

## Foreword

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*“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)*

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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 Bangu, 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 I. 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 sequelae 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",<sup>1</sup> "[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 inexperienced 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)<sup>2</sup>. 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).<sup>3</sup>

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 accidentally 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 Renovatio 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

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- <sup>1</sup> Louw, J. (1987). World War II, industry, and the professionalization of South African psychology. *South African Journal of Psychology*, 17(2), 33–39.
- <sup>2</sup> 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.
- <sup>3</sup> 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>

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