

# The Relationship Between Stress and *Samhandling*: Some Challenges for Leaders in High-Risk Organizations

*Ole Boe*

Norwegian Defence University College

**Abstract:** Military operations are very often accompanied by various levels of stress. This chapter aims to discuss the concepts and factors of stress and *samhandling*. The main factors are social support, self-efficacy, resilience and hardiness, implicit coordination, and character strengths. Individual factors are self-efficacy, resilience and hardiness, and character strengths. Team factors are social support, team efficacy, and implicit coordination. A model describing stress and *samhandling*, including the above-mentioned individual and team factors and their relations, is introduced and discussed. The conclusion is that four individual and two team factors are seen as important if one wishes to counteract the effects of stress and increase both the individual's and the team's ability to conduct *samhandling* when facing unforeseen incidents.

**Keywords:** *Samhandling*, interaction, stress, character strengths, team factors, military operations, unforeseen.

Citation: Boe, O. (2018). The Relationship Between Stress and *Samhandling*: Some Challenges for Leaders in High-risk Organizations. In G.-E. Torgersen (Ed.), *Interaction: 'Samhandling' Under Risk. A Step Ahead of the Unforeseen* (pp. 373–398). Oslo: Cappelen Damm Akademisk. DOI: <https://doi.org/10.23865/noasp.36.ch20>

License: CC BY-NC 4.0

## Introduction

This chapter opens up with a description of a stressful incident where *samhandling* (interaction, cooperation) occurred. After this, a short overview of challenges in contemporary military operations is given. Thereafter, the chapter briefly discusses the concepts of stress and *samhandling*, before some factors contributing to efficient *samhandling* under stress are introduced to the reader. The factors that are discussed in the chapter are social support, self-efficacy, resiliency and hardiness, implicit coordination, and character strengths. Individual factors are self-efficacy, resilience and hardiness, and character strengths. Team factors are social support, team efficacy, and implicit coordination. Finally, a model describing stress and *samhandling*, including the above-mentioned individual and team factors and their relations, is introduced and discussed. A short conclusion related to the importance of the factors for reducing stress and increasing *samhandling* is given at the end of the chapter.

Consider the following incident:

“During an operation somewhere in the world, I was assigned as a bodyguard (close protection specialist) to a high-ranking military officer (the VIP). The VIP’s mission was to attend a meeting with a local warlord, and to negotiate on the issue of getting a safe passage for everyone through the warlord’s territory. The close protection team that I was a part of entered its vehicles and started to drive to the location where the VIP would meet the local warlord. On this day, we had to take care of the aide of the VIP, since he was joining his commander for the meeting. This was not the usual routine, but orders were orders. So, we were stuck with the aide. These things should not happen, but life is not always perfect. Anyway, we knew where we were going and drove to the location. We entered the house after checking it and the surroundings, and having established perimeter security. The negotiations started, and everything seemed to be going fine for about an hour. Then suddenly, a gunshot was heard from below, and somebody started screaming. Both the noise of the gunshot and the screaming floated up the stairs to the second floor, where we were having our meeting. The noises seemed to come from the floor beneath us. The warlord and his ‘goons’ started to ‘freak out’; I could tell that they wanted to draw their weapons. I grabbed our VIP and retreated into a corner, shielding him with my

body. I used some breathing techniques, used self-talk and at the same time took control over the VIP, telling him what to do, because I sensed that he was getting a bit stressed. The rest of the team that were inside the house took up new positions, just changing from the positions they had held and did what they were trained to do. I could hear them giving orders and information about what was happening to each other and to me. So far, so good; we were in control. Except for the aide. I suddenly saw him standing right in the middle of the large room, with eyes like big balloons. He looked at me and I could tell that he was not really seeing me. Clearly, he was having a severe stress reaction to what was going on. The gunshot and screaming had put him into a temporary paralysis. Things like this should never happen. We had, of course, planned ahead for who would be responsible for the aide, but he was just not mentally present. Half of the inside team was working its way down the stairs and the other half was around the VIP, securing him and controlling the warlord. I heard the guys on the stairs shouting, 'Clear!' and 'Move,' and the commands just floated through our communication system like they should – a good example of *samhandling*. I gave orders to the guys controlling the warlord and his 'goons,' and also to the aide, that we should move out of the house and get away. The aide just kept standing there. I cannot tell how much time this took. Finally, I dragged the VIP towards the aide and slapped the aide in the face, saying, 'Move towards the stairs and get out!' It was like his brain came back to work, or like a light was turned on inside his eyes, and he started to move in the right direction. My focus returned to the VIP. We got to the stairs and one of the team members took care of the aide, while I concentrated on getting the VIP safely out of the house. We managed to do that, and nothing more happened. However, we refused to bring the aide with us again."

The incident described above is an example of when *samhandling* under stress worked well in a highly-trained team, except for the unforeseen incident with the aide. In Norwegian, the concept *samhandling* is used to describe this type of "interaction". *Samhandling* as a concept does not have an exact equivalent in English, but concepts such as "interaction", "cooperation", or "collaboration" capture some of the similarities. The escalation in the described situation, (as in the case of the gunshot), was not unforeseen, because we had mentally prepared ourselves for this. The exact time of escalation was unforeseen, but we had practiced how to

handle this too. The unforeseen element in this incident was the reaction of the aide; we had not practiced this.

## Challenges in contemporary military operations

A war is not won alone. An interesting point is that 85 % of all military training takes place in small teams, as opposed to 5 % in the civilian world (Mullin & Shriberg, 2005). Volatility, uncertainty, complexity and ambiguity (VUCA) characterize contemporary military operations (Snider & Matthews, 2012). Participants in modern military operations will face unforeseen incidents. Unforeseen incidents can be defined as the following: The unforeseen denotes something occurring relatively unexpectedly and with a relatively low probability or predictability for those who experience and must deal with it (Kvernbekk, Torgersen & Moe, 2015, author's translation). Stress is a common element in most modern military operations. The need for coping with stress during operations can be found in the leadership doctrine, ADP 6–22, for the U.S. Army:

“Decentralized operations require leaders at all levels that understand their environment, learn quickly, make sound decisions and lead change. Because there are no predetermined solutions to problems, Army leaders must adapt their thinking, formations, and employment of techniques to the specific situation they face. This requires an adaptable and innovative mind, a willingness to accept prudent risk in unfamiliar or rapidly changing situations, and an ability to adjust based on continuous assessment.” (U.S. Army, 2012:0).

As a leader conducting ground operations, your span of control will function best when leading a five-man team (Marshall, 1947). This requires, among other things, the ability to handle stress, and to function well together with others during unforeseen and/or risky incidents, that is, *samhandling*.

“Command in combat requires love. A commander must genuinely love his men and win their affections in return, and when the time comes, he must use that love to cause his men to willingly risk and even sacrifice their lives to accomplish the mission.” (McCoy, 2007:11).

The overarching supporting documents describing Norwegian military leadership are the Norwegian Armed Forces Chief of Defense's *Basic view of leadership in the Norwegian Armed Forces* (Forsvarsstaben, 2012), and the Norwegian Armed Forces Joint Operational Doctrine (NAFJOD) (Forsvarsstaben, 2007; 2014). These documents establish mission command (*oppdragsbasert ledelse* in Norwegian) as the Norwegian Armed Forces' basic leadership philosophy. Mission command can be traced back to the end of the 19<sup>th</sup> century, with the Prussian concept of *Auftragstaktik*, invented by the Prussian General von Moltke the Elder (Ben-Shalom & Shamir, 2011).

Leadership is needed, as it is leadership that aims the gun so that the team can pull the trigger (Cannon & Cannon, 2003). Effective leadership exercised in cooperation with and in relation to others, can be described as a result of the interaction between the leader and their subordinates over time (Forsvarsstaben, 2007). Leadership can therefore be understood as the process that creates a common direction, alignment and commitment in a military unit (Forsvarsstaben, 2012; McCauley, Van Velsor, & Ruderman, 2010). Leadership is context-dependent (Hughes, Ginnett & Curphy, 2014), which means that a leader's behavior and efficiency is the result of interaction between individual factors and the environment (Bandura, 1997), where different situation variables are crucial for effective leadership (Forsvarsstaben, 2000; 2012). Military leadership can thus be described as a continuous process that is exercised in relation to others in a specific military context. One would think that a lot of research had been conducted on stressors and coping strategies in military contexts, simply because military work can be very stressful. Strangely enough, only a limited number of studies have explored the connection between stressors, coping strategies and military performance (Hall, 2009; Limbert, 2004; Overdale & Gardner, 2012). However, Milgram, Orenstein and Zafriros' (1989) study of Israeli soldiers in the Lebanon War was a significant exploration of stressors and coping strategies' impact on military performance. In these studies, one finding was that social support used as a coping strategy had a positive impact on military performance.

However, there are other organizations outside the military system where the personnel have to face unpredictable, difficult, and stressful

situations in their daily work. These are referred to as high-risk organizations. Stated differently, the personnel might face incidents with unknown content and the unforeseen (Kvernbekk, Torgersen, & Moe, 2015). Clear differences have, however, been found between the execution of leadership among staff or in a garrison and the execution of leadership in a military operation (Boe, Johansen & Bergh, forthcoming), as well as when a conflict changes from a high-intensity to a low-intensity conflict (Boe, Bergh, & Johansen, 2017). This means that in the daily routine and education there are less unforeseen incidents, and less stress and risk involved. The need for *samhandling* will therefore probably be less in these conditions. One could state that there is a clear distinction between high-risk organizations (such as the military, the police, the fire department, security forces, and emergency organizations) and civilian organizations. The distinction is that high-risk organizations exist because they have a mission. An interpretation of this is that the mission is the reason for the existence of these types of organizations (Mullin & Shriberg, 2005). There are many similarities between military leadership and leadership in other organizations, but civilian organizations will generally have profit and prestige as their main reasons for existing. In the NAFJOD from 2007, it states, “The opposing rigors can be extreme. Our profession represents the will to succeed and to strive towards results that exceed the expected – the difference between success and failure” (Forsvarsstaben, 2007:160, author’s translation). This quote highlights the importance for an officer to have a strong self-efficacy in their professional practice, in order to function well. It is logical to assume that individuals with high self-efficacy will be more apt to believe that they can meet work challenges although various stressors are present (Jex, Bliese, Buzzell, & Primeau, 2001).

## **Stress and *samhandling***

The Norwegian Chief of Defense (Forsvarsstaben, 2012:11) has stated: “[Military leadership] is about doing the uncomfortable and being able to cope with it, overcoming powerlessness, and avoiding emotional breakdown. Military leadership demands robustness in order to think

clearly and effectively, and cope with one's feelings when facing complex and difficult situations" (author's translation). Considering the nature of many military tasks, an officer will often have to cope with several decisions at the same time, often under severe amounts of stress. These types of situations are referred to as "in extremis" leadership (Kolditz, 2010). In addition, an officer engaged in close combat will have to make decisions under extreme levels of stress. These decisions very often carry serious consequences, namely the possibility of being killed or wounded, and thus contain a lot of risk. A significant part of handling different types of situations is the ability to work efficiently together. There is a broad consensus that trust is a decisive factor in order to solve missions effectively (Horn & Walker, 2008). Trust simply reduces stress and thus increases the possibility for *samhandling* (see the chapter on trust and *samhandling* for a more in-depth discussion about this). Shared mental models comprise much of a unit's collective action repertoire and decisions (Knouse, 2001).

Military training results in a high level of wear and tear on the personnel (Hoedebecke & Wells, 2002). How well a person masters or copes with a challenging situation can have a significant effect on biological symptoms affecting health and wellness (Bandura, 1991). In scientific literature, there is no doubt that stress and related stress reactions have a definite effect on human health and performance (see for instance Cowley et al., 2003; Griffith & Vaitkus, 1999; Hazlett & Morgan, 2003). Activation of the stress reaction is caused by a person's perception of the situation as threatening (Sivik, Delima, Korenjak, & Delima, 1997). It is therefore logical to imagine that this perception of a situation is influenced by a person's psychological resources, so that people with a high level of psychological resources will perceive a situation as less threatening than people who have a low level of psychological resources. A soldier who believes he or she has the resources to get through stressful situations and complete a mission successfully will perceive less threats and stress (Morgan, Cho, Hazlett, Coric, & Morgan, 2002). One's behavior and one's ability to lead under stress may be influenced by a variety of factors (Boe, Kjørstad & Werner-Hagen, 2012).

## Some factors contributing to more efficient *samhandling* under stress

In the next sections of the chapter, I will propose and discuss some factors that may be important under stress, facilitating better *samhandling*. On the other hand, increased *samhandling* may also lead to reduced stress. Clearly, the concepts of stress and *samhandling* are related, and deciding the causal direction from one concept to the other is challenging. However, as this chapter uses a perceived reduction of stress as a main contributor to better *samhandling*, this will infer the causal direction from stress to *samhandling*.

The proposed and discussed factors increase the ability to cope with stress in relation to risk and unforeseen incidents. In addition to the factors described in Table 1 below, other factors exist, such as intelligence, general mental ability and personality traits, that are used to select personnel for the armed forces and other high-risk organizations. The challenge with these factors is that they do not really predict who will function well during unforeseen and stressful incidents (Picano, Roland, Rollins, & Williams, 2002). For instance, general mental ability has been found to be completely uncorrelated with later academic and physical performance in military cadets (Bang, Boe, Nilsen, & Eilertsen, 2017). These factors cannot be used to explain *samhandling* in stressful and unforeseen incidents. As such, they have a limited value in predicting performance in high-risk occupations (Barrick & Mount, 1991; Picano & Roland, 2012).

However, there are some individual and team factors that have been found to be important when it comes to functioning better under stress and when things are unforeseen. As teams are built up of individuals, the individual factors will be discussed first. This is because it is necessary to take control over yourself before engaging in more complex processes, such as taking part in and contributing to a team. The team factors will then be discussed, since they build upon the previously-discussed individual factors. In Table 20.1 below, four individual and two team factors are shown that contribute to reducing stress and increasing effective *samhandling*.

**Table 20.1** Factors that reduce stress and increase *samhandling*.

Individual factors	Team factors
Self-efficacy	Social support
Resilience and hardiness	Team efficacy
Character strengths	-
Implicit coordination	-

As can be seen in Table 20.1, individual factors are self-efficacy, resilience and hardiness, character strengths, and implicit coordination. Self-efficacy can be defined as the belief in your own capabilities in order to reach specific results (Bandura, 1997). For professionals, high standards are required. It should be obvious that you need strong self-efficacy to deal with the countless scenarios you may find yourself in as a soldier and officer. This is not about the abilities and skills one possesses, but about what one considers attainable with the skills one possesses (Bandura, 1986). Bandura writes that self-efficacy is a very important factor for people in order to perform (Bandura, 1997).

Resilience is defined here as the tendency to recover quickly from different challenges and stresses while maintaining your focus (US Army, 2012). Hardiness is a similar concept, focusing upon a person's perception of control, challenge and commitment when facing difficult situations (Kobasa, 1979). As there is clear overlapping between the concepts of resilience and hardiness, they are discussed as one individual factor in this chapter. Character strengths are individual characteristics that are possible to develop through increased vigilance and effort (Biswas-Diener, Kashdan, & Minhas, 2011). Looking at the concept "implicit coordination", this indicates that each individual team member has a shared mental model of the situation they are in (Cannon-Bowers, Salas, & Converse, 1993). This becomes important if a team is to manage to solve and accomplish a mission together. Imagine a team where every team member has his or her own understanding of the situation. The level of *samhandling* will be very low, and the probability of being able to accomplish a given mission will also be low.

Regarding team factors, social support and team self-efficacy are also important if a team is to handle stress and function well during *samhandling*. Social support refers to the support received from the other team

members. According to Bandura (1997), team efficacy deals with the team's collective belief in being able to solve their missions together. However, Bandura uses the term "collective efficacy" to describe this factor.

## Individual factors affecting *samhandling*

### The importance of self-efficacy for *samhandling*

Social cognitive theory was launched in the book "Social Foundations of Thoughts and Action" (Bandura, 1986), and it is in this work that self-efficacy as a concept is presented. Bandura (1997:3) defines self-efficacy as "...[the] belief in one's capabilities to organize and execute the courses of action required to produce given attainments." Here, one's perceived expertise plays a particularly important role in how one copes with situations, as perceived expertise within clearly-defined domains or activities is the most important factor in both self-perception and self-efficacy (Eccles, Wigfield, & Schiefele, 1998). An important factor is thus to create in oneself a high degree of faith in one's own mastery (Eid, 2006). Believing in one's own capacities, skills and abilities has been found to be important for Norwegian military officers within diverse subjects. Examples are increasing the will to kill (Boe & Johannessen, 2015), learning aggression and aggression control (Boe & Ingdahl, 2017), preparing for a parachute jump (Boe & Hagen, 2015), and enhancing leadership communication skills (Boe & Holth, 2017; Holth & Boe, 2017).

An important part of being an officer and in mission command is about being able to cope with various quickly-emerging and unexpected situations when dealing with others, i.e. *samhandling* with your team. An important part of being able to solve a mission is to become aware of how mastery is achieved and how different forms of coping strategies can help to achieve interaction. In a study of 141 military cadets from the three military academies in Norway, it was found that academic self-perception was positively related to self-efficacy, and that self-efficacy was positively related to self-reported individual stress-management ability, working in difficult situations, and motivation to perform (Boe, Säfvenbom & Buch, forthcoming).

## The importance of *resilience and hardiness* for *samhandling*

Kobasa, Maddi and Courington (1981) have suggested that individuals who have a tendency to perceive stressful situations as positive, challenging, enjoyable and stimulating, can be called “hardy”. Although the term “hardiness” has its roots in existential psychology (Maddi, 1967), the term was first used in the research literature by Kobasa in 1979. Kobasa described the concept as organized around three relatively stable and interacting factors: control, challenge and commitment. Commitment describes how dedicated people are to themselves and their surroundings. Challenge describes the degree to which people are looking for new experiences that they perceive as interesting and exciting. Control refers to how much one believes that one can influence the direction life takes. The extent to which a person possesses these specific characteristics may affect their evaluation of a situation as controllable or uncontrollable, challenging or threatening, and will also be crucial with regard to whether a person will be dedicated to a task or feel foreign to it (Kobasa, Maddi, Puccetti, & Zola, 1985). The three factors are thought to interact, so that they lead to people being less affected by stressors if they possess a high degree of the three factors. Hardiness has been shown to prevent poor physiological and psychological health among military personnel, such as soldiers in the Gulf War (Bartone, 1993; 1999; 2000), evacuating personnel in the US Army (Bartone, Ursano, Wright, & Ingraham, 1989) peacekeeping soldiers (Bartone, 1996; Britt, Adler, & Bartone, 2001), Israeli soldiers during combat training (Florian, Mikulincer, & Taubman, 1995), Israeli officer candidates (Westman, 1990), cadets from the Norwegian Naval College (Bartone, Johnsen Eid, Brun, & Laberg, 2002) and also Norwegian university students (Hystad et al., 2010). The concept of hardiness clearly has many similarities to the concept of “resilience” (Leipold & Greve, 2009).

One important question is to what extent can one change and improve one’s hardiness? Evidence has been found indicating that hardiness can be learned and developed (Coutu, 2002; Kobasa et al., 1985; Maddi, 2002). Leipold and Greve (2009) suggest that hardiness will

appear to others as an expression of stability, while hardiness within a person is the result of dynamic and interacting regulatory processes that continually change throughout one's life. Hardiness is probably more stable than just believing in yourself, and Coutu (2002) argues that the ability to make a comeback when things are going badly can be developed and easily changed for the better. Resilience is defined here as the tendency to recover quickly from setbacks, shock, injuries, adversity, and stress while maintaining a mission and organizational focus (U.S. Army, 2012). Paired closely with resilience is the concept of "persistence". Persistence in what one is doing is also an important factor for *samhandling*. Persistence is simply stated as the ability to finish what you start, and it is an important character strength for military officers (Boe, 2016a). Persistence requires a certain level of mental toughness. Mental toughness can be described as the ability to cope effectively with stress despite adversity and/or failure (Smith, Wolfe-Clark, & Bryan, 2016). Resilience is not described as a personality trait, but rather as a normal, stable or successful developmental trait in potentially-dangerous situations. Resistant or hardy individuals can be described as people who have the capacity or ability to make a comeback when things have been difficult or challenging (Coutu, 2002). The overall ability to bounce back and also to respond with positive attitudes during serious difficulties and trauma seems to be quite common. Bonanno (2004) argues that the human capacity to operate and evolve in the face of challenges is undervalued, and there is much to suggest that he is right. People who experience extremely difficult or traumatic events bounce back and function well in their aftermath.

## The importance of character strengths for *samhandling*

Twenty-four character strengths are known to be universal and found in all cultures (Peterson & Seligman, 2004). Previous research in the Norwegian Armed Forces has identified 12 of these 24 character strengths that are the most important for military leaders (Bang, Boe, Nilsen, & Eilertsen, 2015; Bang, Eilertsen, Boe & Nilsen, 2016; Boe, 2015;

2016a; 2016b; Boe, & Bang, 2017; Boe, Bang, & Nilsen, 2015a; 2015b; Boe, Davidson, Nilsen, & Bang, 2016; Boe, Heiskel, Grande, Nilsen, & Bang, 2016; Boe, Nilsen, Kristiansen, Krogdahl, & Bang, 2017). These 12 character strengths are leadership, followed by integrity, persistence, bravery, open-mindedness, fairness, teamwork, self-regulation, love of learning, social intelligence, perspective and creativity. Having character and commitment have proven to be success factors when it comes to, for example, completing the selection of military Special Forces and special police units (Boe, 2011; Boe, Woolley, & Durkin, 2011). Furthermore, successful applicants to the Australian Army Special Forces revealed that their most frequently assigned character strength was integrity, followed by teamwork, persistence and love of learning (Gayton & Kehoe, 2015b). The reason that character strengths are important for military leaders is that character strengths are based on values. An individual will express his or her values through their character. This has been found to play an important role in leadership, adaptability and achievement (Matthews et al., 2006; Gayton & Kehoe, 2015a; Picano & Roland, 2012).

In the described incident at the beginning of the chapter, each member of the team was aware of the character strengths of the other team members, both weaker and stronger character strengths. This allowed the team to increase their level of *samhandling* even during stressful situations.

## The importance of implicit coordination for *samhandling*

A special feature of military leadership is what is called “implicit coordination” (Cannon-Bowers, Salas, & Converse, 1993). Implicit coordination means that participants in a team have a common or shared mental model of the situation they are in. This means that it is possible to predict the other team members’ actions and then adapt one’s own pattern of behavior to the other members’ patterns of action. A high degree of implicit coordination will lead to less perceived stress and enhanced *samhandling* in a team. Implicit coordination is a prerequisite for effective teams and is not just limited to the field of military leadership. The

need to function as well as possible together is, however, even more important in a military context than in a civilian context. This is due to the possibly devastating consequences of failure in a military context. Stout, Cannon-Bowers, Salas, and Milanovich (1999) have also shown the importance of planning the development of shared mental models in a military context, in order to avoid catastrophic consequences as a result of teams being unable to cope with multiple simultaneous tasks. In the above-mentioned incident, our team had practiced a lot, but we had missed out on practicing how to cope with the aide. However, we had practiced enough to know what each team member would and should do in different types of situations.

## **Team factors affecting *samhandling***

### **The importance of social support for *samhandling***

There is a lot of research showing that social support reduces stress and helps recovery (Bianco, 2001; Chan, 2002; Cohen & Wills, 1985; Harlow & Cantor, 1995; Lu, 1997; Pearline & LeBlanc, 2001; Rosenberg & McCullough, 1981; Sarason, Pierce, & Sarason, 1994). Social support has been shown to protect people from unexpected stressors (Doornbos, 1996; Thoits, 1986) and physical illness (House, Landis, & Umberson, 1988; Kennedy, Kiecolt-Glaser, & Glaser, 1990), and has proven to be significant when it comes to recovery from injuries (Wagner, Williams, & Long, 1990). Social support has also been shown to counteract the negative effects of stress and to protect one's psychological sense of well-being (Turner, 1981). Social support is regarded in the literature as a so-called "environmental moderator," since support comes from outside oneself (Stetz, Stetz, & Bliese, 2006). In the incident described in the beginning of the chapter, the team had a tremendous amount of social support in each other and from each other. We had been training and working together for a long time, and knew each other very well. This helped in reducing stress a great deal in the situation in which we found ourselves. As a result of this social support, our *samhandling* worked quite well, despite an unforeseen incident.

## The importance of team efficacy for *samhandling*

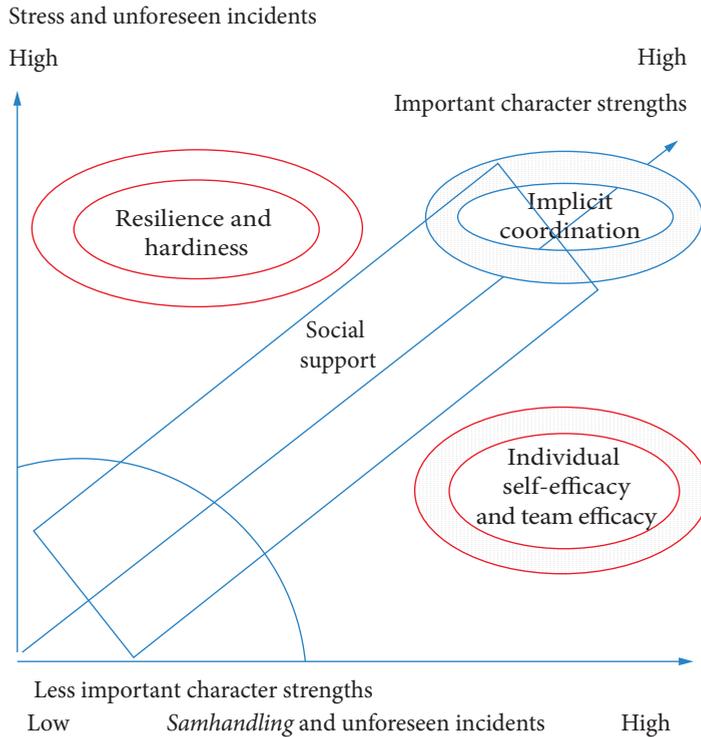
In the aforementioned incident, our team had a high degree of what is known as “team (or collective) self-efficacy” (Bandura, 1997). Based upon our selection and later training, we were quite confident that we could solve our missions.

A word of caution here. Your individual self-efficacy and your team efficacy need to be realistic and not inflated. Getting to know your limits in *samhandling*, as well as your weaknesses and strengths, is an essential part of functioning better together.

## A model describing the relationship between stress, unforeseen incidents and *samhandling*

Based on the previous discussions of several factors that have an effect upon stress and *samhandling*, it is possible to conceptualize this in a simple model. The selection of factors in the model is based upon a semantic theory construction, which is a process of model construction based upon certain parameters. Several sets of chosen parameters at both individual and team level thus constitute the model (Kvernbekk, 2002). The chosen individual factors/parameters are self-efficacy, resilience and hardiness, character strengths and implicit coordination. At the team level, factors such as social support and team self-efficacy are important, in order to cope with stress and to facilitate better *samhandling*. In addition to stress and *samhandling*, the model also incorporates the unforeseen (Kvernbekk, Torgersen & Moe, 2015). The unforeseen is included in the model as it is known to lead to increased stress and less *samhandling*. Figure 20.1 describes this model.

The main point of the model in Figure 20.1 is that unforeseen incidents will normally lead to an increased perception of stress and less ability to execute *samhandling*. Levels of individual and team factors will vary according to where one is in the model. Where one finds oneself in the model will be dependent upon the experienced level of stress, the level of *samhandling* needed, and the level of unforeseen incidents taking place.



**Figure 20.1** Unforeseen incidents and their relation to stress and *samhandling*.

## The relation between a low level of stress, *samhandling* and unforeseen incidents

When the level of stress is low, the level of *samhandling* is low and there is not much that is unforeseen, the individual level of self-efficacy will also be low. This is because there is no need for a well-developed self-efficacy, due to the simplicity of the tasks being executed and the low level of stress and unforeseen incidents. Routines and drills will take care of the normal incidents. The need for individual resilience and hardiness will also be low. As one is not challenged at this point, there is nothing to bounce back from. Also, when the level of stress is low, the level of required *samhandling* is low and very little is unforeseen, less important character strengths will be needed to solve a mission. Character strengths such as, for instance, prudence (being careful about your choices) and

kindness will be used. Implicit coordination will not be important under these conditions, as there will usually be enough time to sort out any problems that arise. One does not, therefore, need a very clear mental picture of what the others in a team are doing. The social support given to each other in the team and the team efficacy do not need to be high when the stress level is low, the need for *samhandling* is low, and not much is unforeseen. Things are working well at this point, so there is not much need for social support either.

### The relation between a high level of stress, *samhandling* and unforeseen incidents

However, as can be seen from the model, this picture changes when unforeseen incidents start occurring. Then the stress level increases and the need for *samhandling* also becomes more important. Individual self-efficacy becomes more important, that is, that each individual in a team believes that he or she will be able to handle the unforeseen incident. This includes, for instance, determination and goal setting (US Department of the Army, 2015). Resilience and hardiness will show their value, as one might try different solutions and perhaps fail. Having a well-developed level of resilience and hardiness will then facilitate *samhandling*, as one tries again and does not give up. When the level of stress and the need for *samhandling* increases, the use of character strengths will also change. As the level of unforeseen incidents increases, this will lead to one needing other more suitable and important character strengths. Character strengths that will be increasingly important during stressful incidents, when one is required to execute *samhandling* at the same time, are integrity, teamwork, and persistence (Gayton & Kehoe, 2015a; 2015b). As the level of *samhandling* increases, implicit coordination becomes more important. It is vital for each individual to know exactly what the other team members are doing. This is simply because of the lack of time caused by a suddenly-appearing unforeseen incident, and the need to solve the incident quickly. The need for social support will be high, and social support used as a coping strategy has been found to improve performance under stressful situations (Milgram, Orenstein &

Zafzir, 1989). Social support will act as a buffer against stress and facilitate more efficient *samhandling*. Being able to function well as a team, that is, having a high level of team efficacy, will become increasingly important as the level of stress and required *samhandling* increases. Unforeseen incidents will thus require a team that believes in its mutual abilities to handle whatever is thrown at them. However, it needs to be said that both individual self-efficacy and team efficacy need to be realistic and based upon previous training and experiences. Otherwise, the level of self-efficacy and team efficacy might not be suited to solve incidents that may occur suddenly.

## Conclusion

This chapter started with an introduction to the theme of stress during *samhandling*. There is no doubt that modern military operations are demanding, and are very often accompanied by various levels of stress. Stress affects the ability to function well together, and stress has a clear effect upon *samhandling*. Four individual and two team factors are seen as important if one wishes to counteract the effects of stress, and increase each individual's and the team's ability to conduct *samhandling* when facing unforeseen incidents. Working on improving one's self-efficacy, resilience and hardiness, character strengths and implicit coordination are important on an individual level. Working on improving the social support given by and to the team members, and working on team efficacy are also important. Together, these individual and team factors will facilitate *samhandling* in stressful and unforeseen situations.

## References

- Bandura, A. (1986). *Social Foundations of Thought and Action: A Social Cognitive theory*. Englewood Cliffs: Prentice-Hall, Inc.
- Bandura, A. (1991). Self-efficacy mechanism in physiological activation and health-promoting behavior. In J. Madden, IV (Ed.), *Neurobiology of Learning, Emotion, and Affect* (pp. 229–269). New York: Raven Press.

- Bandura, A. (1997). *Self-efficacy: The Exercise of Self-control*. New York: Freeman.
- Bang, H., Boe, O., Nilsen, F. A., & Eilertsen, D. E. (2017). Do character strengths predict how well military cadets succeed during their bachelor's program? *ICERI Proceedings 2017*, 7297–7302.
- Bang, H., Boe, O., Nilsen, F. A., & Eilertsen, D. E. (2015). Evaluating character strengths in cadets during a military field exercise: Consistency between different evaluation sources. *EDULEARN Proceedings*, 7076–7082.
- Bang, H., Eilertsen, D. E., Boe, O., & Nilsen, F. A. (2016). Development of an observational instrument (OBSCIF) for evaluating character strengths in army cadets. *EDULEARN16 Proceedings*, 7803–7808.
- Barrick, M. R., & Mount, M. K. (1991). The Big Five personality dimensions and job performance: a meta-analysis. *Personnel Psychology*, 44, 1–26.
- Bartone, P. T. (1993, June). *Psychosocial predictors of soldier adjustment to combat stress*. Paper presented at the Third European Conference on Traumatic Stress, Bergen, Norway.
- Bartone, P. T. (1996, August). *Stress and hardiness in U.S. peacekeeping soldiers*. Paper presented at the annual convention of the American Psychological Association, Toronto, Ontario, Canada.
- Bartone, P. T. (1999). Hardiness protects against war-related stress in Army reserve forces. *Consulting Psychology Journal*, 51(2), 72–82.
- Bartone, P. T. (2000). Hardiness as a resiliency factor for United States forces in the Gulf War. In J. M. Violanti, D. Paton, & C. Dunning (Eds.), *Posttraumatic Stress Intervention: Challenges, Issues, and Perspectives* (pp. 115–133). Springfield, Illinois: Thomas.
- Bartone, P. T., Johnsen, B. H., Eid, J., Brun, W., & Laberg, J. C. (2002). Factors influencing small unit cohesion in Norwegian Navy officer cadets. *Military Psychology*, 14, 1–22.
- Bartone, P. T., Ursano, R. J., Wright, K. W., & Ingraham, L. H. (1989). The impact of a military air disaster on the health of assistance workers: A prospective study. *Journal of Nervous and Mental Disease*, 177, 317–328.
- Biswas-Diener, R., Kashdan, T. B., & Minhas, G. (2011). A dynamic approach to psychological strength development and intervention. *Journal of Positive Psychology*, 6(2), 106–118.
- Ben-Shalom, U., & Shamir, E. (2011). Mission command between theory and practice: The case of the IDF. *Defense & Security Analysis*, 27, 2, 101–117.
- Bianco, T. (2001). Social support and recovery from sports injury: Elite skiers share their experiences. *Research Quarterly for Exercise and Sport*, 72, 376–388.
- Boe, O. (2011). How to find leaders that will be able to face and solve problematic decisions in an operational context? *Proceedings of the 13<sup>th</sup> International Military Health Conference (13IMMHC)*, 35–42.

- Boe, O. (2015). Karaktertrekk hos ledere og møte med det uforutsette (Character strengths among leaders and meeting the unforeseen). In G-E. Torgersen (Ed.), *Pedagogikk for det uforutsette (Pedagogy for the Unforeseen)* (pp. 196–210). Bergen: Fagbokforlaget.
- Boe, O. (2016a). Building Resilience: The role of character strengths in the selection and education of military leaders. *International Journal of Emergency Mental Health and Human Resilience*, (17)4, 714–716.
- Boe, O., (2016b). Character strengths and their relevance for military officers. In S. Rawat (Ed.), *Military Psychology: International Perspectives* (pp. 113–126). New Delhi: Rawat Publications.
- Boe, O., & Bang, H. (2017). The Big 12: The Most Important Character Strengths for Military Officers. *Athens Journal of Social Sciences*, 4(2), 161–174.
- Boe, O., Bang, H., & Nilsen, F. A. (2015a). Selecting the most relevant character strengths for Norwegian Army officers: An educational tool. *Procedia-Social and Behavioral Sciences*, 197, 801–809.
- Boe, O., Bang, H., & Nilsen, F. A. (2015b). An experienced military officer's perception of important character strengths. *Procedia-Social and Behavioral Sciences*, 190, 339–345.
- Boe, O., Bergh, J. & Johansen, R. B. (2017). Leadership challenges for Joint Force Commanders during the transition from a high-intensity to a low-intensity conflict. *Arts and Social Sciences Journal*, 8(3). doi: 10.4172/2151-6200.1000281
- Boe, O., Davidson, S. E. Nilsen, F. A., & Bang, H. (2016), A study of observed character strengths in military cadets during a combat fatigue course. *ICERI2016 Proceedings*, 6068–6077.
- Boe, O., & Hagen, K. (2015). Using mindfulness to help reducing the perception of stress during an acute stressful situation. *Procedia – Social and Behavioral Sciences*, 197, 858–868.
- Boe, O., Heiskel, B. A., Grande, Ø., Nilsen, F. A., & Bang, H. (2016). Measuring character strengths: A methodological study of military cadets during a field exercise. *ICERI2016 Proceedings*, 6057–6067.
- Boe, O., & Holth, T. (2017). Is guidance as a tool for leadership communication for military leaders effective? *Arts and Social Sciences Journal*, 8(2).
- Boe, O., & Ingdahl, A. (2017). Educating monsters with brakes: Teaching soldiers aggression and aggression control. *Kasmera*, 45(3), 1–30.
- Boe, O., & Johannessen, A. H. (2015). The effects of the role of the group, the role of the leader, the emotional distance to the enemy, and the aggressive predisposition upon killing. *Kasmera*, 43(6), 125–144.
- Boe, O., Johansen, R. B., & Bergh, J. (forthcoming). Leadership in a staff or a garrison compared to combat leadership in a military operation. Same same but different? *International Journal of Emergency Mental health and Human Resilience*.

- Boe, O., Kjørstad, O., & Werner-Hagen, K. (2012). *Løytnanten og krigen: Operativt lederskap i strid [The Lieutenant and the War: Operational leadership in war]*. Bergen: Fagbokforlaget.
- Boe, O., Nilsen, F. A., Kristiansen, O., Krogdahl, P., & Bang, H. (2017). Measuring important character strengths in Norwegian Special Forces officers. *EDULEARN17 Proceedings*, 1623–1631.
- Boe, O., Säfvenbom, R., & Buch, R. (forthcoming). Self-concept, Self-efficacy, and Military Skills and Abilities. *Journal of Military Studies*.
- Boe, O., Woolley, K., & Durkin, J. (2011). Choosing the elite: Examples of the use of recruitment, assessment, and selection programs in Law Enforcement Tactical Teams and Special Forces. In P. Sweeney, M. Matthews, & P. Lester (Eds.), *Leading in Dangerous Contexts* (pp. 333–349). Annapolis: Naval Institute Press.
- Bonanno, G. A. (2004). Loss, trauma and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events? *American Psychologist*, 59, 20–28.
- Britt, T. W., Adler, A. B., & Bartone, P. T. (2001). Deriving benefits from stressful events: The role of engagement in meaningful work and hardiness. *Journal of Occupational Health Psychology*, 6, 53–63.
- Cannon-Bowers, J. A., Salas, E., & Converse, S. A. (1993). Shared mental models in expert team decision making. In N. J. Castellan Jr (Ed.), *Current Issues in Individual and Group Decision-making* (pp. 221–246), Mahwah NJ: Lawrence Erlbaum Ass.
- Cannon, J., & Cannon, J. (2003). *Leadership Lessons of the Navy Seals*. New York: McGraw Hill.
- Chan, D. W. (2002). Stress, self-efficacy, social support, and psychological distress among prospective Chinese teachers in Hong Kong. *Educational Psychology*, 22, 557–569.
- Cohen, S., & Wills, T. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98, 310–357.
- Coutu, D. L. (2002). How resilience works. *Harvard Business Review*, 80(5), 46–50.
- Cowley, G., Murr, A., Carmicheal, M., Scelfo, J., Rosenberg, D., & Jefferson, D. (2003, February 24). Our bodies, our fears. *Newsweek*, 141, 42.
- Doornbos, M. M. (1996). The strengths of families coping with serious mental illness. *Archives of Psychiatric Nursing*, 10, 214–220.
- Eccles, J. S., Wigfield, A., & Schiefele, U. (1998). Motivation to succeed. In W. Damon (Series Ed.) & N. Eisenberg (Volume Ed.), *Handbook of Child psychology* (5th ed., Vol. III, pp. 1017–1095). New York: Wiley.
- Eid, J. (2006). Emosjoner, stress og mestring (Emotions, stress and coping). In J. Eid & B. H. Johnsen (Eds.), *Operativ psykologi (Operational psychology)* (2nd ed., pp. 98–118). Bergen: Fagbokforlaget.

- Florian, V., Mikulincer, M., & Taubman, O. (1995). Does hardiness contribute to mental health during a stressful real-life situation? The role of appraisal and coping. *Journal of Personality and Social Psychology*, 68, 687–695.
- Forsvarsstaben. (2000). *Forsvarets fellesoperative doktrine (Norwegian Armed Forces Joint Operational Doctrine)*. Oslo: Norwegian Armed Forces Defense Staff.
- Forsvarsstaben. (2007). *Forsvarets fellesoperative doktrine (Norwegian Armed Forces Joint Operational Doctrine)*. Oslo: Norwegian Armed Forces Defense Staff.
- Forsvarsstaben. (2012). *FSJ grunnsyn på ledelse i Forsvaret (The Norwegian Armed Forces Chief of Defense's basic view of leadership in the Armed Forces)*. Oslo: Norwegian Armed Forces Defense Staff.
- Forsvarsstaben. (2014). *Forsvarets fellesoperative doktrine (Norwegian Armed Forces Joint Operational Doctrine)*. Oslo: Norwegian Armed Forces Defense Staff.
- Gayton, S. D., & Kehoe, E. J. (2015a). A prospective study of character strengths as predictors of selection into the Australian Army Special Forces. *Military Medicine*, 180(2), 151–157.
- Gayton, S. D., & Kehoe, E. J. (2015b). Character Strengths and Hardiness of Australian Army Special Forces Applicants. *Military Medicine*, 180(8), 857–862. doi.org/10.7205/MILMED-D-14-00527.
- Griffith, J., & Vaitkus, M. (1999). Relating Cohesion to Stress, Strain, Disintegration, and Performance: An Organizing Framework. *Military Psychology*, 11, 27–55. doi.org/10.1207/s15327876mp1101\_3.
- Hall, J. C. (2009). Utilizing Social Support to Conserve the Fighting Strength: Important Considerations for Military Social Workers. *Smith College Studies in Social Work*, 79(3), 335–343.
- Harlow, R. E., & Cantor, N. (1995). To whom do people turn when things go poorly? Task orientation and functional social contacts. *Journal of Personality and Social Psychology*, 69, 329–340.
- Hazlett, G., & Morgan, C. A. (2003, October). *Special forces soldier: Model of high performance under stress*. Paper presented at the Peak Soldier Performance Conference, Santa Barbara, CA.
- Hoedebecke, E. L., & Wells, J. (2002, April). *Army campaign plan for injury control*. Paper presented at the 8th Annual Recruit and Trainee Healthcare Symposium, Towson, Maryland.
- Holth, T., & Boe, O. (2017). Enhancing the Leadership Communication Skills of Norwegian Military Officers. *Arts and Social Sciences Journal*, 8(1), 1–6.
- Horn, B., & Walker, R. W. (2008). *The Military Leadership Handbook*. Kingston, Ontario: Canadian Defense Academy Press.
- House, J. S., Landis, K. R., & Umberson, D. (1988). Social relationships and health. *Science*, 241, 540–544.

- Hughes, R. L. Ginnett, R. C., & Curphy, G. J. (2014). *Leadership: Enhancing the Lessons of Experience* (8th ed.). Boston, Massachusetts: McGraw-Hill.
- Hystad, S. W., Eid, J., Johnsen, B. H., Laberg, J. C., & Bartone, P. T. (2010). Psychometric properties of the revised Norwegian Dispositional Resilience (Hardiness) Scale. *Scandinavian Journal of Psychology*, *51*, 237–245.
- Jex, S. M., Bliese, P. D., Buzzell, S., & Primeau, J. (2001). The impact of self-efficacy on stressor-strain relations: Coping style as an exploratory mechanism. *Journal of Applied Psychology*, *86*, 401–409.
- Kennedy, S., Kiecolt-Glaser, J. K., & Glaser, R. (1990). Social support, stress, and the immune system. In B. R. Sarason, I. G. Sarason, & G. R. Pierce (Eds.), *Social support: An interactive view* (pp. 253–265). New York: John Wiley & Sons.
- Knouse, S. B. (2001). *Diversity and Shared Team Mental Models in the Military*. USA: Defense Equal Opportunity Management Institute.
- Kobasa, S. C. (1979). Stressful life events, personality and health: An inquiry into hardiness. *Journal of Personality and Social Psychology*, *37*, 1–11.
- Kobasa, S. C., Maddi, S. R., and Courington, S. (1981). Personality and constitution as mediators in the stress-illness relationship. *Journal of Health and Social Behavior*, *22*, 368–378.
- Kobasa, S. C., Maddi, S. R., Puccetti, M. C., & Zola, M. A. (1985). Effectiveness of hardiness, exercise and social support as resources against illness. *Journal of Psychosomatic Research*, *29*, 525–533.
- Kolditz, T. A. (2010). *In Extremis Leadership: Leading As If Your Life Depended On It*. San Francisco: Jossey-Bass Publications.
- Kvernbekk, T. (2002). Vitenskapsteoretiske perspektiver (Perspectives on scientific theories). In T. Lund (Ed.), *Innføring i forskningsmetodologi (Introduction to research methodology)* (pp. 46–52). Oslo: Unipub.
- Kvernbekk, T., Torgersen, G-E., & Moe, I. B. (2015). Om begrepet det uforutsette [On the concept of the unforeseen]. In G-E. Torgersen (Ed.), *Pedagogikk for det uforutsette [Pedagogics for the Unforeseen]* (pp. 28–55). Bergen: Fagbokforlaget.
- Leipold, B., & Greve, W. (2009). Resilience: A conceptual bridge between coping and development. *European Psychologist*, *14*(1), 40–50.
- Limbirt, C. (2004). Psychological well-being and job satisfaction amongst military personnel on unaccompanied tours: The impact of perceived social support and coping strategies. *Military Psychology*, *16*, 37–51.
- Lu, L. (1997). Social support, reciprocity, and well-being. *The Journal of Social Psychology*, *137*, 618–628.
- Maddi, S. R. (1967). The existential neurosis. *Journal of Abnormal Psychology*, *72*, 311–325.
- Maddi, S. R. (2002). The story of hardiness: Twenty years of theorizing, research, and practice. *Consulting Psychology Journal*, *54*, 173–185.

- Marshall, S. L. A. (1947). *Men Against Fire. The Problem of Battle Command*. Norman: University of Oklahoma Press.
- Matthews M. D., Eid, J., Kelly, D., Bailey, J. K., & Peterson, C. (2006). Character strengths and virtues of developing military leaders: An international comparison. *Military Psychology, 18*, 557–568.
- McCauley, C. D, Van Velsor, E., & Ruderman, M. N. (2010). Introduction: Our view of leadership development. In E. Van Velsor, C.D. McCauley, & M. N. Ruderman (Eds.), *The Centre for Creative Leadership Handbook of Leadership Development* (3rd ed., pp. 1–26). San Francisco: Jossey-Bass Publications.
- McCoy, B. P. (2007). *The Passion of Command: The Moral Imperative of Leadership*. Quantico, Virginia: Marine Corps Association.
- Milgram, N. A., Orenstein, R. & Zafrir, E. (1989). Stressors, Personal Resources and Social Support in Military Performance during War. *Military Psychology, 1*, 185–199.
- Morgan, C. A., Cho, T., Hazlett, G., Coric, V., & Morgan, J. (2002). The impact of burnout on human physiology and on operational performance: A prospective study of soldiers enrolled in the Combat Diver Qualification Course. *Yale Journal of Biology and Medicine, 75*, 199–205.
- Mullin, S., & Shriberg, D. (2005). Military leadership. In: A. Shriberg, D. Shriberg, & R. Kumari (Eds.), *Practicing Leadership: Principles and Applications* (3rd ed., pp. 225–243). New York: Wiley.
- Overdale, S. & Gardner, D. (2012). Social Support and Coping Adaptability in Initial Military Training. *Military Psychology, 24*, 312–330.
- Pearlin, L. I., & LeBlanc, A. J. (2001). Bereavement and the loss of mattering. In T. J. Owens, S. Stryker, & N. Goodman (Eds.), *Extending Self-esteem Theory and Research* (pp. 285–300). Cambridge: Cambridge University Press.
- Peterson, C., & Seligman, M. E. P. (2004). *Character Strengths and Virtues: A Handbook and Classification*. Oxford: Oxford University Press.
- Picano, J., & Roland, R. R. (2012). Assessing psychological suitability for high-risk military jobs. In J. H. Laurence & M. D. Matthews (Eds.), *The Oxford Handbook of Military Psychology* (pp. 148–157). New York: Oxford University Press.
- Picano, J., Roland, R. R., Rollins, K. D., & Williams, T. J. (2002). Development and validation of a sentence completion test measure of defensive responding in military personnel assessed for non-routine missions. *Military Psychology, 14*, 279–98.
- Rosenberg, M., & McCullough, C. (1981). Mattering: Inferred significance and mental health. *Research in Community and Mental Health, 2*, 163–182.
- Sarason, I. G., Pierce, G. R., & Sarason, B. R. (1994). General and specific perceptions of social support. In W. Avison & I. Gotlib (Eds.), *Stress and Mental Health: Contemporary Issues and Prospects for the Future* (pp. 151–177). New York: Plenum.

- Sivik, T., Delimar, D., Korenjak, P., & Delimar, N. (1997). The role of blood pressure, cortisol, and prolactin among soldiers injured in the 1991–1993 war in Croatia. *Integrative Physiological and Behavioral Science*, 32, 364–375.
- Smith, H. A., Wolfe-Clark, A. L., & Bryan, C. J. (2016). An Exploratory Study of the Mental Toughness Psychological Skills Profile Psychometrics, and the Mediating Effect of Social Support Sources on Mental Toughness and Suicidal Ideation Among Military Police. *Journal of Police and Criminal Psychology*, February 2016, 1–9. doi: 10.1007/s11896-016-9192-y.
- Snider, D., & Matthews, L. J. (2012). *The Future of the Army Profession* (2nd ed.). Boston: McGraw-Hill.
- Stetz, T. A., Stetz, M. C., & Bliese, P. D. (2006). The importance of self-efficacy in the moderating effects of social support on stressor-strain relationships. *Work & Stress*, 20(1), 49–59.
- Stout, R. J., Cannon-Bowers, J. A., Salas, E., & Milanovich, D. M. (1999). Planning, shared mental models, and coordinated performance: An empirical link is established. *Human Factors*, 41, 61–71.
- Thoits, P. A. (1986). Social support as coping assistance. *Journal of Consulting and Clinical Psychology*, 54, 416–423.
- Turner, R. J. (1981). Social support as a contingency in psychological well-being. *Journal of Health and Social Behavior*, 22, 357–367.
- US Army. (2012). *Army Doctrine Publication (ADP) 6–22 Army Leadership*. Washington: U.S. Army.
- US Department of the Army. (2015). *FM 6–22. U.S. Army Field Manual 6–22. Army Leadership*. Washington: Department of Army.
- Wagner, M. T., Williams, J. M., & Long, C. J. (1990). The role of social networks in recovery from head trauma. *International Journal of Clinical Neuropsychology*, 12, 131–37.
- Westman, M. (1990). The relationship between stress and performance: The moderating effect of hardiness. *Human Performance*, 3, 141–155.

