



Maximizing Impact Through the Synergy of Psychology and Analytics

I-O Psychology and People Analytics: A Community of Impact

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Table of Contents

Authors..... 1

Content..... 2

Notes 5

References 6

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Dr. Kristin N. Saboe is a nationally recognized leader and industrial-organizational psychologist who uses science and research to drive large-scale strategy and policy. From her service in the U.S. Army as a researcher to her work leading the Employee Voice function at Google and as a professor at Georgetown University to her prior efforts leading talent strategy and research at The Boeing Company, her career centers on helping people and organizations reach their utmost potential. She holds a PhD in Industrial-Organizational Psychology and is a fellow of the American Psychological Association, Society for Industrial and Organizational Psychology, and the Society for Military Psychology. She received the early career award from both the Society for Military Psychology and the Society for Industrial and Organizational Psychology, and was recognized for her national leadership by the President George W. Bush Presidential Center in 2019. She is also co-editor of the book *Military Veterans Employment: A Guide for the Data-Driven Leader* and provides pro bono support leading the Government Relations Advocacy Team Committee for the Society for Industrial and Organizational Psychology, as a founding board member of the Military Psychology Foundation, and for several nonprofits.



Amit Mohindra

People Analytics Success

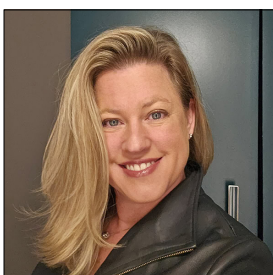
Amit Mohindra, EdD, is the CEO of People Analytics Success, a global analytics and AI advisory, coaching, and education firm, and a founding partner in Future of Work Advisors. After starting as a World Bank research labor economist, he led global teams at Apple, Goldman Sachs, IBM, and McKesson. He is an advisor and limited partner at VC firm SemperVirens, angel investor, and serves on several technology company boards. Amit is a board member and education officer at the Society for People Analytics and is a Top 20 Global People Analytics Influencer. Amit teaches people analytics at Stanford Continuing Studies and will start teaching a graduate analytics course at Babson College in 2026. He has lectured at Cornell ILR, Dartmouth Tuck, and UC Berkeley Haas business schools. He is a Distinguished Principal Research Fellow at The Conference Board. Amit is an electrical engineer and labor economist with a doctorate in organizational change and leadership.



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Dr. Paul Tsagaroulis is the director of people analytics at the University of Virginia, where he and his team use data visualization and storytelling to inform workforce decisions across the university system. He blends IO psychology with analytics to understand work, how people experience it, and its business impact, and has developed people analytics teams across multiple industries. He serves in leadership roles with the Society for Industrial and Organizational Psychology, the Society for People Analytics, and the Data Visualization Society, where he also mentors early-career professionals.



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Dr. Alexis Fink is a seasoned executive and renowned thought leader in people analytics, leadership, and organizational transformation. With leadership roles at Microsoft, Intel, and Meta, most recently as the VP of People Analytics and Workforce Strategy, Alexis has a proven track record of driving significant business results. Additionally, she has served as the president of the Society for Industrial and Organizational Psychology, and has authored over 50 books, chapters, and academic research articles. Alexis seamlessly integrates rigorous research with practical insights to foster transformational change. She is highly regarded as an extraordinary leadership coach and an engaging teacher.

People analytics is defined as “the systematic identification and quantification of the people-drivers of business outcomes, [to] make better decisions” (Van den Heuvel & Bondarouk, 2017, p. 160). I-O psychology is defined as “the scientific study of working and the application of psychological principles to workplace issues facing individuals, teams, and organizations” (SIOP, 2018, p. 5). Psychological theory reveals why people behave as they do. People analytics reveals patterns at scale for better decisions about people—organizations, teams, and individuals. Together, they transform HR from reactive administration to strategic business partners delivering competitive advantage through talent.

People analytics’s transformation of HR has come at a timely moment because it directly addresses organizations’ most urgent and pressing workforce challenges: talent shortages, hybrid work shifts, employee well-being, and, with the advent of generative and agentic artificial intelligence (AI), a radical change in how work is done as well as the nature of the workforce. AI generates excitement about new opportunities but also creates anxieties among workers and causes strategic and operational disruptions across organizations and industries. HR functions, with their increased adoption of people analytics and data-driven decision making, can and should play a leading role in organizations’ adoption of AI with its influence through leadership (in the C-suite, via digital leadership competencies, and through modeling of how to adopt a new technology), stewardship of culture, and accountability for learning and development (Mohindra, 2024).

I-O psychology and people analytics are both interdisciplinary at heart, with elements of behavioral science and data science overlap as core commonalities (see Figure 1). They both address the challenges faced by individuals, teams, and organizations in complex and evolving modern workplaces by drawing on diverse paradigms, ways of thinking, and tool-sets that reflect their multifaceted natures.

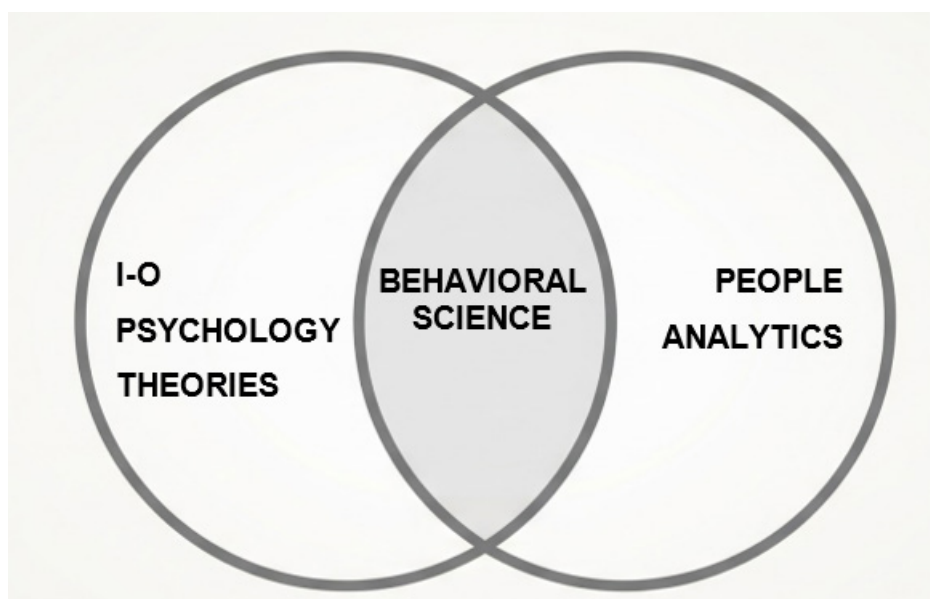


Figure 1. *Cross-Disciplinary Nature of I-O Psychology and People Analytics*

I-O psychology offers theories for understanding employee behavior, motivation, and organizational dynamics through interdisciplinary practice to tackle complex workplace and worker experiences.

Although the work of people analytics is functionally not new, the convergence of skills, strategic positioning of the function in business settings, and unified branding is a renaissance. People analytics has grown apace since the 2010 Harvard Business Review article on talent analytics (Davenport et al., 2010). Presently, most modern organizations with more than 500 employees report having a formal people analytics team, ranging in size from a single person to more than 100 people (Insight222, 2025).

People Analytics

People analytics teams serve as strategic enablers across public, private, and not-for-profit sectors. A new professional society was founded in 2024—the Society for People Analytics, modeled after SIOP. People analytics presentations are increasingly frequent at professional conferences such as SIOP’s annual conferences. A recent Society for People Analytics survey of the people analytics community identified SIOP as one of the top three most popular people analytics conferences in the world (One Model, 2025). In 2025, SIOP hosted a Leading Edge Consortium, titled Advancing People Analytics, co-chaired by two prominent people analytics leaders who hold doctorates in I-O psychology: Cole Napper and Stephanie Murphy. The increasing cross-discipline interest in people analytics demonstrates its sustainability.

People analytics draws from different academic and professional fields to enable organizations to derive meaningful insights from workforce data. People analytics teams are typically found in a human resources (HR) function, which provides the business context, domain expertise, and practical applications for workforce data and analytics. They can also be found outside the HR function, reporting to strategy, technology, or operations—functions that are less likely to employ I-O psychology expertise.

I-O Psychology

Applied psychology research for workplace applications is not new; it is what catalyzed I-O psychology through U.S. Department of Defense funding during World War I and II and demonstrated the utility of science applied to industry through Munsterberg’s Hawthorne Studies in the 1920s and ‘30s.

Whereas I-O psychology has underpinned the practice of HR for generations, people analytics is repositioning its relevance for HR and people operations, much as finance revolutionized accounting and marketing revolutionized sales. People analytics increases the rigor of HR through its strategic focus and evidence-based approach. People analytics extends the traditional I-O psychology purview to leverage data in broader ways, understanding and optimizing human behavior in organizations through data infrastructure and engineering, analyses and research, workforce planning, expert consultation, and insights-to-action functional leadership within a human resources or people operations framework.

As a relatively new centralized HR function, people analytics often leverages analysts trained in I-O psychology as a critical area of expertise and anchor role. People analysts often find themselves offering research and data-driven consultation within various business and HR functions (e.g., Bock, 2015), a skill set closely aligned to I-O psychology. As people analytics work has experienced greater centralization, the function has broadened its focus on data-driven mechanisms to enhance the efficiency of talent processes and HR’s criticality for business outcomes.

Bringing Theory to Practice: How I-O Psychology Transforms People Analytics

The symbiotic relationship between I-O psychology and people analytics is a prime example of how communities of science and practice, when combined, create the strongest expertise and drive innovation and advancement. Much like a ship needs both an energy source to keep it running and a rudder or sail to steer, so too does the modern application of data science to employee experiences; in this case, I-O psychology serves as a rudder, and people analytics powers the ship with its diverse bench of skill sets, such as data engineers, psychometricians, and data scientists.

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Abstractly, the complementary nature of I-O psychology and people analytics naturally combine for better analyses, improved products, and more well-rounded outcomes. In practice, their intersection is often more subtle, as skilled people analytics and I-O psychology practitioners apply data science and psychological scholarship to positively influence organizational outcomes.

Example 1: Understanding People as a Strategic Advantage in People Analytics¹

For the last 5 years, healthcare organizations have faced a retention crisis. High burnout and staffing shortages have plagued the industry. Traditional employee surveys capture symptoms but frequently miss nuanced underlying drivers. Introducing personality assessments could contribute to understanding why people experience burnout. Coupled with people analytics, organizations can find strategic insights that can improve employee well-being.

A healthcare system's survey of nurses illustrates this gap. Nine out of 10 nurses found their work meaningful, yet only half felt valued by their organization. Just one-third achieved work-life balance without burnout. These numbers told a story but not the complete one.

The Breakthrough: Layering Personality Data

Researchers organized the results based on a personality assessment, grounded in four traits. When personality profiles were overlaid with survey responses, clear patterns emerged. Nurses fell into two groups: Results-oriented nurses (dominance and conscientious) reported feeling less valued, experienced worse work-life balance, and burned out at twice the rate of relationship-oriented nurses (steadiness and influence).²

Why This Matters

These findings challenged standard retention approaches. Leaders realized results-oriented nurses struggled with healthcare's increasing relational demands and lacked the natural decompression strategies their relationship-oriented colleagues used.

From Insight to Action

The healthcare system created actionable strategies for leaders. This approach transforms how people analytics teams work. Instead of describing problems, they prescribe solutions. Instead of addressing surface symptoms, they target root psychological drivers. The key is leveraging psychological knowledge to turn personality data into real organizational change (Ledet et al., 2020).

Example 2: Behavioral Frameworks as a Strategic Advantage in People Analytics

A federal agency pioneered a workspace transformation before remote work became mainstream. Directors lost their private offices to hot desking, breaking well-established government norms. The transformation team focused on logistics—furniture, technology, and space allocation—while missing the human element.

The Hidden Psychological Challenge

Directors retained formal power but lost visible status symbols. Organizational science shows this combination increases interpersonal conflict and reduces team effectiveness (Anicich et al., 2016). Power without status creates tension. Traditional people analytics could capture drops in engagement or turnover as lagging indicators. However, the root psychological cause remained hidden.

The Behavioral Framework Solution

I-O psychology provided the missing behavioral framework. Stakeholder interviews revealed underlying drivers. The research by Anicich et al. (2016) uncovered workplace dynamics beyond surface metrics. The approach enabled early intervention before negative outcomes materialized. Alternative status markers were implemented, strategic communication addressed concerns, and feedback channels were established.

From Insight to Prevention

Without I-O psychology insight, this initiative risked failure. Instead, the interdisciplinary approach succeeded by combining “workspace” and “headspace” considerations. The transformation team gained trusted advisors who understood both numbers and human behavior. Mixed-method expertise translated organizational challenges into actionable research questions rather than simply measuring problems after they occurred (Leonardi & Contractor, 2018).

The Strategic Advantage

This case demonstrates how I-O psychology shifts people analytics from reactive reporting to proactive understanding. Rather than just measuring what happened, we reveal why it happened and identify interventions that create change.

Innovation Sits at the Crosshairs of Knowledge Communities

These examples underscore a fundamental truth: Robust advancements often emerge from the convergence of diverse perspectives and specialized knowledge. Communities of science, like I-O psychology, generate foundational theories, rigorous research methodologies, and validated instruments. Communities of practice, like people analytics, apply these principles in real-world settings, leverage data, identify new challenges, and generate invaluable insights. When these communities actively inform each other, the result is a powerful feedback loop that drives innovation and creates more effective solutions.

In conclusion, the relationship between I-O psychology and people analytics is not merely one of assistance or co-existence but one of fundamental integration that is jointly building a community of impact. I-O psychology is not simply informing people analytics; it is driving its evolution by providing the unique and critical expertise necessary to move beyond superficial data analysis to deep, contextualized insights. Just as occupational health psychology and other interdisciplinary fields have benefited immensely from the foundational knowledge and practical applications of I-O psychology, so too does people analytics find its strongest footing when grounded in the rich scientific traditions of I-O psychology. This convergence exemplifies what happens when scientific rigor meets practical application, creating something greater than either discipline could achieve alone.

Notes

¹ Contact Paul Tsagaroulis for more information about this pilot study.

² Binary classification requires further validation given limited empirical support for such groupings and the complexity of personality–behavior relationships in healthcare settings.

People analytics find its strongest footing when grounded in the rich scientific traditions of I-O psychology

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