

Individual Differences¹²

The study of individual differences concerns how people differ in their abilities, attitudes, personalities, interests, and other ways. Psychologists study the psychological dimensions on which people differ, the relationships between different dimensions, and the relationships between these dimensions and other characteristics. Industrial-organizational (I-O) psychologists apply the study of individual differences to the workplace.

Employers are interested in identifying applicants that possess the knowledge, skills, and abilities that will make them a good fit for the job to which they are applying. Thus, many I-O psychologists help employers identify and hire applicants using tests and other measures of individual differences, such as multiple-choice tests cognitive abilities, personality inventories, interviews, and biographical information. General mental ability has been found to predict job performance in nearly all jobs, especially complex jobs (Schmidt & Hunter, 2004); however, it cannot explain all of the individual differences in job performance. I-O psychologists have also found that conscientious (e.g., hard-working, reliable, and organized) individuals tend to be better performers on the job and in training (Barrick, Mount, & Judge, 2001). Using measures of individual differences in the hiring process benefits employers (by choosing the most qualified applicants), applicants (by selecting them based on merit and reducing the chance they are hired for jobs they cannot perform successfully), and customers (by improving goods and services).

Hiring is not the only area in which individual differences help I-O psychologists make scientifically-based recommendations to employers. Individuals differ in their learning styles, what motivates them to perform, and what values and preferences attract them to an occupation or employer. I-O psychologists develop hypotheses and gather empirical evidence to shed light on personality, ability, learning, and motivation, to inform practices such as performance appraisals, training, leadership development, and employee well-being (Hough & Oswald, 2008). For example, a group of I-O psychologists developed, tested, and found support for a hypothesis that meaningful memory (the ability to remember an integrated body of information like a story) uniquely predicts training performance (Cucina, Su, Busciglio, & Thompson Peyton, 2015).

I-O psychologists also measure individual differences in employees' attitudes, such as their job satisfaction and employee engagement, using employee surveys. I-O psychologists have found a medium-sized relationship between individual differences in job satisfaction and performance (Judge, Thoresen, Bono, & Patton, 2001). Thus, many employers are interested in measuring individual differences in job satisfaction. The study of individual differences is also relevant to employers' efforts to improve work-life balance, employee well-being, and other outcomes. Knowledge about individual differences helps employers develop more customized and inclusive human resource practices (e.g., telework) so that employees are happy, healthy, and productive.

¹ [This work is licensed under a Creative Commons Attribution 4.0 International License](#). As noted in the license agreement, licensees may use this material in whole or in part, and also adapt the material as long as the licensees give appropriate credit, provide a link to the license, and indicate if changes were made.

Author Contact: textbook@siop.org

² Please cite as: Individual Differences. (2018, August 28). Retrieved from <https://www.siop.org/Events-Education/Educators/Incorporating-I-O>

Nearly all individual differences in psychology cannot be observed directly. Instead, these are measured using tests, surveys, or ratings. To develop these measures properly, I-O psychologists must know psychometrics (i.e., the statistical analyses and theories underlying standardized test development). When these measures are used to make employment decisions (e.g., selecting applicants, promoting employees), legal guidelines (e.g., U.S. Equal Employment Opportunity Commission regulations) must be followed. Some tests (e.g., general mental ability tests) may have adverse impact against protected groups. Thus employers may need to balance the ability to predict future performance with diversity goals. As a result, I-O psychologists are concerned with ensuring that their measures are used in a legally defensible, ethical, and fair manner.

References

- Barrick, M. R., Mount, M. K., & Judge, T. A. (2001). Personality and performance at the beginning of the new millennium: What do we know and where do we go next? *International Journal of Selection and Assessment, 9*, 9–30. doi: 10.1111/1468-2389.00160
- Cucina, J.M., Su, C., Busciglio, H.H., & Thompson Peyton, S. (2015). Something more than g: Meaningful Memory uniquely predicts training performance. *Intelligence, 49*, 192-206.
- Hough, L. M. & Oswald, F. L. (2008). Personality Testing and Industrial–Organizational Psychology: Reflections, Progress, and Prospects. *Industrial and Organizational Psychology, 1*, 272–290. doi: 10.1111/j.1754-9434.2008.00048.x
- Judge, T.A., Thorensen, C.J., Bono, J.E., & Patton, G.K. (2001). The job satisfaction-job performance relationship: a qualitative and quantitative review. *Psychological Bulletin, 127*(3), 376-407.
- Schmidt, F. L., & Hunter, J. E. (2004). General mental ability in the world of work: Occupational attainment and job performance. *Journal of Personality and Social Psychology, 86*, 162–173. doi:10.1037/0022-3514.86.1.162