

The Impact of Industrial and Organizational (I-O) Psychology on Defense and Security

A strong national defense and security relies on employees capable of performing at a high level when faced with myriad demands resulting from numerous threats. As federal stakeholders consider programs and policy regarding the national response to these changes, the Society for Industrial and Organizational Psychology (SIOP) urges the application of evidence-based methods from industrial and organizational (I-O) psychology.

I-O psychology is the scientific study of working and the application of that science to workplace issues facing individuals, teams, and organizations. Collectively, I-O psychologists bring over a century of conceptual, methodological, and data-analytic expertise in understanding and predicting human behavior in organizational settings. Typical I-O psychology solutions involve analyzing job requirements, measuring employee performance, optimizing employee hiring and training with the aims of maximizing performance and minimizing discrimination/bias, enhancing motivation and leadership, and driving successful organization-level change. Below are some of the ways I-O psychologists can help in the Defense and Security space:

- **CHALLENGE:** Military service members and intelligence professionals often look for ways to optimize performance under stress. In addition, they may experience mental health and well-being issues as a result of traumatic events encountered in the execution of their work. What can the military and government do to reduce the prevalence of these issues and to encourage personnel to seek treatment so that personnel can return to work and contribute to the unit's mission?
I-O IMPACT: Occupational health psychology is a sub-discipline within I-O psychology. Occupational health psychologists possess expertise in: (1) assessing factors associated with resilience and well-being among service members, (2) understanding how leadership and team factors affect the development of mental health symptoms, and (3) providing support for employees who need mental health treatment. For instance, occupational health psychologists can recommend specific training programs to improve the unit's ability to support employees experiencing mental health and well-being issues.
- **CHALLENGE:** The U.S. military continues to experience diversity, equity, and inclusion challenges, including those related to sexual harassment and assault, racial/ethnic discrimination, sexual orientation, and gender identity. These issues lead to stress and retention concerns centered on underrepresented populations.
I-O IMPACT: I-O psychologists possess expertise in studying responses to workplace stressors, such as discrimination, bullying, and harassment, which affect member morale and turnover. I-O psychologists also possess expertise in employment policies, including those involving adverse impact, discrimination, and harassment. I-O psychologists furthermore possess expertise in factors influencing unit cohesion, morale, leadership, and workplace climates and cultures in the context of diversity, equity, and inclusion. I-O psychologists' endeavors in these areas are facilitated by their expertise in research design (e.g., survey development), data analysis, and managing organizational change initiatives.



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- **CHALLENGE:** The increasing prevalence and changing nature of cyber threats, as well as the increasing convergence of cyber and physical security threats, makes it imperative for the Department of Homeland Security (DHS) and the Department of Defense (DoD) to identify, categorize, and code existing cybersecurity jobs, as well as to plan for cybersecurity jobs of the future. However, DHS and DoD have found these tasks to be difficult and need to strengthen their recruitment, hiring, and training efforts in order to fill the large number of vacancies that currently exist across cybersecurity jobs.
I-O IMPACT: I-O psychologists are experts at analyzing existing jobs, including conducting "future-oriented job analyses" aimed at anticipating changes to existing jobs as well as the emergence of future jobs that do not yet exist. I-O psychologists are also experts at designing recruitment strategies, personnel selection systems, and training programs. These efforts can help DHS and DoD optimize their efforts to recruit, hire, and train a highly qualified and diverse workforce for newly revamped as well as anticipated future jobs.
- **CHALLENGE:** Cybersecurity-focused employees can experience high levels of burnout and turnover when their jobs are repetitive and tedious as well as when their work shifts are challenging (e.g., long shifts, night shifts).
I-O IMPACT: I-O psychologists are experts at structuring work shifts, redesigning jobs, and coaching leaders with the aim of sustaining and enhancing motivation and task engagement as well as retaining employees.
- **CHALLENGE:** The 2018 National Defense Strategy calls for an overhaul of Professional Military Education (PME). Part of this overhaul will require proven methods for assessing how PME contributes to service members' development as effective and ethical leaders of a capable and agile force.
I-O IMPACT: Talent assessment approaches are within the arsenal of I-O psychology. I-O psychologists possess rigorous methods for identifying and measuring the knowledge, skills and other attributes that training and education are designed to facilitate. For instance, I-O psychologists possess expertise in various assessment approaches ranging from structured tests through simulated exercise assessments (i.e., assessment centers) to integrity tests. I-O psychologists also know how to connect these knowledge, skills, and other attributes back to on-the-job performance to ascertain whether what was learned in PME is implemented on the job.

SIOP is a community of nearly 10,000 members worldwide with a common interest in promoting the research, practice, and teaching of I-O psychology to enhance human well-being and performance in organizational and work settings. SIOP provides a platform for research scientists, consultants, and practitioners to develop, implement, and evaluate cutting-edge approaches to workplace challenges across sectors. SIOP urges federal policymakers to engage I-O psychologists to promote efficient and effective strategies related to Defense and Security.

To this end, SIOP has launched a new Advocacy Area on Defense and Security. This Advocacy Area features a working group of I-O psychologists in multiple sectors (defense, private industry, public policy, and academia) who possess particular expertise in Defense and Security domains such as those described above. The Advocacy Area will be available to provide evidence-based support to policymakers as they address matters related to DHS, DoD, Congress, and other government and private-sector entities focused on Defense and Security challenges and opportunities.