Military Leadership and Resilience

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Abstract

Military service exposes personnel to a variety of stressors and potentially traumatic events, ranging from combat through to common occupational demands found in any job. Military personnel frequently face demands such as extended time away from family and friends, exposure to ambiguous and potentially lethal situations, restrictions on personal freedoms, increased legal powers from supervisors, and the constant need to maintain "operational readiness." The stressors faced during military service can have significant repercussions on operational effectiveness and force sustainment. How personnel respond to these demands while maintaining effective performance over time is often considered to be a matter of resilience. Resilience involves the ability to bounce back with minimal impact from adversity. Military leaders at all levels have become increasingly concerned about how the resilience of their personnel might impact or enhance operational capability. Commanders are increasingly recognizing the

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important roles leadership and organizational support play in the development of resilience.

This chapter aims to provide a broad overview of some of the research, concepts, and practices being employed by modern militaries to foster resilience. It examines what is meant by resilience, then looks at how different concepts have been used at both individual and organizational levels to encourage greater resilience among military personnel. Overall, the development of resilience is a multifaceted process which leaders need to be aware of if they are to get the best out of their personnel. The promotion of adaptive "resilient" behaviors is particularly important in high-performance/high-stress organizations such as the military.

Keywords

Resilience · Stress · Personality · Selection · Leadership · Job characteristics · Mental health · Training

Introduction

Mental ill-health and the burden of mental disorders are increasing worldwide, disrupting lives and bringing an estimated cost to the global economy of US$16 trillion between 2010 and 2030 (Patel et al. 2018). The economic costs of mental health problems are now estimated to be greater than those associated with chronic somatic diseases such as cancer and diabetes, and these coasts are exponentially increasing (Trautmann et al. 2016). For example, the economic impact of mental health problems across the European Union in 2018 has been estimated at more than €600 billion, largely attributed to lost productivity and the cost of medical support (OECD/European Union 2018). Even when mental health issues are not severe enough to be labeled a "disorder," the impacts on quality of life, productivity, motivation, and wellbeing can have serious repercussions on individuals and organizations (WHO 2007). Sustaining good mental health and reducing the impacts of workplace stress have become a growing concern for leaders, managers, and employees at all levels. Particularly in organizations such as the military where high-stress situations are common and the costs of mistakes can cause significant physical injury and political damage.

Unfortunately, stressors are practically unavoidable in our daily lives with the causes of stress inherent in just about every activity in which humans engage. It may be no surprise to learn that military personnel are more likely to be exposed to traumatic and stressful life events compared to civilians (Van Hooff et al. 2012), or that cumulative exposure to stressors and trauma promotes greater risk of mental disorders (Del Gaizo et al. 2011).

While there is a well-established link between exposure to combat and adverse outcomes such as post-traumatic stress disorder (PTSD) (e.g., Eekhout et al. 2015; Fear et al. 2010; Iversen et al. 2008), operational service is not the only source of

significant stress for members of the military. Military personnel are also exposed to the same life stressors found in civilian work settings (e.g., interpersonal conflict, family demands, daily commuting between work and home, etc.; Almeida 2005). "Routine" or non-warlike military service often exasperates these stressors beyond the levels commonly experienced in typical civilian settings. For example, military personnel frequently face demands such as extended time away from family and friends, unpredictable work hours (military culture traditionally holds that being a soldier is a 24 h a day, 7 days a week role), situationally ambiguous stressors (e.g., reactive/high urgency tasks), restrictions on personal freedoms, increased legal powers from supervisors, and the constant need to maintain "operational readiness" (Adler et al. 2004; Campbell and Nobel 2009). The impact of stressors on military effectiveness should not be understated, with diagnoses for mental health disorders being identified as the leading cause for hospitalization in the US Armed Forces (Armed Forces Health Surveillance Center 2012).

For these reasons, military commanders have become increasingly concerned with the development and maintenance of resilience within their forces. While it is natural to think of resilience as largely depended on the personal qualities of an individual, commanders are now recognizing that leadership and organizational support are also important to promoting resilience – not only at the individual level, but also at the team and organizational levels. (e.g., ADF COMD FORCOMD Directive 2015).

This chapter aims to provide a broad overview of some of the research, concepts, and practices being employed by modern militaries to foster resilience. It will start by examining what is meant by resilience, and then look at how different concepts have been used at both individual and organizational levels to encourage greater resilience among military personnel.

Understanding Stress

While stress is generally seen as something to manage through minimization or avoidance, this approach is not practical in high-performance or inherently contested environments such as the military. Furthermore, a certain amount of stress is required for competent performance to be achieved. Labeled the *Yerkes-Dodson principle,* performance can be demonstrated as following an inverted U shape, where performance will suffer if stress or arousal is either too high or too low (Yerkes and Dodson 1908). Both high and low stress can adversely impact mental health. When stress is deemed too high, physical complaints (e.g., headaches and illness, etc.) and mental health problems increase (commonly called "burnout"). Inversely, when stress is deemed too low, people experience reduced motivation and can often suffer increased anxiety or depression (Hesketh et al. 2019).

Modern warfare has been described by soldiers and commanders alike as "months of boredom punctuated by moments of extreme terror." Thus, military personnel are often exposed to the extreme ends of both high and low stress. The capacity for military personnel to tolerate these shifts between boredom, sustained readiness, and

"terror" has often been attributed to personal resilience (Maddi 2007). But if resilience is important for military personnel, the next question is "what is resilience and can it be trained?"

What Is Resilience?

While the term "resilience" is used often in modern workplaces, many military commanders are still uncertain what resilience actually "is" (despite knowing that they want their personnel to have more of it). This uncertainty is understandable as there is no universal definition of resilience within the public vernacular or in the empirical literature of the last century (Aburn et al. 2015). To many, resilience is considered to be a static trait within an individual; however, this is a misconception. It is more accurate to think of resilience as a dynamic process, which changes over time and with context (Gartland et al. 2011). For example, a soldier might display sound resilience under the stress of operations, but cope poorly when dealing with romantic or interpersonal relationships. A person's ability to cope with the same stressors can also change over time; that is, a person might manage a particular stressor adaptively one day, but poorly the next. There are many possible reasons for this variability. For example, prolonged stress may have a cumulative impact, or previously utilized support might become unavailable (e.g., increased time pressures, absent friends/family, and fatigue/illness).

So, what is resilience? Is it a personality trait, a trained ability, or a resource that needs to be managed? The simplest, yet unsatisfying, answer is that resilience is a product of all these things.

A review of the empirical literature on resilience conducted by Aburn et al. (2015), concluded that resilience relates to *adaption to adversity*, resulting in good mental health and ability to recover or bounce back. Furthermore, resilience was found to be a common attribute inherent in all people, rather than some unique or unusual characteristic held by a special few. Summarizing the plethora of literature on the subject, a generally accepted definition of resilience is *the capacity for an individual to adapt effectively to adversity and trauma with a short-term downturn in functioning and mental health* (Crane 2017; see also, Southwick et al. 2014). Therefore, resilience is less of a static individual characteristic, but rather an outcome predicted by the dynamic interplay between characteristics unique to each individual within a given situation. However, there are some characteristics which seem to promote more resilient outcomes across situations.

Personality and Resilience

How does personality contribute to resilient outcomes? One of the most well-known frameworks for conceptualizing personality is the five-factor model, which categorizes personality into five broad categories: openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism (Costa and McRae 1992).

Authors Sinclair, Waitsman, Oliver, and Deese (2013) offer a comprehensive review of how different personality traits relate to resilience. To briefly summarize their work, evidence shows that people high in neuroticism (i.e., low emotional stability, moody, and emotionally sensitive to stimuli) are more likely to experience reduced mental health and stress-related disorders (Sinclair et al.). Whereas, higher trait levels of conscientiousness and extraversion have been linked to more positive emotions and favorable mental health outcomes.

Extending our knowledge on how personality links to resilience, Sinclair and Cheung (2017) reviewed several models of personality and identified five core themes commonly linked to resilience: *purpose* (the ability to find meaning in life events), *optimism* (the tendency to see negative events as situational rather than enduring), *willpower* (self-discipline and drive to succeed), *emotional stability* (poised under pressure), and *resourcefulness* (self-efficacy and intrinsic locus of control). Understanding how personality characteristics predict resilience is fundamental in selecting the right people for organizations like the military.

A leading researcher in the field of resilience in the military context, Bartone (1999) proposed that individuals high in a personality construct labeled "hardiness" experience fewer mental health problems under stress. Bartone identified three key characteristics displayed by highly hardy people: commitment, challenge, and control. *Commitment* involves looking at difficult experiences as interesting and useful; *challenge* relates to enjoying variety and seeing change/disruptions as interesting opportunities for personal growth; and *control* is a belief that one's actions make a real difference in the results that follow. When working together these facets of hardiness create a mindset predictive of better health and higher performance across the lifespan, despite exposure to stressors (Stein and Bartone 2020). There have been several studies which have supported the idea that those high in hardiness are more likely to have better levels of mental and physical health (e.g., Bartone 1999; Britt et al. 2001; Dolan and Adler 2006). Hardiness has also been found to be a unique predictor of positive health outcomes distinct from those associated with the more common personality constructs such as the five-factor model (Eschleman et al. 2010; Skomorovsky and Sudom 2011).

While there is sound evidence to support the linking of personality factors to stress tolerance and subsequent resilience, this approach is not without contention. The central source of debate is that resilience has not been found to be a fixed or stable trait resulting in resilience across time and situations (unlike personality, which is a highly stable construct; Windle 2011). Furthermore, researchers caution that representing resilience as a product of personality implies that a person lacking these essential characteristics is condemned to failure (Windle). The personality-based focus on resilience has scientific merit, but imposes substantial barriers when viewed from a training perspective; for example, military members commonly self-identify as being resilient. As such, it can be hard to motivate personnel to invest in training that aims to develop something which they believe they already possess and is intangible except when facing significant adversity. From a clinical perspective, the idea of personality-based resilience has great relevance to therapy, but is often viewed as too individualistic for effective use in guiding group-based interventions

as individuals can have very different reasons for seeking to engage in or avoid different (potentially stressful) activities (Holtforth 2008).

Finally, although there is an extensive body of research demonstrating that aspects of personality offer a protective moderating effect against the detrimental effects of stress, the role personality plays in buffering stress is not completely clear. For example, it has been argued that hardiness may actually represent more of a motivational attitude toward how an individual engages with stressors rather than represent a true personality characteristic (Bartone 2012; Maddi 2007). Supporting this perspective, there is evidence that hardiness is itself mediated by motivation, with approach and avoidance motivation explaining much of the beneficial outcomes of hardiness onto mental health (Wang et al. 2019). From this perspective, many of the resilience-based effects of hardiness can be considered from a motivational perspective rather than a true personality construct. This highlights that motivation for service is an important personal quality when looking to establish a resilient organization, an important consideration for leaders and recruiters alike.

Resilience Through Selection

Understanding the personality and motivational underpinnings of resilience is an important consideration when assessing candidates for potential service in high-stress environments. For this reason, the first step for maintaining good mental health and developing resilience in the military comes from establishing good selection practices.

How well a person can perform their job plays an important role in predicting how effectively they will respond to the demands of military service. Accordingly, a common practice in military selection processes is to apply a person-job fit criterion. Job fit criteria is usually established based upon analysis of the demands and requirements of the job for which the candidate is being assessed, and commonly assessed in terms of facets such as intellectual ability, education, and job knowledge (Edwards 1991). This approach has been used in Western militaries for over a century, with militaries such as the UK, USA, and Australia initiating the use of cognitive ability testing for selection during World War I (e.g., Snow and Snell 1993). The aim of selection is to find people with the right combinations of abilities to meet the demands of training and then apply those skills under challenging and changing conditions.

While job competence contributes to reducing workplace stress, task-specific demands are not the sole source of stress within the military. Research has shown that performance over time, motivation, and wellbeing are more likely to be influenced by a person's organizational fit rather than just job skill (Kristof-Brown et al. 2005). Organisational fit relates to the alignment of personal/professional values, beliefs, and team orientation between an individual and the organization they work for. It has been found that a poor alignment between the person and their organization's values predicts reduced job satisfaction as well as declines in mental health (Roczniewska 2014).

In selection, militaries often focus on how well a potential recruit will "fit" within the military environment as opposed to their level of preexisting job knowledge or qualifications (Sørlie et al. 2020; Johnston and Farley 2013). This is because the nature of military service is such that finding ab initio "job ready" recruits is all but impossible. As such, upon entry into the military, all new personnel can expect to undertake a range of intensive training programs to teach them the job knowledge and skills required to fulfill their specific roles. In this way, military selection can be considered as an assessment of "potential" rather than the more typical job fit assessments conducted by civilian employers. On the other hand, aspects relating to person-organizational fit, motivation, and "character" are far harder to train and therefore generally considered more important in potential military recruits than "job skills." Good military candidates ideally possess the required cognitive ability, motivation, and personal characteristics predictive of meeting the demands of military service (e.g., low neuroticism, high hardiness, realistic expectations, mastery motivations, organizational fit, etc.). These attributes are important not only for building job competence, but provide the bases for resilience.

While understanding intrapersonal differences provides a sound place to start when seeking to establish an individual's potential for resilience, more is required to turn good "potential" into highly resilient behaviors. The next step is to identify what resources are required to develop and maintain individual and organizational resilience. This becomes the domain of good leadership and organizational support.

Resilience as a Product of Leadership

Leaders are not only responsible for the planning and execution of missions. They also have direct responsibility for the wellbeing, morale, and motivation of their teams. No one likes working for a poor quality leader, but in the context of resilience, good leadership has tangible effects. For example, perceptions of good leadership, team cohesion, and high morale have been found to predict lower levels of self-reported PTSD symptoms from UK personnel returning from deployment in Afghanistan (Jones et al. 2012).

Militaries typically favor a "warrior" culture, which values ideals of physical and mental strength, stoicism under pressure, and an ability persist in the face of adversity. So, concerns among military personnel about being seen as "weak" or lacking the "mental fortitude" often result in hesitation or avoidance of proactive help-seeking behaviors (Hoge et al. 2004).

Leaders play a critical role in establishing a climate that supports military personnel to seek support in response to mental health problems. For example, Zinzow et al. (2013) conducted qualitative research with operationally deployed military personnel and found problems with leadership were frequently cited by soldiers as a concern that inhibited them from seeking support. Key issues identified included concerns that leaders were too busy with operational matters to recognize or support soldiers with their problems, concerns over a lack of confidentiality in how their personal issues would be handled, and uncertainty regarding how treatment

would impact their performance and ability to contribute to mission objectives. By contrast, Britt, Wright, and Moore (2012) found that when military leaders, where perceived to be fair, displayed an interest in their members' wellbeing, or an interest in seeing their subordinates getting mental health support, then soldiers reported fewer concerns regarding mental health stigma or ability to access support. These authors also found that the immediate supervisor (e.g., often non-commissioned officers) had a stronger effect on stigma and support-seeking behaviors than those higher up the chain of command (e.g., commanding officers).

Training to improve leaders' understanding of mental health and educating them in the promotion of mental health support has been found to be an effective means for promoting resilience; for example, a Canadian program, called the Mental Health Awareness Training (MHAT), was found to improve both leaders and staffs knowledge and attitudes toward supporting mental health, as well as demonstrated a reduction in the average duration of mental health claims by 27% in the nine-month period following the implementation of the program (Dimoff et al. 2016). The MHAT program itself represents a fairly brief intervention, consisting of a single 3-hour session focusing on educating leaders in the early identification, engagement, support, and monitoring of mental health and wellbeing in their staff. This demonstrates how much of an effect the attitudes of leaders can have on how personnel respond to mental health problems, and subsequently promoting improved resilience within their teams.

Further highlighting the importance of leadership buy-in for the effective application of military resilience training, is the "Special Operations Mental Agility Program" sponsored and run by Canadian Special Operations Command (CSOC). While quantifiable outcomes of this program have not been published, CSOC reports that the program has been well received by personnel across the command. Critically, CSOC and the program developers emphasize that the success of the program is based largely upon the co-facilitated delivery model involving a technical expert (i.e., sports psychologist/mental health specialist) and a respected member of the unit who brings relevant operational experience to the training (Mattie et al. 2017). The positive reputation and endorsement of the co-facilitating unit member has been identified as pivotal in creating buy-in to the program.

Leaders also play a key role in shaping how personnel respond directly to stressful situations. Research has found that the mindset (i.e., motivation, attitude, and beliefs) people hold toward stress is an important predictor of resilience. Specifically, when stressful situations are appraised as a threat, then negative effects such as avoidance and reduced mental health are more likely to occur. By contrast, if a situation is appraised as a challenge (i.e., opportunity for meaningful personal growth), then outcomes such as increased performance, persistence, and wellbeing are likely to occur in the face of adversity (Jamieson et al. 2018). Furthermore, the "stress as benefit" mindset appears to be open to external influence, with leaders and role models having an important role to play in encouraging "cognitive reappraisals" of stressors as nonthreatening and beneficial (Crane and Boga 2017; Jamieson et al.). Put simply, leaders who are adapt at finding meaning in stressful situations, and are

effective in facilitating this mindset within their teams, are more likely to foster an adaptive mindset toward stress and thus encourage resilient outcomes.

In this context, it is a key leadership challenge to strike an appropriate balance between the values of perseverance and "grit" in the face of adversity (in which militaries pride themselves) and promoting a culture that encourages proactive mental health support to sustain good self-care and long-term operational effectiveness.

In summary, the attitude of the leader toward stress and mental health is a critical organizational element to fostering resilience. However, there is still more involved in providing the foundations of resilience. Leaders also need to understand how job demands create strain and what resources their personnel require in order to thrive.

Job Characteristics and Resilience

Every occupation has its own unique demands and stressors. The job demands-resource (JD-R) model offers a flexible approach to conceptualizing the workplace characteristics associated with job stress and allows for predictions to be made regarding staff burnout, commitment, and performance (Bakker and Demerouti 2007). The JD-R model proposes that factors associated with job stress can be classified into two general domains: *job demands* and *job resources*.

- *Job demands* refer to the physical, psychological, social, or organizational aspects of the job that require sustained physical, psychological, cognitive, and emotional effort. This effort is associated with certain physiological and/or psychological costs (e.g., adverse physical environment, performance demands, interpersonal conflict, etc.). While job demands are not by default a negative experience, they do represent a stressor, which needs to be met with the expenditure of energy and effort. If insufficient recovery time is available, previously manageable demands can become significant sources of stress.
- *Job resources* refer to those aspects of a job that directly contribute to the achievement of work goals and stimulate personal growth, learning, and development (e.g., quality leadership, autonomy, feedback, support, relevant equipment, etc.).

Fundamentally, job demands put an individual under pressure and job resources buffer the impact and help individuals in effectively responding to those pressures. If the job demands outweigh the job resources, then burnout and reduced commitment/performance is likely to be the result. Alternatively, if job resources exceed the demands, personnel are likely to become more engaged, happier, healthier, and more committed to their work. While it would be an oversimplification to simply tally up all the job demands and job resources in order to see which one outweighs the other (there are too many unique combinations of demands and resources for simple

comparisons to work), the JD-R model is a useful tool for identifying key demands and resources which in turn assists efforts to predict burnout, impaired morale, and performance issues within workplaces.

The JD-R model has been used within militaries as a framework to assist commanders in identifying potential issues within their command. For example, the "Profile of Unit Leadership Satisfaction and Effectiveness" (PULSE) survey is a unit-level climate survey which was developed collaboratively between the Australian and Canadian Forces in the mid-1990s and has since been refined into a standardized tool. The PULSE is a four-page questionnaire, which measures a range of human factors within a unit that can impact performance and has relevance to resilience. Key areas measured include: job stressors, perceived organizational support, leadership effectiveness, job satisfaction, work motivation, and communication.

The PULSE assists military psychologists to work with unit commanders in order to better understand the "perceived reality" of unit members and help identify and manage areas contributing to burnout or reduced motivation/morale. Understanding the climate and perceptions of "healthy" or "struggling" units allow commanders to take proactive steps to reinforce or enhance resilience at an organizational level. For example, many leaders feel the need to monitor their personnel closely to meet the expected performance demands, or engage in "micromanagement" under the mistaken belief that they are providing valued "mentoring"; however, outcomes from successive PULSE surveys underscore the perception that micromanagement is a significant job demand which directly undermines feelings of competency and autonomy (both important resources and motivational antecedents; Deci and Ryan 2000). Micromanagement and double standards represent some of the biggest criticisms leveled against leaders and can have significant negative impacts on the morale, motivation, and wellbeing. The JD-R model and unit climate surveys allow for issues like these to be identified and addressed.

In terms of job resources, the perceived cohesion, purpose, and morale within a unit can have significant effects on how closely an individual identifies with the group or unit they are working in. There is strong evidence that perceived job value and shared respect is just as important for individuals' health and wellbeing as it is for productivity and performance (Steffens et al. 2017). Stated simply, when individuals feel valued and supported by their organization, they are more likely to respond better to organizational stressors and display long-term resilience. The JD-R model offers insights into how well units and subunits within the organization are meeting individuals' needs in terms of job resources and alignment of values.

It almost goes without saying that it is important for commanders to be alert to the work demands within their units. However, work demands such as the impact of micromanagement are often harder to detect than more tangible demands such as workload and productivity requirements. The use of organizational climate surveys such as the PULSE represent a useful tool in a commander's repertoire when aiming to identify and balance job demands and resources in order to achieve outcomes in long-term organizational resilience.

Mental Health Support

Early intervention is critical for good mental health recovery, but many military members delay seeking support due to career concerns. It is not uncommon for personnel to adopt the idea that mental health issues can be hidden to avoid potential career ramifications or embarrassment. It follows then, that for effective mental health support and resilience to flourish within the military, there needs to be a strong trust developed between individual members, commanders, and mental health support services.

Some militaries employ commissioned psychology officers, who not only provide mental health services relating to counseling and critical incident mental health support, but also provide organization-level support in the form of direct advice to commanders on issues such as motivation, performance, human factors, fatigue/shift management, unit cohesion, and job suitability (Staal and Stephenson 2006). Military psychologists are also commonly engaged in research, psychoeducation, and support on topics ranging from pre/post-operational adjustments and stress management, through to specific tasks such as working with human remains or hostage recovery. In this way, military psychologists attempt to engage with commanders and service members at all levels with a view to proactively improving performance and resilience, rather than being seen solely as medical practitioners who only get involved once a member becomes a "patient." This helps promote the mindset that positive mental health and psychology are proactive performance enhancers rather than reinforcing negative mental health stigmas where seeking psychological support is akin to injury or weakness (e.g., Crane and Boga 2017; Jamieson et al. 2018).

Several nations (e.g., Australia, Canada, the USA, and New Zealand) conduct mental health screening for military personal returning home from deployments. The aim of these screens is to identify potential impairments in mental health and provide opportunities for brief interventions and/or psychoeducation to encourage adaptive behaviors, or to refer personnel for more comprehensive assessment and support (Searle et al. 2015). These screens also enable the large-scale collection of data to better understand and improve mental health support to operations. This organizational approach seeks to reinforce the message that command takes mental health seriously and allows for early interventions, for those most in need upon return from operations.

Building upon the responsibilities of leaders to make mental health support accessible, health specialists also need to build trust with both military members and commanders in order to overcome the barriers and stigma associated with mental illness. Many military personnel have deeply held concerns that even relatively "minor" mental health problems will result in perceptions that they are "damaged" or unreliable within their units. Accordingly, mental health intake, assessments, and treatment processes need to take into consideration not only the most ethical and effective treatment options available, but also potential issues of how different treatment options might affect operational readiness and career progression. While this observation may sound superficial (as effective treatment needs to be the

priority), research has shown that perceived damage to a military member's career poses a significant risk to long-term mental health and creates a substantial barrier to broader help-seeking behaviors during military service (Hoge et al. 2004; Van Hooff et al. 2018). For example, removing a soldier from a promotion course to undertake comprehensive treatment might be the best clinical option, but options that allow them to complete their course while accessing support should also be considered. If one soldiers' career is perceived to be unfairly impacted by engaging in mental health support, there may be many more wondering if seeking support for themselves is worth the risk.

Unsurprisingly, increased exposure to combat is directly linked to increases in symptoms of combat stress and post-traumatic stress (Judkins and Bradley 2017). The delivery of brief psychological interventions promoting the resilience, recovery, and return to duty has become a foundation of operational psychology. While the management of combat stress within an operational environment is a multi-dimensional process, with mental health professionals working closely with serving members and command, the cumulative evidence shows that militaries that provide embedded psychological support reduce the prevalence of long-term disfunction and are more effective at maintaining an effective fighting force (Judkins and Bradley 2017).

By way of illustration, the US military identifies six key treatment principles for managing operational stress reactions (brevity, immediacy, contact, expectancy, proximity, and simplicity; or BICPES; Judkins and Bradley 2017). The Australian military uses a similar construct called PIES (proximity, immediacy, expectations, and simplicity). Other militaries have adopted similar models but the fundamental idea remains the same. Specifically, the aim is to manage military members experiencing stress reactions as close to their deployed location as possible. This keeps them connected with their team and helps maintain their operational mindset. Maintaining an individual's expectation that they will return to effective duty is critical to avoiding the development of a causality mindset (i.e., no longer operationally effective and thus returning home). The further a member is removed from their operational unit during treatment, the harder it becomes for them to return to operational duties (Judkins & Bradley). Early identification of issues and simple interventions are the most effective methods for promoting fast recovery from common mental injuries and strains. However, it is acknowledged that not all treatments can be delivered in this way. More serious stress reactions may necessitate withdrawal to rear-echelon areas or even return home for comprehensive treatment. Proactive resilience training is one means in which militaries endeavor to preserved operational capability through the reduction of psychological casualties.

Resilience Training in the Military

Stress inoculation training has traditionally formed around the idea that exposure to demanding stressors will inevitably lead to more resilient personnel. Unfortunately, experience without clear feedback and guidance is just as likely to build bad habits as good ones.

A key ingredient in effectively building resilience seems to be in exposing individuals to levels of stress sufficient for them to learn adaptive and beneficial lessons without pushing them to the point of injury or distress where learning becomes impaired. Ideally, training should challenge a person in a meaningful manner, while allowing for different approaches and skills to be trialed and reflected upon (Crane and Boga 2017). If training is overwhelming or beyond an individual's capacity, adaptive learning becomes impaired and the focus starts to shift from learning to survival. This can lead to an increase in long-term sensitivity/avoidance of stressors, the development of new mental health problems, or withdrawal from training/exit from the military. Furthermore, pushing people beyond their limits with the expectation that the exposure will inoculate them to stress risks promoting a culture in which a stoic response to stress is expected and any observable sign of weakness is discouraged, resulting in individuals choosing to hide mental health problems rather than seek support when required.

Militaries around the world have taken different approaches to developing resilience training. A commonly seen approach adopts a workshop format involving psychoeducation and the practice of cognitive skills for stress management. Such training often runs between a couple of hours and a couple of days. A classic example is the mental health training developed by the NATO Science and Technology Organization which teaches basic cognitive skills such as: acceptance and control, goal setting, self-talk, and tactical breathing in a 2-hour workshop. Variations of this program have been adopted by at least eleven militaries from NATO countries; although there have been few empirical validations conducted, there is evidence to suggest that these programs lead to better cognitive coping (e.g., less self-blame) and lowered short-term psychological distress in training (Bailey et al. 2011; Cohn and Pakenham 2008).

The following represents a small sample of programs used to illustrate different approaches to resilience training within the military forces.

The Master Resilience Training (MRT) is a ten-day program that aims at teaching resilience skills to non-commissioned officers (NCOs). This program forms a pillar of the US Army–led "Comprehensive Soldier and Family Fitness" (CSF2) program. Based on cognitive behavioral therapy (CBT), the curriculum centers on the "action-belief consequence model" proposed by Ellis (1962). This model holds that cognitions shape emotional and behavioral responses. The MRT is primarily intended as a *foundation* for training resilience skills, but it also aims to introduce resilience concepts that soldiers will encounter on deployments and across their career (Reivich et al. 2011). The program adopts a train-the-trainer approach, targeting NCOs with the intent that they lead and instruct junior soldiers in these skills. The purpose is to enhance soldiers' overall performance and wellbeing by increasing their ability to handle adversity and thereby prevent depression/anxiety. Training is delivered in a combination of large-group information sessions and small-group breakout sessions. Activities include role-plays, checks on learning, and experiential learning (e.g., group discussions and application exercises). The program builds on evidence-based protective factors that have been found to contribute to resilience. These factors include: optimism, effective problem-solving, flexibility, faith, self-regulation, relationships, and emotional awareness (Reivich et al. 2011).

In an evaluation of the MRT, Harms, Herian, Krasikove, Vanhove, and Lester (2013) found that the training decreased the diagnoses for mental health problems and substance abuse. However, the benefits were judged to be marginal, with only a small difference in subsequent diagnoses for mental health problems observed between the training and control groups (4.44% in the MRT sample compared to 5.07% in the non-MRT sample). These results suggest that CBT-based group training programs can have positive effects in reducing mental health problems – although the effect sizes were small. Still, although the effect size of the program was small, given the prevalence and costs of mental health problems, Harms et al. argue that even a small reduction in diagnosed mental health problems represents meaningful outcomes for individuals in larger populations, such as the US military. Furthermore, the cumulative effects from small effect sizes are not easily modeled and might result in large gains over time. Further study was called for to assess potential long-term effects.

One additional point of interest from Harms et al.'s (2013) validation was that when analyzed for mediating effects it was found that MRT had no direct effects onto diagnoses of mental health problems; rather the effects were completely mediated by improvements in soldier's self-reported *optimism* and *adaptability*. While more research is required to understand these results longitudinally, it provides some insight into what aspects of the MRT are providing the greatest benefits onto mental health. This knowledge has facilitated ongoing refinement of the resilience training program and informed the development of further resilience programs.

Mental Fitness Training. The mental fitness training developed by Macquarie University, in conjunction with the Australian Defense Force takes a distinctly different approach from more commonly applied psychological skill-building strategies. Psychological skill-building strategies are generally intended to teach stress management skills (e.g., tactical breathing, grounding, and progressive muscle relaxation). By contrast, the mental fitness training involves the application of a single metacognitive approach: coping and emotion regulatory self-reflection. The aim is to modify how personnel appraise stressors, encouraging a "stress as opportunity for self-growth" mindset. The training is designed to fit within preexisting military exercises and builds upon the adversity already inherent in military training. The program involves a 30-min introduction to the training and a self-reflection workbook to be completed periodically over the exercise period. The length of time between self-reflection can vary depending upon the intensity of training, but typically involves five 10-min periods of guided self-reflection conducted over 2–5 weeks.

Mental fitness training adopts a similar concept to physical fitness, where fitness is trainable, requires maintenance, and is often judged based on the demands of the environment (e.g., a "competition-fit" weightlifter is unlikely to be considered a "fit" marathon runner). Military personnel have generally been found to be more receptive to this practical/performance-orientated approach rather than less tangible ideas such as "training mental health." It also assists trainees to develop a personal identity of being "mentally fit" and reinforces the relevance of engaging in training to better adapt to changing environmental conditions (e.g., a soldier with optimum fitness on

operations may need to adjust their "training program" to become better "fitted" to the different demands of civilian life upon return home). At its core, the program frames stressors as opportunities for continual growth and offers a framework to develop personal training programs to progress toward established goals.

Five reflective practices are encouraged in the mental fitness training in order to strengthen resilience. These are: (a) awareness of one's emotional, physical, behavioral, and cognitive responses to triggering events; (b) awareness of values and value-based goals in relation to the situation; (c) awareness of strategies applied to address the situation; (d) evaluation of strategy effectiveness in relation to values and goals; and (e) constructive adaptations of strategies to promote improvements in future strategies (Crane et al. 2019).

In 2017, a validation of the mental fitness training program was conducted with a class of officer cadets completing a particularly demanding part of their initial training at the Australian Royal Military Collage (involving field/tactical skills and leadership under adversity). Half the cadet class received the mental fitness training and the remainder attended an established psychological-skills-building resilience workshop. Data collected at the immediate conclusion of the field exercise demonstrated that there were no significant differences in depressive and anxiety symptoms between the two programs. However, over the next three months, anxiety and depressive symptoms continued to climb in the psychological skills group, whereas cadets who completed the mental fitness training demonstrated a significant reduction in depressive symptoms and perceived frequency of stressors. On average, at the three-month follow-up, cadets in the mental fitness program demonstrated symptom reductions of greater than >20% on all primary outcome measures (i.e., depression, anxiety, and perceived frequency of stressors) compared to those who received the psychological skills training. Most notably, the level of reported anxiety symptoms in the mental fitness group had practically returned to baseline levels (Crane et al. 2019). Thus, the mental fitness program was found to facilitate a speedy return to normal functioning post-adversity (representing the concept of resilience) rather than just buffing immediate stressors. Comparatively, the CBT-based psychological skills program provided similar short-term stress-buffering effects, but was not found to promote post-adversity recovery.

Experiential Leadership Development Activities (ELDA). Since 2007, the New Zealand Army has incorporated outdoor ELDA in support of their Army leadership framework to train and develop leaders. Since 2012, many New Zealand soldiers have been required to complete ELDA training as part of their promotion courses. ELDA are outdoor activities, ranging between 6 days (for level 1) and 12 days (for level 2 training), which utilize challenging activities such as rock climbing, whitewater kayaking, mountaineering, or ski touring as the medium for personal development. The aim of the ELDA program is to challenge students every day, then allow periods of self-reflection and group discussion to encourage students to assess their own performance with respect to motivation, confidence, and skill. From these experiences, participants generate personalized self-development strategies. The level 2 course extends the training to include tools to help students better understand discrepancies between their personal identity and how they are

perceived by others. The goal is to help students develop strategies which will enable them to better utilize their strengths and mitigate their weakness as leaders, particularly under periods of adversity.

Since 2012, ELDA training has become more focused on understanding personality and leadership and less concerned with performance under pressure or resilience. However, validation studies have found that students were more likely to demonstrate positive thinking and understanding or consideration of others when dealing with challenging situations, with positive behavioural changes being evident for an average of 4 months post-training without active reinforcement (Rhodes 2012). The evaluation of the training also notes that the more challenging and militarily relevant the course is, the more frequently positive workplace changes were observed. Furthermore, courses were found to be enhanced when they included inbuilt reminders to encourage ongoing self-reflection post-course, with the intent to recognize a broad range of immediately applicable personal strategies to respond to demands.

Overall, the accumulated research suggests that psychological stress management skills are able to be trained and inhibit some of the negative effects of stressors; however, resilience training goes beyond just buffering stressors. Adaption, recovery, and long-term resilience require changing the way people interpret and interact with stressors. Resilience training should not be considered a "one-shot" or annual inoculation, but needs to be actively incorporated into routine training and military life if it is to be maximally effective.

Summary

Resilience involves the ability to bounce back with minimal impact from adversity. Resilience is developed within military organizations through good selection and training practices that build upon the personal strengths of military members. Leaders have an important role to play in encouraging resilient outcomes. The attitude that leaders hold toward stress (in general) and mental health support (specifically) has a significant impact on whether or not individuals will engage in adaptive or maladaptive behaviors when faced with adversity. At the unit level, commanders need to display a genuine desire to see their members thrive. How a commander manages morale, work demands, and resources plays an important role in the long-term resilience of military members under their authority. At the broadest level, understanding barriers to care and effective integration between command and mental health support practitioners is fundamental for achieving resilient outcomes. Finally, there are notable benefits from the conduct of bespoke resilience training, but there is no single solution to building resilience. All the pieces need to fit together and reinforce each other to get the best results.

In closing, given the complexities and demands of military service, the promotion of resilience requires a whole of organization approach, sharing the responsibility between individual members, leaders, commanders, and support agencies.

Cross-References

- ▶ Leadership in Extremis
- ▶ Military Leader and Leadership Development
- ▶ Military Organizational Learning
- ▶ Military Personnel
- ▶ Military Training, Education, and Socialization
- ▶ Recruitment and Retention
- ▶ What is Military Leadership?

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