Human-Performance Optimization: Social Considerations for Leadership and Team Cohesion

by Dr. Jessica Gallus and MAJ Robert L. Green

To most Soldiers and Army civilian employees, many of the topics the Chief of Staff of the Army (CSA)'s Strategic Studies Group (SSG) is researching may seem alien or difficult to relate to military operations, yet the complexity of future operations will require Soldiers, teams and leaders to attain capability in leveraging social competencies to meet mission requirements.

Consider this from the Army's human-dimension concept: "How Soldiers and Army civilians interact with and are influenced by others' beliefs, behaviors, feelings and interpersonal interactions makes up the social component. Social fitness consists of individual well-being through self-discipline, developing and maintaining trusted, valued relationships and fostering good communication with others."[1]

Of the five broad areas of strategic and operational importance to land forces that the CSA directed the SSG to study, one is human-performance optimization (HPO). This article describes the HPO effort broadly, but it focuses predominantly on the social aspects of human performance. Each topic is summarized from a layman's perspective, then a brief description follows of how the ideas are interrelated as well as applicable to the military.

HPO framework

The HPO framework in its simplest form can be described within the context of three key domains: physical, cognitive and social (Figure 1). Per the Army's human-dimension concept, enhancing these domains will provide the foundation for maximizing individual and team performance. The goal is to improve "performance through the identification, development and optimal integration of human capabilities."[2]

Aspects of the physical domain include fitness, health, injury prevention and recovery. The cognitive domain examines areas such as intelligence and memory. Resilience, trust, cohesion and emotion regulation are just a few of the components of the social domain.

Figure 1. HPO research framework.

Recently the SSG, in conjunction with the U.S. Army Research Institute (ARI) for the Behavioral and Social Sciences,[3] hosted a workshop to explore areas of research related to the social domain. The title of the workshop was "[HPO] in the Social Domain: Hard Problems, Fuzzy Constructs and Huge Potential." The workshop's core was these topics: "self-compassion and trauma";[4] "leadership and psychological resilience in the military: an occupational-health perspective";[5] "the functions and dysfunctions of teamwork";[6] "emotion, regulation and performance dynamics";[7] "group emotion: how it works and why it matters";[8] and "afterwar: moral injury and healing."[9]

Self-compassion

Self-compassion is "compassion directed inward, relating to ourselves as the object of care and concern when faced with difficult and painful experiences."[10] Essentially, self-compassion is a person's ability to recognize and acknowledge problems vs. suppressing them, and then taking healthy steps toward dealing with those problems.

In many instances people tend to be more judgmental and critical of themselves than they would be of others. Consider times when friends or coworkers were negative about their own performance and you as an outsider told them they were being too harsh or negative. If a person can offer inward support and acceptance the same as they might offer it to a friend, they are exercising self-compassion.

A lack of self-compassion can contribute to a range of negative consequences, including numbing, detachment and avoidance, while greater self-compassion can have a positive impact on overall health and well-being. This does not imply that in the midst of a firefight a Soldier should stop and think about his or her feelings. That probably isn't the right time or place. But it is important for Soldiers to reflect on and make sense of their experiences at some point vs. suppressing them indefinitely. The presence of self-compassion shows promise in increasing resilience and reducing some of the negative effects of trauma such as post-traumatic stress disorder (PTSD).

Occupational-health perspective

The key idea behind the "leadership and psychological resilience in the military: an occupational-health perspective" presentation was the potential for increased effectiveness created when good leaders take additional steps toward modeling or supporting specific behaviors that contribute to improved physical and mental health.

The Army Operating Concept highlights the importance of effective leadership given current and future environments, which will require "cohesive teams that thrive in conditions of uncertainty, … [l]eaders [who] foster trust among other leaders and Soldiers, … [l]eaders and Soldiers [who] are committed to each other and the Army professional ethic … [and leaders who] remain resilient and preserve their moral character while operating in environments of persistent danger."[11]

Examples of leader behaviors that can contribute to increased effectiveness include sleep leadership, preventive-medicine leadership, combat-operational-stress control leadership, health-related leadership, resilience-training leadership, emotion-regulation leadership and post-traumatic growth leadership.

Take sleep leadership, for example. Research indicates that in units where leaders place importance on quality sleep, unit climate and cohesion can improve over and above the benefit they get from just generally being a good leader. Leaders can emphasize sleep by asking Soldiers about their own sleep, including it as an important factor in planning operations and training, and by providing sleeping areas conducive to good sleep (e.g., quiet, dark, proper temperature) to the extent possible based on available resources and the environment.

Teamwork

When we think of improving teams, it is not uncommon for organizations and leaders to focus almost exclusively on areas for improvement, whether due to gaps in training, poor or inexperienced leadership and/or insufficient resources to meet the mission. The "functions and dysfunctions of teamwork" research emphasizes the importance of understanding teams from a holistic perspective to optimize characteristics that contribute to functional team behaviors, processes and outcomes, and to minimize dysfunctions that detract or actively hurt the team.

While the research is ongoing, it is believed that functional factors support higher effectiveness when present and contribute to ineffectiveness when absent. Conversely, dysfunctional factors create ineffectiveness but allow effectiveness when they are reduced.

	Attitude/motivations	Cognition	Behavioral
Functional	Trust Resilience Cohesion	Accurate shared mental models Shared situational awareness	Conflict management Cooperation Leadership
Dysfunctional	Distrust Task conflict Distress	Groupthink Polarization Shared-information bias	Member ostracism/exclusion Aggression Bullying

Figure 2. Function and dysfunction.

Both functional and dysfunctional factors consist of attitudes and motivations, cognition and behavioral elements. Examples of each are shown in Figure 2. When teams are able to examine both their functional and dysfunctional aspects, they can identify the steps necessary to achieve higher levels of performance.

Performance dynamics

The "emotion, regulation and performance dynamics" research describes some of the connections between emotion and performance by exploring emotion and performance episodes in unison by overlapping emotional experiences with performance episodes.

Consider, for example, the idea that regulating emotion is taxing to a person. The more regulation required, the fewer resources a person has for regulating other important functions like task attention or interpersonal behaviors. If too much regulation is required, a person can reach a burnout state, which can result in reduced self-control, which in turn contributes to increased attention difficulties like excessive mind-wandering and uncivil behavior.

These negative behaviors can reduce performance in individuals and can negatively impact team performance. Conversely, positive emotional states can contribute to improved resources, attention and performance.

Group emotion

While it is generally well understood that individuals have emotions, what is somewhat less clear is the emotional interplay among groups of people leading to group emotion. Group emotions can arise from the "bottom-up," in which processes such as emotional contagion – the largely automatic sharing of emotions among group members – can lead to group mood arising in a group. The person the group pays the most attention to, such as the leader, can be particularly powerful in changing the emotional state of the group. Further, most often the people in the group who are "catching" the other person's emotional state don't realize it is happening.

An additional aspect of the "bottom-up" perspective vis a vis the "group emotion: how it works and why it matters" research relates to the diversity of emotional traits within a group. Groups with members who have emotionally diverse emotional traits perform more poorly than groups with homogenous emotional traits. This holds true even in groups with all negative traits.

From a "top down" perspective, group emotion can also be instituted "from the top" in the form of emotional culture (the deep underlying assumptions, values and norms regarding what emotions are allowed to be expressed or suppressed in the group). A study examining emotional culture in a civilian workforce indicated that emotional culture can influence employee job satisfaction, teamwork, burnout and absenteeism and can ripple out to the clients of the organization as well.

In sum, group mood in all its forms has been shown to be a factor in group attitudes, cognition and performance.

Afterwar

Moral injury results when individuals cannot make sense of their experience within the context of his or her own moral code. Moral injury isn't a new idea; it can be found in classic Greek tragedies.

Moral injury is not PTSD, which is – at least in its narrowest sense – a fear-conditioned response to life threat. And unlike PTSD, moral injury does not yet carry stigma. The feelings associated with moral injury are guilt, shame, resentment, indignation or a sense of betrayal.

Moral injury can result from one's own actions, from the actions of others or even from those one witnesses as a close bystander. For example, a Soldier could feel guilty for not being there to save a buddy on the battlefield, or may feel resentment or shame after complying with an order that resulted in a tragic outcome that is seemingly unwarranted or avoidable.

Offsetting the negative aspects outlined are positive emotions such as trust, gratitude, forgiveness and hope. Often what is required is a trusting relationship through which a Soldier comes to have hope in himself/herself because someone else has hope in them. Or a Soldier comes to feel trust when his or her chain of command shows support for his or her anxiety and acknowledges his or her sense of distress.

Connections

While the preceding paragraphs don't do justice to the presentations or the complexity of the research discussed, one can see the connections among these subjects. How do the ideas described relate to leadership and team cohesion? This section will connect the ideas in a context relevant and meaningful to the Army.

Let's begin with self-compassion. Everyone encounters stress and conflict in their daily interactions and duties. These can include an argument with a spouse or significant other; conflict with a coworker, subordinate or supervisor; getting bad news about a promotion or assignment; or any number of things that cause a negative emotional response. By acknowledging and dealing with negative emotions rather than suppressing them, a person can reduce the drain on his or her emotional resources. Instead of beating yourself up over these stressors, be an "internal ally"[12] or advocate and support yourself as you would a coworker or fellow Soldier. By exercising self-compassion, one can reduce loss of performance due to emotional drain.

Emotional drain has a negative impact on performance through loss of attention and self-control. Negative emotional states can spread across a group through emotional contagion, thus reducing an entire team's effectiveness. These negative aspects can contribute to team dysfunction and undermine functional team dynamics, further degrading team performance.

Leaders can play a key role in this cycle. If they are emotionally drained and lacking the ability for self-regulation, they will not likely model or encourage healthy behaviors. Should they set positive examples and create a climate conducive to healthy behavior, leaders can help to improve individual and team performance.

The Army's human-dimension concept offers the following regarding stress and performance: "The Army must accelerate its efforts to understand the effects of acute and chronic stress. Soldiers and Army civilians who are physically fit, cognitively ready and socially, emotionally, spiritually and morally fit maintain a strong commitment to the profession while being more resilient to the effects of prolonged exposure to stress. Thus, it is critical that individuals and units understand how stress affects their performance and how to master techniques that optimize performance."[13]

Figure 3 illustrates in a very basic and linear manner possible outcomes for team performance based on how a person (the self) reacts to stresses, especially if the person is the leader of the team.
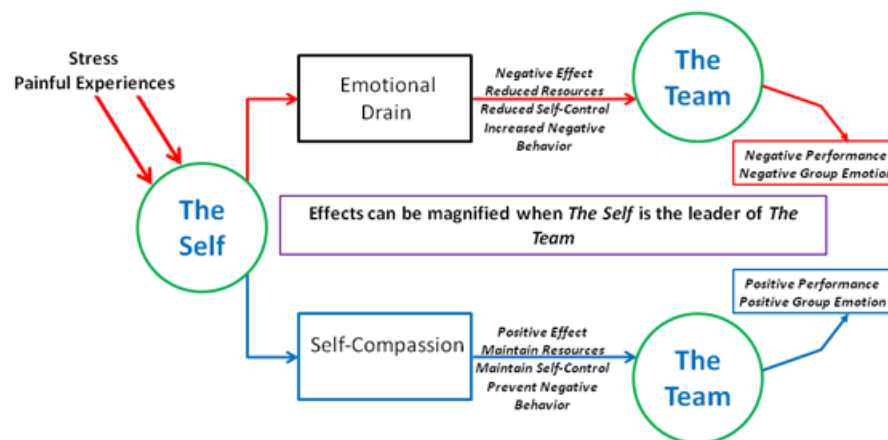

Figure 3. Team performance conceptual model.

How does all of this relate to moral injury? One could argue that factors such as a reduced capacity for self-control, reduced resources to cope with stress or negative emotions and a lack of self-compassion may contribute to moral injury through 1) either poor judgment or a diminished capacity to process what has happened, or 2) a piling up of bad luck and events which aren't properly processed. Just as one can become more susceptible to disease with a weakened immune system, one may be at greater risk for moral injury when resources to withstand difficulties (resilience) is compromised from previous stresses.

Also, if leaders and fellow Soldiers are experiencing reduced resources and degraded resilience, a person experiencing moral injury may be without support. Trusting relationships are key, and a sense of trust in the system allows Soldiers with moral injury to come forward and seek help.

What are the implications for Army leaders? From the tactical level to the highest levels of the Army, each Soldier is part of a team. Recognizing the impact individuals, especially leaders, can have on team cohesion, emotional states and performance are important in maximizing effectiveness. Understanding how the concepts described in this article impact effectiveness and health are a critical first step in developing resilient and cohesive teams prepared to meet current and future challenges.

While the HPO research ongoing for the CSA is far from complete, it is clear there are several areas of great potential for improving individual and team performance. This article discussed only a few areas and dealt exclusively with the social domain. Even with this fairly narrow focus, it seems clear the Army can continue to improve individual and team performance. Doing so would enable the Army to become the world leader in HPO.

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Notes

[1] TRADOC Pamphlet 525-3-7, **The U.S. Army Human-Dimension Concept**, May 21, 2014.
[2] Ibid.
[3] Other organizations represented in the workshop include the Consortium for Health and Military Performance, Walter Reed Army Institute of Research (WRAIR) and the Army Resiliency Directorate.
[4] Presented by Dr. Katherine Dahm, Department of Veterans Affairs; for more information, contact Dahm at katherine.dahm@va.gov.
[5] Presented by Dr. Amy Adler, WRAIR; for more information, see the following Website: http://wrair-www.army.mil/ReAndDevelop_MilPsychiatryAndNeuroscienceResearch.aspx, or contact Adler at amy.b.adler.civ@mail.mil.
[6] Presented by Dr. Marissa Shuffler, Clemson; for more information, contact Shuffler at mshuffl@clemson.edu.
[7] Presented by Dr. Howard Weiss, Georgia Institute of Technology; for more information, see the following Website: http://psychology.gatech.edu/weisslab/index.html, or email Weiss at hmweiss@gatech.edu.
[8] Presented by Dr. Sigal Barsade, The Wharton School, University of Pennsylvania; for more information, see the following Website: https://mgmt.wharton.upenn.edu/profile/1304/, or contact Barsade via Joseph Frank Bernstein, professor of management; The Wharton School, University of Pennsylvania; Suite 2000, Steinberg-Dietrich Hall; Philadelphia, PA 19104, (215) 898-1373 or barsade@wharton.upenn.edu.
[9] Presented by Dr. Nancy Sherman, Georgetown University; for more information, see the following Website: www.nancysherman.com; or email Sherman at shermann@georgetown.edu.
[10] Dahm, "Self-Compassion and Trauma: Research and Recommendations," presented March 18, 2015.
[11] TRADOC Pamphlet 525-3-1, **The U.S. Army Operating Concept**, Oct. 31, 2014.
[12] Dahm.
[13] TRADOC Pamphlet 525-3-7.

Acronym Quick-Scan

ARI – Army Research Institute
CSA – Chief of Staff of the Army
HPO – human-performance optimization
PTSD – post-traumatic stress disorder
SME – subject-matter expert
SSG – Strategic Studies Group
WRAIR – Walter Reed Army Institute of Research