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Using Industrial-Organizational Psychology to Strengthen the National Security Workforce

The Society for Industrial and Organizational Psychology (SIOP) strongly supports the efforts of the National Academy of Sciences, Engineering, and Medicine to draw from the social and behavioral sciences in enhancing national security. There are many issues pertinent to the behavioral sciences, and the development of an effective national security workforce is among the most essential. The national security workforce is unique. The work of national security relies on expert human judgment, and as such, building a talented and engaged national security workforce is of the utmost importance. The national security landscape is highly dynamic and requires a workforce that can adapt quickly to change and navigate uncertain environments. The work of national security is complex, and thus requires a workforce that is highly trained and supported in their work.

There are many challenges associated with creating an effective workforce. National security agencies must identify these challenges and combat them with scientific best practices, many of which are rooted in the study and practice of industrial and organizational psychology (I-O). I-O is the scientific study of working and the application of that science to find evidence-based solutions to workplace issues facing individuals, teams, and organizations. Among the relevant issues are the recruitment, selection, retention, and management of national security professionals, as well as the development of high-performing teams and competent leaders to support the intelligence community in their work. In 2011, the National Academies of Sciences, Engineering, and Medicine (NASEM) published a report, *Intelligence Analysis for Tomorrow: Advances from the Behavioral and Social Sciences*, that offered a detailed analysis of these issues, which are summarized below.

Recruitment and Selection of National Security Analysts. The intelligence community must recruit and retain the best possible workforce. A strategic approach to human resource management can ensure this goal is met [1]. Individuals vary in personality, cognitive abilities, and motivations that are relatively stable over time and are strong predictors of job performance [2]. Individuals also vary in job-related skills and knowledge, which are less stable and can be acquired through training. The determination of which psychological characteristics are most relevant to job performance in the intelligence community can and should be determined by using scientific job analysis and psychometric validity procedures. Unscientific practices such as conversational job interviews should be avoided as a means of assessing relevant characteristics [3].

Ongoing Development and Leadership to Support Analysts. Once a team is created, ongoing development and support is needed to ensure that the team can perform. It is also unlikely that a new analyst will join the intelligence community with all the skills needed for excellent performance. As such, agencies must be prepared to develop the specialized knowledge and skills it needs in its workforce. Workforce development should be a continuous and pervasive focus of the agencies. This development should follow best practices for identifying training needs, designing instructional methods, and evaluating the success of learning experiences. Specific and timely feedback is an important component of effective learning [4]. So too is the creation of an environment where analysts feel able to admit uncertainty and development needs.

The promotion and modeling of continuous learning is something that should happen at all levels of management. Managers can also support others by administering rewards and assessments that are in line with agency goals. Performance management research has identified many factors that improve the usefulness of performance feedback and assessment [5, 6].

Creating a Work Environment that Supports Analyst Work. The structure of national security agencies is complex and can impede effective communication. Teams are a required part of intelligence work, as no single person can master all the skill and knowledge sets needed to solve complex problems [7]. Diversity in experience and perspective is also beneficial to problem solving [8]. Structuring collaboration according to best practice can improve the quality of decisions made by the team, and improve the motivation and retention of team members. Analysts, who are highly skilled and competent, should not be treated as “cogs in the machine” but as autonomous and expert contributors. The meaningfulness of the work they do should be emphasized both in the setting of goals and in the way performance is assessed [5].

In recent years, I-O psychologists have leveraged their unique expertise to ensure multiple teams of researchers are implementing these evidence-based best practices to push the boundaries of scientific innovation. I-O-based findings have been utilized to promote team effectiveness on a number of diverse projects, from working with the Department of Homeland Security (DHS) to examine multi-team systems for critical cyber security incident responses to collaborating with the National Aeronautics and Space Administration (NASA) to ensure astronauts address and account for issues in team cohesion during future trips to Mars and beyond. Moreover, the National Science Foundation (NSF), which co-sponsored the 2011 National Academies report, has also provided funding for several innovative Science of Team Science (SciTS) research projects through its Social, Behavioral, and Economic Sciences Directorate (SBE), which supports basic research to develop a scientific evidence base for improving the performance, effectiveness, management, and development of organizations.

SIOOP is a community of more than 8,000 members worldwide with a common interest in promoting the science, practice, and teaching of I-O psychology to enhance human well-being and performance in organizational and work settings. SIOOP provides a platform for scientists, academics, consultants, and practitioners to collaborate, implement, and evaluate cutting-edge



SCIENCE FOR A SMARTER WORKPLACE

approaches to workplace challenges, such as critical team development strategies, across sectors.

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