budhwani & Sun, 2020, p.1). In addition to this, the reference to "Chinese virus" (Budhwani & Sun, 2020, p.1) by the then US President Donald Trump sparked a sum of 177 327 tweets all using this reference to refer to Covid-19 (Budhwani & Sun, 2020).

In this way, stigma and discrimination are not limited to certain spaces but may escalate in both physical and digital domains due to fear, ignorance or misinformation. When considering the mental health implications associated with Covid-19, it becomes imperative to monitor and establish whether any stigma or discrimination had taken place. This will allow one to educate military members and the general public and correct stigmatising information and behaviour so that these do not hinder health care interventions in future.

Research aim and objectives

The repatriation of South African citizens from Wuhan was a first for the South African government. These special circumstances of risk presented a unique opportunity to explore experiences of military members who were at the frontline. Based on the studies discussed above, there was no research on the SANDF population in relation to Covid-19 at the time of this research. When one considers the considerable sacrifice offered by SANDF members during the Covid-19 pandemic and the national lockdown in South Africa, it becomes imperative that research be done on this population. The important information obtained at the start of the Covid-19 pandemic through the repatriation exercise could provide a baseline for further research regarding the SANDF and Covid-19. It is also worth considering the valuable and unique insights that SANDF members could provide regarding the first South African repatriation and initial emotions and perceptions of Covid-19.

The exploratory study reported on here aimed to explore the experiences of SANDF members on the first South African repatriation of its citizens due to Covid-19. This had to inform possible stigma, perceptions and emotions that might have been held at the time by SANDF members towards Covid-19, repatriation and quarantine.

This aim was achieved by exploring -

- the perceptions of individuals towards quarantine;
- perceptions towards the first South African repatriation of its citizens;
- possible emotions that individuals might have had towards Covid-19 and the national lockdown;
- any stigma regarding Covid-19; and
- the perceptions of information regarding Covid-19.

Method

This was an exploratory quantitative study, because the researcher only aimed to explore the phenomena and not to confirm any findings. As a result, no hypotheses were stated

for this study (Arendse & Maree, 2019). The overarching aim of the study was to consider the experiences of SANDF members on the first South African repatriation in terms of Covid-19. This aim was achieved through the five objectives of the study. The objectives involved descriptive statistics in order to assess the frequency of responses for particular items. Correlation and reliability analyses were conducted on one section of the questionnaire to identity significant relationships between the items. The reliability was assessed as an initial evaluation of the psychometric properties of the questionnaire. Since the sample size was relatively small due to the unique nature of the repatriation mission, the statistical analyses were interpreted with caution and will form a baseline for future psychometric evaluation of the questionnaire.

Participants

The study was aimed at including only SANDF members who had participated in the first repatriation flight to Wuhan, China, and quarantine in South Africa for Covid-19. The sampling procedure was thus purposive sampling. There were no other requirements for the SANDF members participating in the study.

Of the individuals involved in the repatriation, 13 agreed to participate in the study. Although this was a small number of participants, it should be noted that there were very few SANDF members required for the repatriation and quarantine mission. The military members were predominately males (85%). The ages of the military members ranged from 29 to 55 years with a mean age of 39 years. The indicated race groups were African (77%) and White (23%). The majority of the languages indicated were Sepedi (23%), English (15%) and Setswana (15%). Only three of the nine provinces in South Africa were represented, namely Gauteng (77%), Mpumalanga (8%) and North-West (8%). The highest education of the repatriated military members ranged from Grade 12 to a master's degree, with the majority of the military members having a bachelor's degree (31%). The occupations listed by the military members included military practitioners, nurses, a psychologist, a social worker and a few military officers. The relationship statuses of the military members are indicated in Table 1. The majority of the staff were married (46%). In terms of the number of dependants listed by the military members, this ranged from none to 7 dependants. The type of dependants was identified as both financial and emotional (31%) and only financial (39%).

Table 1: The relationship statuses of military members

Relationship status	N	%
Married	6	46%
Relationship	3	23%
Single	3	23%
Complicated	1	8%
Total	13	100%

Instrument

A self-completed questionnaire labelled Stigma and Related Matters Questionnaire was empirically created by the researcher and was informed by literature (see Brooks et al., 2020; Cheung, 2015; Person et al., 2004; Stangl et al., 2019). The questionnaire was only piloted on a few members to assess the language used and to confirm their understanding of the questions posed. No psychometric analysis of the questionnaire was conducted prior to the repatriation sample. The instructions were provided to ensure clarity and the biographical questions were added for research purposes to describe the sample participating in the study. No identifying information was required on the questionnaire and this ensured anonymity. The Stigma and Related Matters Questionnaire contains 37 questions, namely 12 word association questions and 25 Covid-19 statements. The first section, word association questions, consists of five answer options with the fifth option allowing participants to enter a more suitable answer if one is not available. The second section, Covid-19 statements, consists of 25 statements with five answer options (strongly disagree, disagree, unsure, agree, and strongly agree). As stated previously, there no psychometric properties were indicated on the questionnaire because the repatriation sample was the first to use the questionnaire. Moreover, the questionnaire was specifically developed for the Covid-19 pandemic. This article will however be reporting on the initial reliability of the questionnaire. The Stigma and Related Matters Questionnaire took a maximum of 10-15 minutes to complete. It should be noted that in this study, the term 'persons under investigation' (PUI) referred to the repatriated individuals for whom the SANDF members had to care during the repatriation and quarantine.

Data collection procedure

The following procedure was followed for this study: after getting permission from the relevant authorities within the South African Medical Health Service (SAMHS), a nodal person was identified within the repatriated group to assist with the data collection process because strict Covid-19 protocols were in place for the repatriated group at the time. The researcher provided the nodal person with the following: a step-by-step administration guideline for the questionnaire, the information sheet, consent forms, and copies of the questionnaire. When the informed consent forms were handed to the individuals, the nodal person explained the research to them. On agreement of participating in the research, the consent forms were collected and the Stigma and Related Matters Questionnaire was given to them to complete. The Stigma and Related Matters Questionnaire was then returned to the researcher by the nodal person once the repatriation process had been completed. All 13 questionnaires were completed and returned. The consent forms and questionnaires were filed in a secure facility.

Data analysis

Since the questionnaire predominately contains closed-ended answer options, the chosen method of analysis was quantitative. Descriptive statistics were run through SPSS to explore the nature of the sample that completed the questionnaire. The racial biographical information was required to explain the sample obtained. No generalisations or inferences

were made during this research study on the basis of the biographical data, and thus it only served to describe the sample. Frequencies were calculated to assess the pattern of responses for the word association questions and Covid-19 statements of the questionnaire. Since the word association questions did not have a standard answer option and allowed participants to enter their own answer, these items were excluded from a reliability and correlation analysis. As a result, the reliability and correlation analysis was only run on the Covid-19 statements to evaluate the internal consistency and relationships among these statements. The correlation strength was interpreted according to the framework drafted by the Quinnipiac University (cited in Akoglu 2018): .1 negligible, .2 weak, .3 moderate, .4–.6 strong, .7–.9 very strong and 1 perfect. It should also be noted that, when conducting the reliability analysis, the negatively phrased items (16 items) were reverse scored. The reliability coefficient, Cronbach's alpha, was interpreted in terms of the closeness of the value to 1, which would be indicative of a high internal consistency within this section of the questionnaire (Arendse, 2020; Cronbach, 1951; Nunnally & Bernstein, 1994; *Taber*, 2018).

Ethical considerations

In line with the South African Good Clinical Practise Guidelines (Department of Health, 2006), the participants in the study did not meet the requirements for a vulnerable population. Moreover, it should be noted that their participation was regarded as a "negligible risk" (Department of Health, 2006, p. 17). The risk involved with this research study was therefore very low. This low risk was informed by the minimal potential risk this study posed to participants, as there were no physical risks associated with participating in the study. Additionally, the subject matter covered in the questionnaire concerned perceptions and emotions and did not pose any psychological discomfort or stress to the participants. The following ethical principles were taken into account in terms of this study and are also informed by the South African Good Clinical Practise Guidelines (Department of Health, 2006): respect for persons, informed consent, voluntary participation, and beneficence and justice. Efforts were made to protect individual autonomy, minimise harm and maximise benefits. The steps taken to ensure that there was compliance with these ethical principles involved that military members —

- were informed of the research and that participation was voluntary;
- completed an informed consent form, and the questionnaire did not require any identifying information; and
- were informed throughout the process that, if they were uncomfortable with any questions, they could contact the researcher.

This study was ethically approved by the 1 Military Hospital Ethics Committee (ref: 1MH/302/6/01.07.2020), a registered ethics committee.

Results

The results section presents the descriptive, reliability and correlation analyses conducted in terms of the questionnaire. The results are presented according to the two sections of

the questionnaire, namely the word association (descriptive statistics) and the Covid-19 statements (reliability, descriptive and correlation analyses).

Word association responses

The word association questions had predominately two main responses. The responses to these questions were labelled as dominant feelings because the answer options indicated different emotional states.

Table 2: Word association responses

Questions	Dominant feelings
How do you think people undergoing quarantine feel?	Safe (54%) Scared (39%)
How do you think people felt that were repatriated back to South Africa?	Safe (31%) Peaceful (31%)
How do you feel about the COVID-19 outbreak?	Unhappy (46%) Positive (31%)
What do you think about COVID-19 outbreak?	Normal virus outbreak (54%)
How do you feel about being in South Africa during the Corona virus outbreak?	Positive (69%)
How do you feel about social distancing?	It is a good thing (92%)
How does the thought of being in lockdown in South Africa make you feel?	Safe (85%)
What do you think about the National lockdown in South Africa?	I feel safe (69%)
Are you worried about any of the following during the National lockdown?	My health (31%) Not worried (38%)
Are you worried about any of the following after the National lockdown is over?	Myself and family (31%) No (31%)
What do you think about the media information on the Corona virus?	They informed people about the spread of the virus (31%) They provided accurate information on the virus (31%)
How would you describe your current living conditions?	It is comfortable (62%) I feel safe and protected (31%)

In Table 2, the dominant emotional states are indicated for the different questions posed in this section of the questionnaire. When examining the responses to the different questions, it became apparent that there was a predominantly positive outlook on Covid-19, repatriation and quarantine. Although very little was known about Covid-19 at the time of the study in the year 2020, the respondents felt safe and were supportive of government measures such as social distancing and the lockdown.

Covid-19 statement responses

The results for the Covid-19 statements are presented as follows: reliability, frequency of responses, and correlation of these statements.

Table 3: Reliability statistics for the Covid-19 statement responses

Instrument	Cronbach's alpha	Total items
Covid-19 Statement Responses	.876	24

In Table 3, the reliability statistic is indicated for the Covid-19 statements. A Cronbach's alpha of .876 suggests that these 24 Covid-19 statements were sufficiently reliable (see Nunnally & Bernstein, 1994).

Table 4: Responses to Covid-19 statements

Statements	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
I feel like people will gossip about the PUI.		31%	31%		
I feel like people will judge the PUI for coming back to South Africa.	39%	23%		23%	
I feel like the PUI are happy to be back in South Africa.				33%	67%
I feel like the PUI feel good about being back in South Africa				42%	58%
I was scared to get tested for the virus (Corona).	39%		23%	23%	
I feel quarantine is good for me.				62%	31%
I feel the PUI are treated well by the health care practitioners.					75%
I think the PUI blame themselves for being in this position.	50%	31%			
I think the PUI feel ashamed about being quarantined.	50%	31%			

Statements	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
I think the PUI feel guilty about being repatriated back to South Africa.	62%	23%			
I think the PUI blame others for spreading the virus (Corona).	25%	50%			
I think the PUI feel dirty because they had to be repatriated to South Africa.	46%	39%			
I think the PUI were insulted/ teased because of the virus (Corona).	15%	69%			
I think the PUI feel discriminated against because of the virus (Corona).	39%	23%	23%		
I think the PUI feel angry about what the virus has done to the world.	15%	31%		23%	
I am scared I will be excluded from social gatherings in general.	25%	58%			
I do not feel good about things during quarantine.	33%	50%			
I think the PUI feel like they are being punished because of this situation.	50%	25%			
I feel like there is a lot of fake news about the virus (Corona).		31%		31%	31%
I feel like social media helped the PUI during this process.			23%	39%	23%
I am happy to serve my country during the repatriation operation.					92%
I feel that repatriation was important.					83%
I feel supported by other staff members.				23%	77%
This experience has scared me.	39%	39%		23%	
I would assist in repatriating people again.					85%

^{*} PUI refers to persons under investigation

In Table 4, the frequencies of responses chosen by the military members are indicated. It should be noted that only the highest percentages are shown in the table to illustrate the predominant responses. In general, the 'unsure' answer option was only used to a small extent as military members appeared to have a clear idea of whether they agreed or disagreed with the statements. There were some statements that showed a very clear pattern of agreement and disagreement by military members. These sentences were bolded

to show how clearly military members responded to these statements. When assessing the content of the statements and the responses by military members, it became very apparent that an overwhelming sense of positivity and dedication was indicated in their responses. The responses to quarantine, repatriation and the perception of PUI's feelings suggest that the military members experienced the Covid-19 repatriation and quarantine as an important task that they were confident to execute. It is however worth noting that there was a smaller percentage of military members that were not as positive and had some doubts regarding the perception of PUI's feelings and quarantine.

Table 5: Correlation of Covid-19 statements

Covid-19 response statements	Correlation value	Corresponding Covid-19 response statement
I feel like people will gossip about the PUI.	.839 , .000	I think the PUI feel discriminated against because of the virus (Corona).
I feel like people will judge the PUI for coming back to South Africa.	.758, .003	I feel like people will gossip about the PUI.
I feel like people will gossip about the PUI.	.712, .009	I think the PUI feel like they are being punished because of this situation.
I think the PUI feel discriminated against because of the virus (Corona).	.739, .004	I think the PUI feel dirty because they had to be repatriated to South Africa.
I would assist in repatriating people again.	847, .001	I am scared I will be excluded from social gatherings in general.
I think the PUI feel like they are being punished because of this situation.	.730, .011	I am scared I will be excluded from social gatherings in general.
I think the PUI feel ashamed about being quarantined.	.729, .005	I think the PUI feel discriminated against because of the virus (Corona).
I feel like people will judge the PUI for coming back to South Africa.	.919, .000	I think the PUI feel discriminated against because of the virus (Corona).
I think the PUI feel discriminated against because of the virus (Corona).	.704, 016	I am scared I will be excluded from social gatherings in general.
I think the PUI blame themselves for being in this position.	.810 , .001	I think the PUI feel dirty because they had to be repatriated to South Africa.
I think the PUI feel ashamed about being quarantined.	.788, .001	I think the PUI blame themselves for being in this position.
I am scared I will be excluded from social gatherings in general.	.782, .004	I feel like people will gossip about the PUI.

I think the PUI feel ashamed about being quarantined.	.704, 016	I am scared I will be excluded from social gatherings in general.
I think the PUI were insulted/teased because of the virus (Corona).	.744, .009	I am scared I will be excluded from social gatherings in general.
I think the PUI feel like they are being punished because of this situation.	.721, 008	I think the PUI feel angry about what the virus has done to the world.
I think the PUI feel angry about what the virus has done to the world.	.746, .003	I think the PUI feel discriminated against because of the virus (Corona).
I think the PUI feel like they are being punished because of this situation.	.719, 008	I think the PUI were insulted/teased because of the virus (Corona).
I am scared I will be excluded from social gatherings in general.	908 , .000	I am happy to serve my country during the repatriation operation.
I do not feel good about things during quarantine.	. 802 , .005	I am scared I will be excluded from social gatherings in general.
I think the PUI feel like they are being punished because of this situation.	.811 , .001	I think the PUI feel discriminated against because of the virus (Corona).
I feel like people will judge the PUI for coming back to South Africa.	.720, .005	I think the PUI were insulted/teased because of the virus (Corona).
I think the PUI feel dirty because they	.765, .002	I think the PUI feel ashamed about
had to be repatriated to South Africa. I feel that repatriation was important.	763, .006	being quarantined. I do not feel good about things
	.,,	during quarantine.
I think the PUI feel ashamed about being quarantined.	.760, .003	This experience has scared me.
I feel supported by other staff members.	740, .004	I think the PUI feel dirty because they had to be repatriated to South Africa.
I am happy to serve my country during the repatriation operation.	701, .001	I think the PUI feel like they are being punished because of this situation.
I think the PUI feel like they are being	.765, .004	I feel like people will judge the PUI
punished because of this situation.	000 001	for coming back to South Africa.
This experience has scared me.	. 809 , .001	I think the PUI feel like they are being punished because of this situation.
I think the PUI feel like they are being punished because of this situation.	.786, .002	I think the PUI feel ashamed about being quarantined.
I would assist in repatriating people again.	.887, .000	I am happy to serve my country during the repatriation operation.

^{*} Please note that particular statements were repeated because these statements have correlated with several statements.

In Table 5, the highest statistically significant correlations observed across the different Covid-19 statements are shown. There were some high correlations but these were not statically significant and were thus not included in the table above. All the correlations in the table are considered large, indicating that there are strong to very strong relationships among these statements (Akoglu, 2018). The strength of these relationships suggests that the statements indicated above are measuring similar constructs. In addition to this, some strong negative correlations indicate that these statements have an inverse relationship with one another. The correlations that have been highlighted in Table 5 show the statements with the strongest relationships. These statements are:

- I think the PUI feel discriminated against because of the virus (Corona)
- I am scared I will be excluded from social gatherings in general
- I think the PUI feel like they are being punished because of this situation
- I think the PUI feel dirty because they had to be repatriated to South Africa
- I am scared I will be excluded from social gatherings in general
- I am happy to serve my country during the repatriation operation.

Discussion

The results are discussed according to the objectives of the study as indicated previously.

Exploring perceptions towards quarantine

The military members' responses to the questions indicated that they perceived the PUI as feeling both safe and scared with regard to quarantine. Their feeling 'scared' could have been due to the uncertainty regarding Covid-19 at the time of repatriation, while those indicating 'safe' were perhaps confident in terms of the process of quarantine. Lohiniva et al. (2021) however found that participants were worried and fearful during quarantine. The military members did not feel that the PUI felt ashamed about quarantine (81%) and they strongly agreed that the PUI were treated well by health care practitioners (75%). They agreed that quarantine was necessary (93%) and they felt good about things during quarantine (83%). Likewise, Lohiniva et al. (2021) found that individuals did not experience stigma during quarantine, as their social interactions were limited. Hasan et al. (2020) however found that those individuals who were Covid-19-positive and needed to quarantine were subject to stigma and discrimination. This also led to them being socially excluded by others (Hasan et al., 2020). PUI undergoing quarantine in Bangladesh had their details disclosed to the public, and they were evicted onto the street because of their Covid-19 status and symptoms (Hasan et al., 2020).

Exploring perceptions towards South Africa's first repatriation

Since this was the first South African repatriation related to Covid-19, it presented an extraordinary experience for both the military members and PUI. According to the military members, PUI-

- felt safe and peaceful regarding their repatriation back to South Africa;
- did not feel guilty about being repatriated back to South Africa (85%);
- did not feel dirty because they had to be repatriated to South Africa (85%);
- were happy to be back in South Africa (100%);
- felt good about returning to South Africa (100%); and
- felt that people would not judge the PUI for returning to South Africa (62%).

Kawuki et al. (2021) acknowledge that repatriation was important and held many benefits for the country. However, they warn against the after-effects of being repatriated that may lead to discrimination and stigma.

The military members' own perceptions towards their experience of repatriation revealed the following:

- they were happy to serve their country (South Africa) during the repatriation operation (92%);
- they felt that repatriation was important (83%);
- they would assist in repatriating people again (85%);
- they felt supported by other staff members; (100%); and
- the repatriation experience did not scare them (78%).

The positive attitude towards repatriation and its necessity was in line with findings by Kawuki et al. (2021).

Exploring possible emotions towards Covid-19 and national lockdown

Some of the military members felt that the Covid-19 outbreak was a normal virus outbreak (54%). Farhana and Mannan (2020) similarly found that medical professionals understood Covid-19 as a result of natural causes, which correlates to how the majority of the SANDF military members viewed the Covid-19 outbreak. The positive experience of military members may be explained by timely and reliable information received about the Covid-19 outbreak. Olapegba et al. (2020) however reported that 50% of their study participants (Nigerians) viewed Covid-19 as a "biological weapon designed by the government of China" (Olapegba et al., 2020, p. 6).

The Covid-19 outbreak made some of the military members feel unhappy (46%) while others felt positive (31%). The positive outlook on lockdown was also found in the HSRC study (Dukhi et al., 2020; HSRC, 2020). The 46% unhappiness among this sample indicated above agreed with the finding by Roy et al. (2020) where people were concerned and fearful of Covid-19.

The military members predominately felt that lockdown (69%) and being in lockdown in South Africa made them feel safe (85%). This correlates with the HSRC findings that 99% of South Africans complied with the movement restrictions while 50% of them felt safe (Dukhi et al., 2020, HSRC, 2020). Abdelhafiz et al. (2020) similarly found a

positive attitude among Egyptian participants in their study. The current study and the study by Abdelhafiz et al. (2020) are however contradictory, as in India and Nepal, people expressed their restlessness and distress that a lockdown was being enforced because of Covid-19 (Koirala et al., 2020).

When asked what they were worried about during and after the national lockdown was over, the responses by the military members indicated that some were worried about their health (31%), and about themselves and their family (31%), while others were not worried (38% and 31% respectively across different questions). When asked about their perception of PUI in relation to Covid-19, military members indicated that –

- they thought that the PUI did not blame themselves for being in this position (81%);
- they thought PUI blamed others for spreading the Covid-19 virus (75%); and
- they did not think that the PUI felt angry about what the virus had done to the world (46%).

The perception that military members had regarding the emotions of PUI towards the Covid-19 pandemic could have been influenced by the PUI acquiring sufficient information on the Covid-19 outbreak and their repatriation. In contradiction to this, Lohiniva et al. (2021) found that participants felt that they were stigmatised because some blamed them for getting Covid-19 and others were angry with them for making them vulnerable to infection of Covid-19.

Exploring any stigma regarding Covid-19

The military members indicated that they felt social distancing was a good thing (92%). Furthermore, they felt positive about being in South Africa during the Corona virus outbreak (69%) and they were not scared that they would be excluded from social gatherings (83%). This was contradictory to Roy et al. (2020) who found that people were avoidant of socialising and there was fear regarding the spread of the virus. In Bangladesh, PUI, health care workers and law enforcement officers involved with Covid-19 were all subject to stigma and discrimination (Hasan et al., 2020; Lohiniva et al., 2021). This also involved social exclusion and some being asked to leave their homes (Hasan et al., 2020). In Iran, PUI reported experiencing social rejection due to their Covid-19-positive status. Some indicated that their family also limited telephonic contact as they felt they could become infected through telephonic contact, while some reported that their neighbours stopped their children from playing together after their Covid-19 status had become known (Dehkordi et al., 2020). The results obtained for the current study might differ from other studies as the study was conducted early in 2020 and emotions towards social distancing and the Covid-19 pandemic might have differed later in 2020.

The military members were unsure whether people would gossip about the PUI (31%) but did not feel that the PUI were insulted and/or teased because of the virus (84%). They did not feel that the PUI felt discriminated against (62%) or that they felt that they were being punished because of the situation (75%). In contrast, Roy et al. (2020) found that

recovered individuals from India were exposed to some stigma. Lohiniva et al. (2021) found that participants experienced others gossiping about them due to Covid-19 and as a result, they felt discriminated and stigmatised. It should however be cautioned that the Stigma and Related Matters Questionnaire was completed before reintegration into society, and thus the PUI did not have contact with people outside their quarantine. As a result, these findings might have been premature.

Exploring the perceptions of information regarding Covid-19

The military members reported that they felt the media informed people about the spread of the virus (31%) and that they provided accurate information on the virus (31%). This relates to a study by Roy et al. (2020) and another by Olapegba et al (2020) which found that people knew the basic transmission of the virus and how to prevent it, as it was very contagious. Geldsetzer (2020), Abdelhafiz et al. (2020) and Olapegba et al. (2020) similarly found that people were informed on the virus symptoms and protocols to follow when they were infected with Covid-19.

Although the military members felt that there was a lot of fake news about the virus (62%), they also felt that social media helped the PUI during the process (62%). There were also some reports of misinformation in some studies that contributed to stigma (see Abdelhafiz et al., 2020; Lohiniva et al., 2021). Lohiniva et al. (2021) and De Quervain et al. (2020) both found that individuals who kept up to date with Covid-19 news showed increased stress levels.

Overall, the perceptions of quarantine and towards being quarantined were positive. Based on the responses by military members, it was suggested that the perceptions and experiences of repatriation were strongly supported by them and by PUI. The emotions indicated by the military members were predominately optimistic and suggested that they were in agreement with the imposed lockdown as it allowed them to feel safe. Despite this feeling of safety, there were some worries that were indicated by the military members. Moreover, their perception of how PUI felt regarding Covid-19 suggested that some had accepted the virus outbreak and did not cast blame on themselves or others. The responses by military members and their perception of how the PUI felt, suggested that, for the majority of them, there appeared to be no stigma at the time. It should however be noted that this did not mean that there was no stigma present, but rather that it was only present to a small extent for this sample. In terms of how information on Covid-19 was perceived by military members, there appeared to be mixed responses regarding the accuracy of information available on social media. It should be noted that the current study was conducted at the start of the Covid-19 pandemic and the views and perceptions indicated in this article might have shifted since. In terms of the questionnaire, the Covid-19 statements showed great promise with the high reliability observed. The word association questions should however be researched further before developing them into closed-ended statements that can be validated.

Limitations and recommendations

There were a few limitations in terms of this study that should be noted. The self-administered questionnaire on stigma and related matters was not comprehensive in terms of all the emotions and perceptions experienced or present during the Covid-19 pandemic in South Africa. For this reason, this article can only reflect deductions on the responses to the questions. Since participation in this study was voluntary, the sample size or this study was very small. However, the significance of this sample (i.e. the first repatriation by South Africa), was examined for exploratory purposes. The study was conducted during the onset of Covid-19 in 2020, and thus the emotions and feelings were only relevant for that particular period and for the military members participating in the study. There was a restriction of range so it is not possible to generalise the results of this study. It is recommended that follow-up studies be conducted in terms of the questionnaire to explore both changes in attitude and the validity of the questionnaire.

Conclusion

During the initial outbreak of the Covid-19 pandemic, many nations were compelled to repatriate their citizens from across the globe, and South Africa was among these nations. This repatriation mission was a first for South Africa, and the SANDF was an essential part of this mission. The main aim of the study was to explore the experiences of SANDF members involved in both the repatriation of citizens and quarantine in terms of the Covid-19. Although a small sample was obtained, the repatriation and quarantine mission did not require many SANDF members to be involved. The Stigma and Related Matters Questionnaire provided valuable information and a baseline for other SANDF studies related to Covid-19. In addition to this, the high reliability obtained for the statements section of the questionnaire advocates the continued use of the questionnaire. The findings suggested that the military members were predominately positive and supportive of virus containment measures and lockdown practices. The majority did not report any stigmatising or discriminatory beliefs around Covid-19 nor did they believe the PUI were stigmatised. Their responses were however in contrast to literature from other countries and contexts where people reported having experienced severe discrimination and stigma. There was however literature that supported the positive perceptions on virus containment measures observed in this study. It should be noted that this study took place during the onset of Covid-19 in South Africa while the military members were not yet in contact with the outside world and this may have affected their responses at the time. This study contributes to Covid-19 research and provides a particularly unique observation with its focus on the SANDF and South Africa's first repatriation. More research is recommended on the Covid-19 pandemic in South Africa, and particularly its effects in the SANDF.

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Disclaimer

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References

- Abdelhafiz, A. S., Mohammed, Z., Ibrahim, M. E., Ziady, H. H., Alorabi, M., Ayyad, M., & Sultan, E. A. (2020). Knowledge, perceptions, and attitude of Egyptians towards the novel coronavirus disease (COVID-19). *Journal of Community Health*, 45(5), 881–890. https://doi.org/10.1007/s10900-020-00827-7
- Akoglu, H. (2018). User's guide to correlation coefficients. *Turkish Journal of Emergency Medicine*, 18, 91–93. http://doi.org/10.1016/j.tjem.2018.08.001
- Arendse, D. E. (2020). The impact of different time limits and test versions on reliability in South Africa. *African Journal of Psychological Assessment*, 2(14), 1–10. http://doi.org/10.4102/ajopa.v2i0.14
- Arendse, D. E., & Maree, D. (2019). Exploring the factor structure of the English Comprehension Test. *South African Journal of Psychology*, 49(3), 376–390.
- Brooks, S., Webster, R., Smith, L., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. (2020). The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. *The Lancet*, 395(10227), 912–920. https://doi.org/10.1016/S0140-6736(20)30460-8
- Budhwani, H., & Sun, R. (2020). Creating COVID-19 stigma by referencing the novel coronavirus as the "Chinese virus" on Twitter: Quantitative analysis of social media data. *Journal of Medical Internet Research*, 22(5), 1–7. https://doi.org/10.2196/1930
- Cheung, E. Y. L. (2015). An outbreak of fear, rumours and stigma: Psychosocial support for the Ebola virus disease outbreak in West Africa. *Intervention, Journal of Mental Health and Psychosocial Support in Conflict Affected Areas, 13*(1), 70–76. https://doi.org/10.1097/WTF.00000000000000000099
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297–334.
- Dehkordi, M. A., Eisazadeh, F., & Aghjanbaglu, S. (2020). Psychological consequences of PUI with coronavirus (COVID-19): A qualitative study. *Iranian Journal of Health Psychology*, 2(2), 9–20. https://doi.org/10.30473/IJOHP.2020.52395.1074
- Department of Health. (2006). Guidelines for good practice in the conduct of clinical trials with human participants in South Africa.
- De Quervain, D., Aerni, A., Amini, E., Bentz, D., Coynel, D., Gerhards, C., Fehlmann, B., Freytag, V., Papassotiropoulos, A., Schicktanz, N., Schlitt, T., Zimmer, A., & Zuber, P. (2020). *The Swiss Corona Stress Study*. http://doi.org/10.31219/osf.io/jqw6a
- Dukhi, N., Mokhele, T., Parker, W., Ramlagan, S., Gaida, R., Mabaso, M., Sewpaul, R., Jooste, S., Naidoo, I., Parker, S., Moshabela, M., Zuma, K., & Reddy, P. (2021). Compliance with lockdown regulations during the COVID-19 pandemic in South Africa: Findings from an online survey. *The Open Public Health Journal*, 14, 45–55.
- Farhana, K. M., & Mannan, K. A. (2020). Knowledge and perception towards novel coronavirus (COVID-19) in Bangladesh. *International Research Journal of Business and Social Sciences*, 6(2), 75–79. http://doi.org/10.2139/ssrn.3576523
- Geldsetzer, P. (2020). Knowledge and perceptions of COVID-19 among the general public in the United States and the United Kingdom: A cross-sectional online survey. *Annals of Internal Medicine*, 173(2), 157–160. https://doi.org/10.7326/M20-0912
- Goyal, K., Chauhan, P., Chhikara, K., Gupta, P., & Singh, M. P. (2020). Fear of COVID 2019: First suicidal case in India! Asian Journal of Psychiatry, 49, Art. 101989. https://doi.org/10.1016./j.ajp.2020.101989
- Griffith, J. (2020, April 6). Illinois man who suspected girlfriend had COVID-19 fatally shoots her and himself. NBC News. https://www.nbcnews.com/news/us-news/illinois-man-whosuspected-girlfriend-had-covid-19-fatally-shoots-n1177571

- Hasan, M., Hossain, S., Saran, T. R., & Ahmed, H. U. (2020). Addressing the COVID-19 related stigma and discrimination: A fight against "infodemic" in Bangladesh. *Minerva Psichiatrica*, 61(4), 184–191. https://doi.org/10.31234/osf.io/gpbj7
- He, J., He, L., Zhou, W., Nie, X., & He, M. (2020). Discrimination and social exclusion in the outbreak of COVID-19. *International Journal of Environmental Research and Public Health*, 17(8), 17–20. https://doi.org/10.3390/ijerph17082933
- Human Sciences Research Council. (2020). HSRC study on COVID-19 indicates overwhelming compliance with the lockdown. http://www.hsrc.ac.za/en/media-briefs/general/lockdown-survey-results
- Kawuki, J., Papabathini, S. S., Obore, N., & Ghimire, U. (2021). Evacuation and repatriation amidst COVID-19 pandemic. *SciMedicine Journal*, 3, 50–54. http://doi.org/10.28991/SciMedJ-2021-03-SI-7
- Koirala, J., Acharya, S., & Neupane, M. (2020, April 4). Perceived stress in pandemic disaster: A case study from India and Nepal. SSRN. https://doi.org/10.2139/ssrn.3568388
- Li, Z., Ge, J., Yang, M., Feng, J., Qiao, M., Jiang, R., Bi, J., Zhan, G., Xu, X., Wang, L., Zhou, Q., Zhou, C., Pan, Y., Liu, S., Zhang, H., Yang, J., Zhu, B., Hu, Y., Hashimoto, K., ... Yang, C. (2020). Vicarious traumatization in the general public, members, and non-members of medical teams aiding in COVID-19 control. *Brain, Behavior, and Immunity*, 88, 916–919. https://doi.org/10.1016/j.bbi.2020.03.007
- Lohiniva, A.-L., Dub, T., Hagberg, L., & Nohynek, H. (2021). Learning about COVID-19-related stigma, quarantine and isolation experiences in Finland. *PLOS ONE*, *16*(4), e0247962. https://doi.org/10.1371/journal.pone.0247962
- Nunnally, J. C., & Bernstein, I. H. (1994). Psychometric theory (3rd ed.). McGraw-Hill. Olapegba, P. O., Ayandele, O., Kolawole, S. O., Orguntayo, R., Gandi, J. C., Dangiwa, A. L., Ottu, I. F., & Iorfa, S. K. (2020). A preliminary assessment of novel coronavirus (COVID-19) knowledge and perceptions in Nigeria. https://doi. org/10.1101/2020.04.11.20061408
- Perappadan, B. S. (2020, March 31). Preventing stigma related to COVID-19 requires full-throated campaign, says expert Gita Sen. *The Hindu*. https://www.thehindu.com/news/national/preventing-stigma-related-to-covid-19-requires-full-throated-campaign-says-expert-gita-sen/article31215075.ece
- Person, B., Sy, F., Holton, K., Govert, B., Liang, A., & NCID/SARS Community Outreach Team. (2004). Fear and stigma: The epidemic within the SARS outbreak. *Emerging Infectious Diseases*, 10(2), 358–363. https://doi.org/10.3201/eid1002.030750
- Ramaphosa, C. (2021, February 22). President commends SANDF role in COVID-19 fight. South Africa Government News Agency. https://www.sanews.gov.za/south-africa/president-commends-sandf-role-covid-19-fight
- Roy, D., Tripathy, S., Kar, S. K., Sharma, N., Verma, S. K., & Kaushal, V. (2020). Study of knowledge, attitude, anxiety and perceived mental healthcare need in Indian population during COVID-19 pandemic. *Asian Journal of Psychiatry*, 51, 1–7. https://doi.org/10.1016/j.ajp.2020.102083
- Stangl, A. L., Earnshaw, V. A., Logie, C. H., Van Brakel, W., Simbayi, L. C., Barre, I., & Dovidio, J. F. (2019). The Health Stigma and Discrimination Framework: A global, crosscutting framework to inform research, intervention development, and policy on health-related stigmas. *BMC Medicine*, 17(31), 1–13. https://doi.org/10.1186/s12916-019-1271-3
- Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research Science Education*, (48), 1273–1296. https://doi.org/10.1007/s11165-016-9602-2
- Thakur, V., & Jain, A. (2020). COVID 2019-suicides: A global psychological pandemic. *Brain, Behavior, and Immunity*, 88, 952–953. https://doi.org/10.1016/j.bbi.2020.04.062

- Turok, I., & Visagie, J. (2020). COVID-19 hits poor urban communities hardest: Density matters. *HSRC Review*, 18(4), 26–28.
- Wang, C., Pan, R., Wan, X., Tan, Y., Xu, L., Ho, C. S., & Ho, R. C. (2020). Immediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease (COVID-19) epidemic among the general population in China. *International Journal of Environmental Research and Public Health*, 17(5), Art. 1729. https://doi.org/10.3390/ijerph17051729
- World Health Organization. (2020). Social stigma associated with COVID-19: A guide to preventing and addressing social stigma. https://www.who.int/docs/default-source/covid19-stigma-guide.pdf
- World Medical Association. (2013). Declaration of Helsinki Ethical Principles for Medical Research Involving Human Subjects. World Medical Association General Assembly.

Endnotes

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Book Review

The Routledge international handbook of military psychology and mental health

Updesh Kumar (ed.)

London and New York: Routledge Taylor & Francis Group 2020, 557 pages ISBN 9780367237066 (Hardcover)

The discipline of Military Psychology is multifaceted, as it takes into account multidisciplinary, multicultural, unpredictable, agile and vigorous environments. The intense nature of the military and its operational theatre require an understanding of the psychological factors confronting soldiers, their behaviour and their performance in the workplace. This Routledge publication covers the complexities of the military as a profession with an additional focus on aspects of mental health. The book is written in a scholarly yet practical manner making it relatable to practitioners in the field, military leaders, students and lay readers alike. This makes the concept of being a handbook applicable and relevant, as it provides the audience with a comprehensive approach to military psychology.

This handbook comprises a compilation of thirty-five chapters divided into three parts, each dedicated to a specific theme. Part one focuses on "Military psychology: The roots and the journey". Part two is dedicated to "Soldiering: Deployments and beyond", while Part three focuses on "Making a choice: mental health issues and prospects in the military". These themes are carefully formulated to unravel contemporary issues with military psychology and interventions comprehensively. The first theme creates a solid foundation and overview for Military Psychology, as it revisits the origins of military psychology and ways in which the profession has evolved over the years. This theme stretches over eight chapters, focusing on the principles of Psychology and its application in the military organisation during both peace and war times; the evolution of assessments for military recruitment; culture and cognition in the military, implications of the fourth industrial revolution. This part is concluded with two chapters that are very critical to the field of Military Psychology, namely the prospective of military psychology as well ethical issues within the discipline. As a discipline and profession, military psychology has and continues to evolve based on a range of factors affecting the military and its personnel. Scientifically forecasting the trajectory and prospects of military operations becomes an imperative preparation and readiness tool for practitioners and military leaders to enhance the successful development of the organisation. The chapter highlights trends, possible directions and determinants of military psychology developments. The authors posit that the military is likely to be confronted with ten theatres of war: ground space, underground space, above water space, underwater space, airspace, outer space, psychological space, social space, information space and cyber space. Future wars in these theatre spaces present the military with major "novelty, uncertainty, unpredictability and variability" (Karayani, 2020, p. 100). In return, military psychology will be required to develop the calibre of soldier (resolute, positive, resourceful, patriotic, collaborative, etc.) that will best fit the environment through training and development.

The last chapter of Part one focuses on the ethics of the discipline, which tends to be blurred in the military. Professionals in uniform often encounter a wide range of ethical issues in the line of executing their roles and engaging in various activities. This results from the organisational expectation that one is a soldier first and then a professional. Given the prevalence of ethical challenges experienced by most practitioners, the chapter proposes a structured ethical decision-making process to assist practitioners to reach ethical solutions.

The second part of the book deals with the key role player and contributor in the achievement of military success, namely the soldier. Over eleven chapters, there are deliberations on mental-related problems and factors that are affecting soldiers on deployment and beyond. This section of the book provides mostly insight for practitioners and leaders on the dormant and active issues experienced and reported by soldiers during and after deployments. The section further suggests effective psychological interventions to enhance mental health, resilience and hardiness, to mention a few. The two-pronged approach further looks at aspects after deployment, which military psychologists should consider to ensure the wellbeing of personnel. The section further extends into aspects relating to family reintegration, turnover, post-traumatic growth, transitioning from military to civilian life. As a pivotal point of influence, a framework of an ideal military leader in these highly unpredictable and highly demanding operational scenes is proposed to assist organisations in shaping the leadership climate for effective leadership. Military operations require leaders who have skills and abilities to face adversities; thus, they necessitate the development of a strong character of a leader. Turnover in the military is a topic of interest, and in this chapter, the authors enlighten readers on the unique dynamics of turnover and its implications in the military context. They further propose and develop a militarily relevant model to analyse and understand turnover in the military and the reasons why people leave the organisation. A comprehensive framework is introduced as a mechanism to manage turnover proactively. The chapters in this section seem interrelated, and they collectively contribute to the development of psychologically fit soldiers equipped to address operational requirements and its challenges effectively.

The final and most important part that accounts for the uniqueness of this publication, Part three, focuses on mental health: "Making a choice: mental health issues and prospects in the military". The concept of mental health has received widespread attention in recent years globally and across various industries (Adler et al., 2011; Greene-Shortridge et al., 2007). The military, being one of the most physically and psychologically demanding working environments, has historically researched the concept of mental health of personnel in particular after wars, missions, operations and deployments. Due to the prevalence of soldiers showing signs of deteriorating mental health and military leaders

being ill equipped to address these challenges effectively and adequately, "[p]sychology is more relevant and viable today for the military, than at any point in history" (Matthews, 2014, p. 215). Owing to the prevalence and rise of mental health-related issues recorded and reported, psychosocial issues spilling over into the workplace, the effects of social media, as well as economic and political factors, there is a dire need for the field to conduct research, analyse and understand developments in the field. There is therefore a need to develop scientific evidence-based interventions to address contemporary problems using modern solutions.

This section provides a clinical approach to mental health in the military, zooming in on antecedents and aspects that contribute to mental health. This section has sixteen chapters addressing numerous mental health issues, such as burnout, work engagement, stress and coping in the military, traumas, moral injuries, suicide prevention strategies in the military and sexual trauma in and among the military, amongst others. It further explores effective psychological interventions that are scientific, multifaceted, specific and relevant to the military organisation. Overall, the nature of militaries comes with extreme exposure to stress and challenges that could lead to chronic mental health issues. One of the fundamental objectives of the military is to ensure a holistically healthy force. Military Psychology as a discipline serves to ensure psychological wellbeing of military personnel. Psychological aspects presented in this handbook on military psychology and mental health are critical and essential tools for military leaders, practitioners and students in the field with contributors from various streams within the field of psychology, from multiple continents, militaries and cultures all rich with knowledge and expertise within the field. The diversity and varying perspectives strengthen the content of the broad field of military psychology.

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References

- Adler, A. B., Bliese, P. D., & Castro, C. A. (2011). Deployment psychology: Evidence-based strategies to promote mental health in the military. American Psychological Association.
- Greene-Shortridge, T. M., Britt, T. W., & Castro, C. A. (2007). The stigma of mental health problems in the military. *Military Medicine*, 172(2), 157–161.
- Karayani, A. G. (2020). War of the future and perspective directions of military psychology. In U.
- Kumar (Ed.), The Routledge international handbook of military psychology and mental health (pp.89-102. Routledge.
- Kumar, U. (Ed.). (2021). The Routledge international handbook of military psychology and mental health. Routledge.
- Matthews, M. D. (2014). *Head strong: How psychology is revolutionizing war.* Oxford University Press.

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Book review

Dangerous charisma: The political psychology of Donald Trump and his followers

Jerrold M Post with Stephanie R Doucette

London: Pegasus Books

2019, 352 pages

ISBN13: 9781643132877 (eBook)

Within the context of the ongoing January 6 Committee hearings in the United States, which is the congressional inquiry into the Capitol riot that occurred on 6 January 2021 (Zurcher, 2022), a review of the book, *Dangerous charisma: The political psychology of Donald Trump and his followers*, could not be better timed. The lead author of the book, the late Jerrold M Post, is viewed as the pioneer (or, as he himself phrased it, the "founding father" in the field of political personality profiling (Post & Doucette, 2019). He furnished many helpful profiles, inter alia those of Menachem Begin, Anwar Sadat, Osama bin Laden, Saddam Hussein and Ayatollah Khomeini. Post's co-author is Stephanie Doucette, a scholar in political psychology.

At first glance, the book appears to be a case study on narcissism, but there is more to it. This analysis of Donald J Trump, the 45th president of the United States of America, is written in a language understandable for the academic and the layman alike. There are some 'juicy' bits for the Trump haters, and detailed analyses for scholars who want an indepth understanding of Trump and his followers. The well-structured text consists of five sections. The first section is an introductory part comprising the Preface and Introduction, followed by Part 1, covering Chapters 1 to 6. The third section is Part 2, "The political psychology of Trump's followers". Section four refers to Part 3, "Trump's impact", and lastly, section five, is the Epilogue to the book.

The Preface, written by Post, gives background on how he became involved in political personality profiling in the Central Intelligence Agency after completing his studies to become a psychiatrist. He offers knowledge to how he and an interdisciplinary team from cultural anthropology, political, organisational and social psychology, and political scientists interested in leadership developed a method for creating political personality profiles. He emphasises that a political personality profile aims to provide policymakers with an understanding of psychological issues that affect the political leadership, decision-making and negotiations of and by a head of state. This includes, among other things,

leadership considerations, such as strategic decision style, crisis decision style, negotiation style, management style and core attitudes. Academics and scholars interested in political personality profiling will find this chapter helpful because Post opens the door to the methodology and themes used slightly. He highlights the ethical challenges he faced when he was accused of violating the Canons of Ethics of the American Psychiatric Association and the vital role health care professionals, such as psychiatrists, play in society. According to Post, they have a moral responsibility to inform and warn political decision-makers when concerns are raised about the psychology and mental stability of a person in an important role, such as the president of a country.

In the introduction, the authors provide a theoretical background on the powerful tie between leaders and their followers, explicitly referring to charismatic leader–follower relationships, charismatic cults and the two forms of charismatic leaders: the destructive and the reparative. They use the metaphor of some crucial aspects of the leader's psychology acting as a key that fits and unlock vital elements of the psychology of the followers. In the case of Trump, they specifically addressed this lock-and-key relationship by drawing upon the emerging understandings of the psychology of narcissism. They describe two broad types of narcissists that are interacting here. The first (Trump) is a "mirror-hungry personality", who focuses on the glorious self and is hungry for confirming and admiring responses to counteract their inner sense of worthlessness and lack of self-esteem. The second (the follower) is the "ideal hungry personality" who also has an inner sense of worthlessness and lacks self-esteem but counters it by latching onto individuals they admire for prestige, power, beauty, intelligence or moral stature, manifesting as a narcissistic symbiosis of shared psychosis.

In the third section, Part 1, Post and Doucette (2019) discuss the charismatic leader with a chapter focusing on describing the narcissist in his or her purest form as described by the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2013). They link the diagnostic criteria for narcissism and Trump's conduct. Various examples illustrate where he demonstrated "no capacity to empathize [sic] with others", from his own family to the crowds of Texas after Hurricane Harvey, where he was more interested in the size of the crowd than the suffering of the people. In Chapter 2, the authors identify a pathway through Trump's past that might have influenced him. They explain the role of his paternal grandfather, his entrepreneurial father, and how the apparent lack of a solid paternal relationship with his mother laid the foundations for problems with trust, underlying insecurity, difficulties with appraising reality, and issues with empathy. Chapter 3 highlights how Trump, in line with the characteristics of a narcissist seeking the spotlight, depicts himself as successful despite failures portraying delusions of grandeur. His obsession with his 'brand' of Donald Trump is highlighted, and it is described how he continuously desired recognition and the importance of keeping his name in the newspapers. The role of relationships in the life of a narcissist is portrayed in Chapter 4, referring to Trump's relationship with his former and current spouse and children. Chapter 5, aptly titled King Donald, illustrates how dreams of glory preoccupy the narcissist and when these dreams are achieved, it consumes the narcissist, such as Donald Trump, who actually did not believe he would win the election. When he did, he tried to rule America like a kingdom. Referring to Trump's political personality, the authors discuss in Chapter 6 his intellect, the lack of books in his office, and his lack of intellectual curiosity other than expected from a president. They mention incidents in the media where he proved his lack of knowledge and inability to retain information. They view Trump's grammar and vocabulary lower than that of any other recent president. All these links well with how the characteristics of narcissists can limit their information processing abilities as they focus on how a situation affects them rather than how it affects the country. As with the lock-and-key analogy, some interesting metaphors are used. Trump's "Swiss Cheese Conscience" (Post & Doucette, 2019) implies he has strong moral prohibitions, but he cannot satisfy his own needs without prohibition, pouring through the holes of the cheese, justifying his actions while condemning those of others.

Part 2 (section four) deals with the political psychology of Trump's followership, while Chapter 7 lays the theoretical foundation for understanding the charismatic leader follower relationship. The discussion on the "Trump phenomenon", its stability and the psychological power of Trump's followership is worth reading. It specifies how the hypnotic pull of a charismatic leader is compelling for the ideal-hungry followers seeking a hero to rescue them while the leader draws energy from their response. In turn, followers will uncritically follow their leader's call for violence, which seems to have happened on 6 January 2021. Trump's charismatic relationship with his followers is described as "destructive reparative" as he, like Adolf Hitler, "pulls his followers together as he extorts hatred to an external enemy" (Post & Doucette, 2019). Trump's relationship with his followers differs, for example, from that of Mahatmas Gandhi and Martin Luther King and their followers described as a "reparative" relationship. Chapter 8 discusses Trump's relationship with the public group The Tea Party, whose members are mainly white, elderly, white, angry and small business owners who care more about economic problems than about social issues. Trump's chant of making America great again and portraying him as the "voice of the outsider" resonated well with this group. In Chapters 9 and 10, references are made to how Trump divided the Republican Party and investigated why people in the party followed him. Rhetorical appeals of "make America great again", "build the wall", "drain the swamp" and that Trump is a businessman and "not a politician" resonated well with his supporters in the Republican Party, comprising mostly the white working class with low-paying jobs, gun ownership advocates, and those in the rural areas who have been overlooked in United States politics. Chapter 11 discusses how Trump's rhetoric contributed to an increase in hate crimes and how rightwing extremists believed that Trump was one of them. In line with being a destructive reparative leader, Trump and his followers' use of "splitting" between good and evil and "with us" or "against us" is discussed. This polarisation is used in his speeches, and Trump draws his energy from the crowd. Both leaders and followers tend to hide their insecurities and lack of self-esteem by pointing out the weaknesses and moral flaws of others and setting the leader as the saviour and the one that must be respected. Post and Doucette (2019) describe this dynamic interaction as follows, "[t]here is a quality of mutual intoxication in the leader's reassuring his followers which in turn reassure him." Following this, is an interesting discussion on The Unexpected Followers in Chapter 12 speculating why women and some minorities supports Trump.

The fourth section, Part 3, consists of Chapters 13 to 16, which discusses the outcome of

Trump's presidential election on the mental health of the American nation, the reaction from the political left, and the effect of Trump's "America First" foreign policy on foreign relations. This section ends with Chapter 16, which asks some questions about the future. It is especially Chapter 16 that illustrates the value of a well-researched political personality profile, and the authors speculate (predict in scientific terms) in 2019 how Trump would react should he lose the election in 2020 (which he did). They expected that would he lose: he would not accept defeat, he would overstep presidential political authority, he would not honour the results of the election, blame the results on voter fraud through the defence mechanism of projection, and that the interregnum between the election and the inauguration of the new president will be a time of particular vulnerability where his supporters might react with violence. All predicted here was cause for the January 6 Committee hearings.

In the fifth and final part, the Epilogue, Post and Doucette (2019) state that the book was not meant to capture every moment of Trump's life or his presidency but that they wanted to give readers a clear understanding of the political personality of both Trump and his followers. They also highlight a few incidents after completion of the book, such as gun rights, environmentalism, hunting, immigration, "draining the swamp", his lack of empathy, his paranoia and his continuous use of rhetoric.

It would be safe to say that putting Donald J Trump accurately in his historical, political and cultural context and indicating how these factors shaped and constrained him illustrates the utility of the political personality profile for politicians and decision-makers. Despite the complex and demanding subject of political personality profiling, Post and Doucette (2020) managed to integrate several elements to build and unravel the puzzle of who Donald J Trump is. Firstly, they emphasise the uniqueness of each individual in that people are a product of the complex interaction of various facets in life. Secondly, each individual should be analysed in his or her unique context to understand him or her.

Lastly, in the current international arena, rogue leaders related to superpowers influence the balance of the global system with widely differing individual agendas and psychologies. Therefore, this book is a must-read for intelligence officers and diplomats dealing with political leaders who often draw support through their charisma. With the unfortunate loss of Post due to Covid-19, one hopes that Stephanie Doucette will continue to produce similar products as Post did.

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References

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Author.
- Post, J. M., & Doucette, S. R. (2019). *Dangerous charisma: The political psychology of Donald Trump and his followers*. London: Pegasus Books.
- Zurcher, A. (2022, June 9). January 6 Committee: Former President Trump actions to be focus of hearings. *BBC News*. https://www.bbc.com/news/world-us-canada-61735605

Endnotes

²⁶ No page numbers are given for direct quotes as the electronic version of the book was reviewed. Page numbers might change based on the reader's selection of font size.
²⁷ Piet Bester grew up on a farm in the Orange Free State. After matriculation, he did national service (conscription). Piet joined the South African Defence Force, attended the South African Military Academy, obtained various degrees, and completed the University of Johannesburg's Doctoral Programme: Leadership in Performance and Change. He is also a registered Industrial Psychologist and completed various military courses, including the Joint Senior Command and Staff Programme and Security and Defence Studies Programme, including a Post Graduate Diploma in the Management of Security at the University of the Witwatersrand. Piet is currently a senior lecturer at the University of Stellenbosch's Faculty of Military Science. His research interests include leadership, integrity, performance enhancement, test construction, and national security.

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Book Review

Contemporary issues in South African Military Psychology

Nicole M Dodd, Petrus C Bester, and Justin van der Merwe (eds.)

Stellenbosch, South Africa: African Sun Media

2020, 238 pages

ISBN: 9781928480624 (Paperback)

At the time of publication, all three editors (i.e. Nicole Dodd, Petrus Bester and Justin van der Merwe) were associated with the South African Military Academy (SAMA), which is the Faculty of Military Science, Stellenbosch University. Right from the outset (Chapter 1), the editors briefly analyse the term 'military psychology' and provide a broad overview of what is known (i.e. previous research conducted on various psychological concepts) and how aspects of military psychology are contextualised within the broader South African National Defence Force (SANDF). In the remaining chapters, various scholars contribute, using military psychology as a 'lens' to give insight into contemporary issues experienced in the SANDF (p. 9).

Chapters 2 to 7 of the book focus on the student population of the SAMA. As pointed out by the editors (p. 8), the SAMA is the flagship of higher education in the SANDF and represents both residential students, who are officers on campus in Saldanha, and non-residential students (i.e. known as 'interactive telematic education students' who comprise officers and non-commissioned officers, but who are not physically on campus). SAMA students represent all four arms of service: the South African Army (SAA), the South African Military Health Service (SAMHS), the South African Air Force (SAAF), and the South African Navy (SAN). It might therefore be argued that the SAMA student sample is representative of the broader SANDF.

Chapter 2 presents research results, showing that demographic variables, such as gender, marital status, parental status and mode of study (i.e. being a non-residential or residential student) may influence the work–study–family interface of being a 'first-generation student' (see Heymann & Carolissen, 2011). The results can be applied to assist first-generation military students to understand issues associated with time-, strain-, and behavioural-based conflict, and to find a healthy balance in their work–study–family roles.

Chapter 3 presents the findings of both quantitative and qualitative results, in identifying salient factors, which contribute to students' success (i.e. pass rate). Apart from cognitive abilities (e.g. memory and understanding), personality traits (specifically conscientiousness

and extraversion), commitment and resilience all show to be significant indicators of whether students will graduate. Additionally, the authors found that students who are older are more likely to seek academic assistance (as compared to younger students, who perform better on cognitive tasks). The findings can be used to refine the selection process of SAMA students and can also be incorporated in academic assistance programmes.

In Chapter 4, the author uses the Biographical Questionnaire for the Military Academy (BQMA) with both open-ended and fixed-response items to gather information (over the period 2011 to 2016) to identify factors that affect the psychosocial wellbeing of SAMA students. Broad themes that emerge as factors affecting psychosocial wellbeing are *motive* to study at SAMA, productivity and confidence, which directly emanate from *reading habits*; and intermittent social *stressors* (e.g. having family responsibilities, financial pressure, feeling lonely). Once again, the findings of this study can be used to assist academic support programmes.

In Chapter 5, the authors consider three prominent predictors of employees' turnover intentions, namely the violation or breach of the psychological contract between the employee and the organisation, affective organisational commitment, and job satisfaction. By conducting multiple regression analyses, results show that that it is unlikely that soldiers with high levels of affective commitment and job satisfaction will consider resigning. Additionally, individuals who perceive a breach and/or violation of the psychological contract between themselves and the organisation are likely to leave the SANDF.

To add to this notion of understanding an employee's psychological bond with the SANDF, Chapter 6 considers whether there is a relationship between a positive psychological contract and the perceptions of organisational support and commitment. The authors conclude that adhering to the psychological contract does indeed relate to soldiers' affective commitment. Military career managers might find Chapters 5 and 6 useful to consider when having career discussions with unit members, because positive psychological contracts may "reduce uncertainty, shape behaviour, and give people a feeling of control over what happens to them in the organisation" (p. 84).

Chapter 7 presents the results of psychometric properties of one of the personality traits, as measured by the revised NEO Personality Inventory (see Costa & McCrae, 2008). More specifically, the research presented in this article focuses on the personality trait, conscientiousness, and the author finds the internal reliability of the six sub-facets (i.e. competence, order, dutifulness, achievement-striving, self-discipline and deliberation) to be acceptable. Further, the results show that each sub-facet is indeed a separate component, which all load on conscientiousness (as a single factor). These results, together with those presented in Chapter 3, show that the personality trait, conscientiousness, might be a reliable and valid predictor of academic success (i.e. pass rate). These findings are relevant in selecting future military students to study at the SAMA.

In the remaining three chapters of the book (Chapters 8, 9 and 10), it is reported how empirical data were collected from the broader SANDF. More specifically, Chapter 8 looks at the resilience and mental toughness within the South African Navy. In this

chapter, the psychometric properties of two different resilience scales are reported: the Dispositional Resilience Scale (DRS-15), which is often used in military contexts to assess hardiness; and the Mental Toughness Questionnaire (MTQ-18), which is applied in the sporting domain to assess performance under pressure. Results show that the SAN sample scored higher on both these measures, as compared to other military and civilian samples. Preliminary results on the psychometric properties of the MTQ-18 indicate that the MTQ-18 might be a better measure of resilience than the DRS-15, specifically in South African samples. These results are noteworthy, because additional work needs to be done on validating psychometric measures in the South African context. The authors encourage future researchers to investigate the validity of these two tests further, using larger, more diverse samples.

In Chapter 9, the authors investigate whether emotional intelligence and job satisfaction predict work engagement amongst individuals working at the Joint Operations Headquarters. Results revealed that job satisfaction is a better predictor of work engagement than emotional intelligence. As part of practical implications, the authors suggest that job rotation, and job enrichment could be introduced in the workspace to enhance work engagement.

Adding to the understanding of what leads to increased work engagement, Chapter 10 presents data from a cross-sectional study amongst infantry soldiers, investigating whether low levels of work engagement might lead towards the termination of work contracts. The results show that soldiers who consider resigning are low on two sub-scales of engagement (Schreuder & Coetzee, 2021) namely *dedication* (an emotional component of being connected to the job and employees whilst working) and *absorption* (a cognitive component, which relates to being alert and being involved at work). Interestingly, the physical component of engagement (i.e. *vigour*, which is about being physically involved in work tasks) was not a significant predictor of the intention to resign. By getting infantry soldiers to connect emotionally to their daily tasks (e.g. by giving them meaning and purpose) and by stimulating them cognitively, turnover in the SANDF could be reduced.

Finally, Chapter 11 makes a refreshing, theoretical contribution. The authors propose a trauma–survivor-oriented framework, which focuses on positive psychological constructs and psychological growth. The model is specifically formulated for combat-active military personnel, where risk factors can be identified before employment by screening for risk factors prior to joining the SANDF, and by facilitating psychological growth for pre-, during and post-deployment phases. The proposed model shows to have practical value, in that those soldiers who have experienced adversity and trauma, can overcome the negative effect thereof by focusing on various elements of psychological wellbeing. In doing so, combat-readiness in the SANDF can be sustained.

This book, together with the book previously published by Van Dyk (2016), provides a broad picture of theory and practice of Military Psychology as a science in Africa. One would like to see future researchers focusing on the mental health of military personnel during operations, deployments and working in their daily capacity, especially after the Covid-19 global pandemic.

As a final thought, this book may show to have practical value for those working in higher education who develop academic support programmes, for military career managers who make important decisions about soldiers' careers, and for those leaders who may influence decisions on policy and planning. One can draw on the content of this book to gain a thorough understanding of how the future leaders in the SANDF can best be groomed and developed to enhance their full potential and strengthen our armed forces.

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References

Costa, P. T. Jr, & McCrae, R. R. (2008). The Revised Neo Personality Inventory (NEO-PI-R). Sage.

Heymann, L., & Carolissen, R. (2011). The concept of 'first-generation student' in the literature: Implications for South African higher education. South African Journal of Higher Education, 25(7), 1378–1396. https://hdl.handle.net/10520/EJC121400

Schreuder, A. M. G., & Coetzee, M. (2021). Careers: An organisational perspective (6th ed.). Juta. Van Dyk, G. A. J. (2016). Military psychology for Africa. Sun Media.

Endnotes

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Book Review

The Great War and the birth of modern medicine

Thomas Helling

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Historians, journalists and writers often contrast the First World War with conflicts of previous centuries based on its highly industrialised nature and scale. They write how horse-drawn wagons and mounted infantry made way for highly mobile machines. They also note how industry, alongside government and society, co-operated more closely than before to build a growing number of new technologies. Such developments saw aircraft, tanks, submarines and chemical weapons make their military debut in this global conflict. Armies also carried out logistics and supply operations on a greater scale and over wider distances than before. In addition, belligerent nations mobilised more manpower and over greater geographical distances than ever before. The number of mutilated men and war dead due to the destructive power of weapons and munitions was also greater than ever experienced. Apart from the physically maimed, the psychological impact of the horrors of the war gained new proportions and intensity. For these reasons, it is hardly surprising that the conflict between 1914 and 1918 became known as the Great War since every aspect of the war occurred on a 'greater' scale. At the same time, the war can be described as 'great' due to its beneficial contribution to humankind – as unlikely as that might seem. Due to the war, a greater number of lives could be saved by medical personnel than claimed by hostilities if weighed on a balance sheet over the long term. The most recent experience of the viral pandemic was evidence of this when governments, physicians and scientists dusted off the lessons learned from a century past. But, unlike them, their predecessors often did not have such advantages at the turn of the twentieth century. The contributions of these men, and occasionally women, gave birth to modern medicine, as Thomas Helling's latest publication suggests. The outcome of the war was therefore not only destructive but also constructive since new knowledge, technology and incentives ushered in a new age of medicine from which future generations benefited and are still benefiting.

In *The Great War and the birth of modern medicine*, Helling describes how governments, private enterprises, wealthy benefactors, civil organisations and societies, military authorities, doctors, scientists, and a host of other individuals from different backgrounds and disciplines, offered time, finance and other forms of support. Their main aim was to restore soldiers' health to such an extent that men could return either to the battlefield or to civilian employment. Such collaboration occurred globally across universities,

hospitals and other institutions near the front lines and far from it. For instance, pioneers such as the French surgeons Maurice Marcille and Antonin Gossett mobilised surgical teams on the Western Front close to the trenches to stabilise soldier-patients, who were then moved along the chain of evacuation behind the front lines for further treatment (Helling, 2022, p. 4). At the same time, far from the European battlefields, surgeons used scalpels and knives for the first time to restore men's cosmetic appearance and essential functions, such as chewing and talking. The New Zealand-born surgeon Harold Gillies - often referred to as the "Father of Plastic Surgery" - was largely responsible for these advancements in reconstructing devastating and disfiguring facial injuries (Helling, 2022, p. 8). However, not all developments had their origins in the war itself. Many medical improvements were based on past knowledge as well. For instance, Hugh Owen Thomas developed the Thomas splint to immobilise compound fractures and other injuries based on his experience of treating dockworkers in Liverpool (Helling, 2022, pp. 219–220). He died of pneumonia in 1891, long before the war erupted. However, his nephew, the gifted surgeon Robert Jones, continued using the splint even while serving in the British Territorial Force during the war. By 1917, most aid posts on the Western Front carried these splints. In contrast, as Helling shows, not all contributions to modern medicine were as definite or concrete (p. 260). In other cases, the war offered only an opportunity to begin understanding the impact of warfare on soldiers' health.

One such area was some of the earliest studies conducted on post-traumatic stress disorder (PTSD). Some cases resembling PTSD were already reported in previous conflicts but on a much smaller scale. Arguably, the highly industrialised nature of warfare at the turn of the century had a markedly new and different effect on the minds of men. Already in late 1914, the first cases of unexplained paraplegia were reported (p. 232). Examinations showed that those all had the trappings of traumatic spinal cord contusion but without any signs of external injuries. Similar reports followed, accompanied by more unexplained symptoms. These included but were not limited to mutism, shivering, insomnia, emotional instability, blindness, amnesia, hallucinations and a host of others without any visible physical wounds. Some physicians classed these men as suffering from 'shell shock' and others as 'war neurosis', 'neurasthenia', 'hysteria', 'mental anaphylaxis', or 'emotional shock', to name but a few. Regardless of the diagnosis, men who suffered from the psychological scars of war were often ostracised as unmanly, shirkers, malingerers or cowards. In 1920, two years after the conclusion of the war, the British Parliament appointed a committee of inquiry into these cases. Another two years followed before the committee concluded in its report that they disparaged the term 'shell shock' and other variants, and that there was no link with cowardice. Unfortunately, the findings of the committee were slow in penetrating public perceptions and the stigma surrounding those who had PTSD – some of which remain to this day. However, the war did offer an opportunity for early research on trauma, which has since grown into an important research field.

Throughout the book, Helling not only discusses advancements in modern medicine but also considers the individuals who made these contributions. He highlights that many medical specialists, such as physiologists, found ways to travel to or serve on the Western Front – not so much out of duty, patriotism or a sense of adventure, but rather because the war front offered them a human laboratory of sorts. However, despite the training these

professionals received, many were plagued by the bodily mutilations caused by war. Like the soldiers, they were not immune to the horrors of the war. Even surgeons noted in their reminiscences the sights and sounds, which at times influenced their clinical observations and measurements. For some, it was too much to bear in conjunction with the long hours and limited resources. They sometimes opted to return home. For others, decisions between who should be treated and who should be left to die also haunted them. "These were the ones at whom surgeons smiled and simply walked past" (Helling, 2022, p. 65).

Fortunately, not all of Helling's narrative is doom and gloom. He often includes quirky and colourful anecdotal descriptions of individuals, which humanise them and makes each page a riveting read. One such character is the very wealthy Anne de Rochechouart de Mortemart, the Duchesse d'Uzès, heiress to the Veuve Clicquot Champagne house. She advocated for women's rights and was one of the founding contributors to The French Union for the Suffrage of Women (p. 18). Apart from these interests, one of the newest inventions, the automobile, bewitched her. This fascination could explain why she received one of the first speeding tickets in the Bois de Boulogne west of Paris in 1898. When war erupted, she not only qualified as a nurse and opened her home to war wounded but also made a social and economic capital contribution to one of the first mobile surgical ambulances to the front (Helling, 2022, pp. 18–19). She is but one of the many animated characters who grace the pages of Helling's book.

Despite such praise, some aspects of the *Birth of modern medicine* leave the reader wanting. Notwithstanding the vivid descriptions, the book is devoid of any diagrams, sketches or photos, which would have made for a welcome addition. Furthermore, there is no glossary or even an appendix with some definitions at the end. This is sorely missed. Novice readers, in particular, might become confused or lost in the narrative at times. At the same time, besides the extensive bibliography of sources consulted, Helling simplifies medical complexities and jargon for the average reader. Such an accomplishment is no small feat considering that Helling is a professor of surgery and the head of General Surgery at the University of Mississippi and not a journalist, historian or non-fiction writer. His crisp and rich writing style is all the more impressive, considering his background.

However, this accomplishment in one area does not entirely make up for the limitations in another. Like most contemporary literature on the First World War, the book tends to focus on the Western Front and the contributions made by the British, French and Americans. Some mention is made of advancements in other areas of Europe, such as Germany and Italy, but little if any on the further corners of the world. Discussions on treatment and experiences of medical personnel in other war theatres are also largely absent. As a result, most readers interested in the topic will not be surprised by the themes covered. These include but are not limited to medical innovations in blood transfusions, antiseptics, anaesthesia, the treatment of shock, gas gangrene, the use of mobile X-ray units, developments in the chain of evacuation and triage and others. Many might have gleaned some top ten or twenty list of medical innovations on the war scrawled on some internet website. However, the finer details and how these developments unfolded would not be described as deftly as in Helling's book. For these reasons, some local readers might wonder whether this pricey work is worth a plastic swipe when converted to the South African rand. And yes, it is.

For several reasons, the book is relevant to the more advanced but also novice readers on topics related to the history of war and medicine. For one, South African soldiers benefited from these medical advancements. Private D Beattie, who served in the 2nd South African Infantry Brigade in East Africa during the First World War, is one such individual (RCS Archives, Beattie). A gunshot wound caused some loss of bone in his chin and jaw, which not only affected basic functioning but also caused some disfigurement. He was transferred to England in 1919 for medical treatment. Initially, he suffered from depression and refused treatment. However, his mental state improved significantly after surgeons at Queen Mary's Hospital repaired most of the damage through several reconstructive surgeries. Beattie was repatriated the following year (RCS Archives, Beattie). Beattie was merely one of many who benefited from developments in reconstructive surgery, which arguably influenced to what extent he reintegrated into civilian life. Without the reconstruction, he might have become a social recluse who would have had to survive on a state pension or worse. Readers and researchers will surely make similar connections between the treatment of other South African soldier-patients and advancements during the First World War as in Beattie's case.

Another reason the book may be relevant to local readers is that of the South African contributions to modern medicine. As Helling himself highlights (p. 285), none of the medical developments can be credited to only one individual, as the work is the product of a larger collaborative project. Similarly, as a Johannesburg physician, GT du Toit, wrote some decades after the war, "[t]he team-work of plastic surgeon, orthopaedic surgeon, radiologist, specialist in physical medicine and the various therapists have developed a machine capable of far greater achievement than any isolated man" (Du Toit, 1954, p. 730). One member of this global team was Maj Maurice G Pearson. He immigrated to South Africa in 1901 after completing his studies. During his first year in South Africa, he acted as district surgeon at Alicedale in the former Cape Province. After a year in this position, he moved to Durban, where he worked as a surgeon and ophthalmologist in general practice. When war erupted, he enlisted in the South African Medical Corps. During his time on active service in France, he contributed significantly in terms of treating thick thighbone or femur fractures. The results achieved by him and his team led to the War Office placing him in charge of a 'femur hospital', the Edmonton Special Military Surgical Hospital in England (Metcalfe, 1919, pp. 72–73; RCS Archives, Pearson). He was but one of several such individuals.

If none of these reasons seems convincing, potential readers could consider the following. Many medical advancements and technologies, such as the Thomas splint, are still used today. Even perhaps more interesting is that, despite its use for over a hundred years, academics are still researching the application of this splint, showcasing its relevance in modern medicine in our contemporary world (see Hoppe et al., 2015). The same applies to the prevention and treatment of PTSD. These and other areas explored by Helling make his book particularly relevant to current researchers and practitioners, since it could aid their understanding and provide context for their own field of interest.



References

Du Toit, G. T. (1954). The orthopaedic aspects of rehabilitation: Rehabilitation as a national problem. South African Medical Journal, 28(34), 730–733.

Helling, T. (2022). The Great War and the birth of modern medicine. Pegasus Books.

Hoppe, S., Keel, M. J., Rueff, N., Rhoma, I., Roche, S., & Maqungo, S. (2015). Early versus delayed application of Thomas Splints in patients with isolated femur shaft fractures: The benefits quantified. Injury, 46(12), 2410–2412.

Metcalfe, J. (1919). Stereoscopic radiography in the treatment of fractures of the femur. Proceedings of the Royal Society of Medicine, 12(Electro Ther Sect), 72–73.

Royal College of Surgeons Archives (RCS Archives). Gillies Collection, 124, Beattie D (1920). Royal College of Surgeons. (RCS Archives). Plarr's lives of the fellows, E005247, Pearson, Maurice Grey (1872 - 1952).

Endnotes

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