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Promoting Psychological Resilience in the U.S. Military

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Summary

Study Background, Purpose, and Approach

The long and frequent deployments of U.S. armed forces associated with Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF), combined with the other consequences of combat, such as exposure to trauma, have tested the resilience and coping skills of U.S. military service members and their families. While most military personnel and families are resilient under these difficult circumstances, many also experience difficulties handling stress at some point.

Psychological resilience refers to the process of coping with or overcoming exposure to adversity or stress. With regard to mental health interventions, psychological resilience is more than an individual personality trait—it is a process involving interaction among an individual, that individual’s life experiences, and current life context. For example, resilience can apply to contexts relevant either to prevention (before exposure to stress) or to treatment (when recovering from the harmful effects of such stress).

Over the past several years, DoD has implemented a number of programs and strategies to promote psychological resilience among service members. Although the value of resilience programming is widely accepted, little is known empirically about the programs’ effectiveness or the extent to which they are based on factors identified by social and behavioral science as contributing to resilience in individuals or groups. Although some previous research has shed light on the factors that foster psychological resilience, this research has typically not been assembled in a summary form that can be used easily to design programs. Moreover, previous research has not fully examined how these factors might apply in the military.

To assist DoD in understanding factors and methodologies that are informed by social and psychological research and may be useful in promoting psychological resilience in service members and their families, RAND NDRI conducted a study to identify evidence-informed practices for promoting factors that foster psychological resilience. The study also assessed selected resilience programs to determine whether they incorporate evidence-informed practices to promote resilience and includes a literature review and a program review.

Factors That Promote Resilience: Findings from the Literature Review

Using the working definition of psychological resilience specified above, we conducted a systematic review of the scientific literature on psychological resilience. The review had a twofold purpose:

- to identify evidence-informed factors that promote psychological resilience (i.e., resilience factors)
- to assess the strength of the evidence base associated with each factor.

We identified 270 relevant publications. The initial set of evidence-informed factors for promoting psychological resilience, based on these publications, was identified by the research team. These evidence-informed factors were confirmed by an expert review process, yielding 20 evidence-informed factors associated with resilience. We categorized these resilience factors according to whether they operated at the individual, family, organization (or unit), and community levels. We used such an organizing framework to distinguish intrinsic factors that promote resilience within an individual from resilience factors that involve other individuals who are part of a group (e.g., family, organization, community). Each factor is listed and defined below.

Individual-Level Factors

- **Positive coping.** The process of managing taxing circumstances, expending effort to solve personal and interpersonal problems, and seeking to reduce or tolerate stress or conflict, including active/pragmatic, problem-focused, and spiritual¹ approaches to coping
- **Positive affect.** Feeling enthusiastic, active, and alert, including having positive emotions, optimism, a sense of humor (ability to have humor under stress or when challenged), hope, and flexibility about change
- **Positive thinking.** Information processing, applying knowledge, and changing preferences through restructuring, positive reframing, making sense out of a situation, flexibility, reappraisal, refocusing, having positive outcome expectations, a positive outlook, and psychological preparation
- **Realism.** Realistic mastery of the possible, having realistic outcome expectations, self-esteem and self-worth, confidence, self-efficacy, perceived control, and acceptance of what is beyond control or cannot be changed
- **Behavioral control.** The process of monitoring, evaluating, and modifying emotional reactions to accomplish a goal (i.e., self-regulation, self-management, self-enhancement)

¹ Spiritual coping may include the adoption of faith-based beliefs and values as a form of positive coping, receiving support that draws upon those beliefs and values, and also as a form of belongingness through participation in spiritual/faith-based organizations, protocols, ceremonies, etc.

- **Physical fitness.** Bodily ability to function efficiently and effectively in life domains
- **Altruism.** Selfless concern for the welfare of others, motivation to help without reward

Family-Level Factors

- **Emotional ties.** Emotional bonding among family members, including shared recreation and leisure time
- **Communication.** The exchange of thoughts, opinions, or information, including problem-solving and relationship management
- **Support.** Perceiving that comfort is available from (and can be provided to) others, including emotional, tangible, instrumental, informational, and spiritual support
- **Closeness.** Love, intimacy, attachment
- **Nurturing.** Parenting skills
- **Adaptability.** Ease of adapting to changes associated with military life, including flexible roles within the family

Unit-Level Factors

- **Positive command climate.** Facilitating and fostering intra-unit interaction, building pride/support for the mission, leadership, positive role modeling, implementing institutional policies
- **Teamwork.** Work coordination among team members, including flexibility
- **Cohesion.** Unit ability to perform combined actions; bonding together of members to sustain commitment to each other and the mission

Community-Level Factors

- **Belongingness.** Integration, friendships, including participation in spiritual/faith-based organizations, protocols, ceremonies, social services, schools, and so on, and implementing institutional policies
- **Cohesion.** The bonds that bring people together in the community, including shared values and interpersonal belonging
- **Connectedness.** The quality and number of connections with other people in the community; includes connections with a place or people of that place; aspects include commitment, structure, roles, responsibility, and communication
- **Collective efficacy.** Group members' perceptions of the ability of the group to work together

Of the 270 documents that we reviewed:

- There was generally very little rigorous research available across the different resilience factors.
- Only 11 reported results from a randomized design—the strongest form of scientific evidence for intervention effectiveness.
- The individual-level factors with the strongest evidence in the literature were positive thinking, positive affect, positive coping, realism, and behavioral control. These factors were rated as having either moderate evidence (based on cross-sectional correlational or observational design) or strong evidence (based on a randomized design or other longitudinal design).
- Among the family-level factors, family support had the most evidence.
- For unit-level factors, positive command climate had the most evidence.
- For community-level resilience factors, belongingness had the most evidence.

Incorporation of Evidence-Informed Factors in Resilience-Promotion Programs: Findings from Program Review

Next, we examined the extent to which these evidence-informed factors were reflected in resilience-promotion programs relevant to DoD. We conducted interviews with representatives from 23 relevant programs and gathered information about their structure, barriers to implementation and operation that they face, and how the programs assess their effectiveness. Most of the programs were targeted to military members or their families. Every program addressed at least one phase of deployment. Most of the programs delivered these services via workshops or classes, though other forms of services were also provided.

Consistent with the literature review, we found that most programs commonly emphasize one or more of these five individual-level factors: positive thinking, positive coping, behavioral control, positive affect, and realism training. A majority of programs also incorporate positive command climate and teamwork (with less at the unit level). Enhancing family communication was also a relatively widely employed approach to promoting resilience among the programs, though there was less evidence for that family factor than for support. Belongingness was the community factor most widely used by programs.

The most widely cited barriers to program implementation and operations were not specific to resilience factor content and reflect general barriers to implementing novel programs in the military setting. Common barriers include lack of support or “buy-in” from military leadership, logistical issues (such as maintaining adequate staffing, coordinating events, and finding appropriate working space), and lack of sustainable funding. Less commonly reported were barriers specific to implementing resilience

content, which were attributed to mental health stigma or difficulty tailoring program content to nonclinical military audiences. Additionally, there are potential barriers to teaching cognitive skills during predeployment because service members are already undergoing rigorous training over very long days and are cognitively depleted because of anxiety and depression associated with anticipating separation and being in harm's way. These conditions make it difficult to find time to practice new skills daily, as recommended. Even among those programs that cited barriers specific to implementing resilience content (such as maintaining interest in stress-related topics, or optimally timing trainings), strong support from leadership was consistently cited as integral to addressing these barriers.

With respect to measuring effectiveness, programs showed considerable variation in their definitions of resilience and the measures they used to gauge program effectiveness. At the individual level, commonly used measures were mental health–related, implying that resilience is defined in terms of the absence of mental health symptoms or conditions such as PTSD, depression, anxiety, and anger. However, others included measures of well-being, positive affect, self-regulation, and mindfulness, reflecting a focus on strengths, rather than deficits. Others focused on performance and functioning, either in general (e.g., using a global assessment tool) or for targeted populations (e.g., reduced productivity for workers, return to duty or reduced training failures for service members). At the family, unit, and community levels, a variety of other measures were used to assess effectiveness of the programs that targeted those populations, including family satisfaction, family communication patterns, unit engagement, and perceived organizational support. No standard measures of resilience or outcomes were used across resilience programs.

We found that only five of the 23 programs had conducted formal assessments of their effectiveness. Because of this, there is limited evidence available as to how well the programs are working or would work if they were implemented in the military. Where evidence is available, the effects appear to be positive but modest. We found that many programs gathered feedback in order to refine and improve their programs. Others have based their programs on years of documented scientific evidence from other studies, which guided the programs' development.

Recommendations for Policy and Programs

Define Resilience

Our literature review identified a variety of resilience definitions, making a summary of the field difficult. Senior commanders and policymakers should carefully formulate a definition of resilience that reflects both the literature and the military culture as a necessary first step in building any existing programs. A clear definition will clarify

program stakeholders' understanding of their mission and will also provide clear guidance for those developing program outcome measures.

Integrate Resilience Programming into Policy and Doctrine

For effective implementation of resilience programs, the DoD should consider clear policy to define resilience, to assign roles and responsibilities across the Services, and to provide guidance on program implementation. Because building resilience is largely a function of focused training, such policy could identify the Under Secretary of Defense for Personnel and Readiness as the primary oversight organization for training, implementation, and monitoring. This is important because most resilience researchers are behavioral scientists, whose work would normally inform the military health system; placing responsibility for resilience programs in Health Affairs, however, could possibly hamper implementation of resilience initiatives by operational commanders. Good policy would clearly identify the main factors in building resilience, would properly align oversight with personnel programs, and would allow for flexible implementation that reflects the unique culture of each of the Services.

Strengthen Existing Programs

Evaluation will help to identify strengths and weaknesses of existing programs, possibly aligning with the resilience factors identified here, allowing for improvements to be implemented in an evidence-informed fashion. In addition, randomized controlled trials (RCTs) that compare promising programs with the strongest evidence as well as the current effort to combine programs with the most potential based on current evidence (such as evaluations of the Army's Comprehensive Soldier Fitness (CSF) program, currently underway) are recommended. Finally, additional funding targeted at evaluating existing programs will be needed to accomplish these goals.

Standardize Resilience Measures to Enable Program Comparison

Standardized resilience measures could be applied to a variety of populations in different contexts and allow for a comparison across programs. Such measures would incorporate the evidence-informed factors and could build on or adapt existing metrics of program effectiveness to achieve consensus about what factors comprise resilience, which measures are most valid and reliable for assessing resilience, and their relevance for military populations. This would entail reviewing resilience measures and developing a new resilience measure, based on the overall conceptual structure and list of factors, that is reliable and valid for military populations and their families. The Global Assessment Tool being developed as part of the CSF program for the Army is a step in this direction, although no data on reliability or validity is currently available.

Provide Military Members and Their Families Guidance About the Different Resilience Programs Available

With such a wide variety and rapid increase in programs that are available, it is difficult for individuals to decipher the trade-offs of using different services or programs. A resource guide for resilience programs that compares and contrasts the different types of services offered by different programs would increase awareness about different options.

Incorporate Evidence-Based Resilience Factors

New programs designed to promote resilience should incorporate factors with the most evidence. Thus, the military community will benefit most from programs that teach individual military members and their family members techniques that enhance positive affect, positive thinking, positive coping, realism, and behavioral control. Family-level programs that bolster support, communication, and nurturing; unit-level programs that foster a positive command climate by training military leaders to build mastery and confidence among their troops; and efforts to engage the military community by providing opportunities to participate in integrated activities will likely promote resilience.

Engage Senior Military Leaders

A major challenge to building a resilience program within the military culture is getting support from senior operational leadership. Placing oversight of resilience programs in personnel training programs and training operational commanders to fully understand their role in building a resilience force will help promote values important to the Service cultures. Examples of existing programs include Service career schools for leaders such as the Marine Corps University and the Army's Command and Staff College.

Adopt a Flexible Curriculum

Resilience programs must be designed to dovetail with existing training and community-based programs. At the individual and unit levels, regularly scheduled training should include materials that capture the factors described in this monograph. An excellent example of this is the Marine OSCAR program, which delivers resilience concepts in a format already familiar to Marines alongside existing operational training. Chapel and family programs are ideal examples that promote family and community resilience using existing structures and programs in the community.

Conduct More Rigorous Program Evaluation

Studies with evaluative data need to be encouraged to publish their results. Results from both the literature review and the program review point to the need for more program evaluation. As noted, only 11 documents in the literature review are based on

RCT evaluation design, and only five of the programs reviewed have formally evaluated program success. In general, studies of resilience in the military should enhance scientific rigor by conducting more RCTs and longitudinal studies that span the phases of deployment. This is particularly true for military families, because little research has been published in this area.