Industrial and Organizational Psychology (2026), **19**, 215–218
doi:10.1017/iop.2026.10090

CAMBRIDGE UNIVERSITY PRESS

COMMENTARY

The match-to-sample task: Adapting insights from cognitive psychology to address I-O construct proliferation

Rachel Helisch, Laura Lakusta, and Jennifer Bragger

Montclair State University, USA
Corresponding author: Rachel Helisch; Email: rachelhelisch@gmail.com

(Received 30 December 2025; revised 24 January 2026; accepted 28 January 2026)

The focal article (Bowling et al., 2026) raises a timely concern regarding construct proliferation in industrial and organizational (I-O) psychology. Consistent with the article's position, we argue that addressing construct proliferation requires methodological innovation capable of discriminating among highly abstract psychological constructs. Adopting a cross-disciplinary perspective, we draw on cognitive psychology to examine how people naturally distinguish among concepts in everyday cognition and adapt a methodology that tests this process for application to construct differentiation in I-O research. This approach culminated in the current version of the match-to-sample (MTS) task, which offers a promising and largely untapped method for distinguishing between both new and existing constructs in the field.

In this commentary, we describe what the MTS task is, explain how it can address core concerns raised in the focal article, and illustrate its relevance using recent research on servant leadership categorization. We conclude by outlining how MTS methods could be extended to examine construct distinctiveness among current theoretically overlapping constructs in I-O psychology, such as related moral leadership theories.

What is the MTS task?

The MTS task is a forced-choice experimental framework widely used in cognitive and developmental psychology to assess categorization and conceptual understanding in both children and adults (Wright et al., 2015). In a typical MTS task, participants are presented with a sample stimulus (e.g., an image or video exemplifying a target concept), followed by two or more comparison stimuli, only one of which belongs to the same conceptual category as the sample. Successful performance requires the participant to identify the option that is "the same kind of thing" as the sample. Crucially, the MTS task can be designed to test abstract concepts, such as participants' ability to categorize social and relational phenomena (e.g., Gentner & Asmuth, 2017; Wright et al., 2015). By manipulating the stimuli, researchers can determine whether participants represent a concept distinctly from competing or adjacent concepts in different contexts.

When adapted for workplace research, the MTS task enables I-O psychologists to address a foundational question that is often assumed rather than empirically tested: whether employees can implicitly distinguish among abstract psychological constructs. This question is especially salient in light of the focal article's concern that construct proliferation frequently stems from insufficient conceptual and empirical differentiation as perceived by one of I-O psychology's primary populations of interest: the average worker.

© The Author(s), 2026. Published by Cambridge University Press on behalf of Society for Industrial and Organizational Psychology.

https://doi.org/10.1017/iop.2026.10090 Published online by Cambridge University Press

Why MTS Is relevant for addressing construct proliferation

The focal article highlights two primary mechanisms through which construct proliferation occurs: (a) insufficient conceptual distinctiveness and (b) failures of empirical distinctiveness due to measurement error. The MTS task offers a solution by shifting the focus from discriminant validity of measures to discriminability of constructs themselves. Rather than asking whether two self-report scales correlate too highly, the MTS assesses whether individuals can reliably distinguish one theoretically defined construct from another when both are represented behaviorally in researcher-controlled scenarios. This capacity is important given that many I-O constructs, such as leadership, are enacted in ambiguous and socially embedded workplace contexts.

Because MTS tasks are implicit, forced choice, and rely less on verbal ability, they reduce several sources of bias highlighted in the focal article. They do not require participants to articulate distinctions using verbal descriptors (e.g., Parolini et al., 2009), nor do they rely on self-reported evaluations (e.g., "my supervisor is ethical"). Instead, MTS tasks leverage categorization, a fundamental cognitive process that operates across language boundaries and mirrors how people may encounter psychological constructs in real-world settings (Harnard, 2017).

Empirical findings: MTS and servant leadership categorization

Recent research applying the MTS paradigm to leadership provides an empirical example of how this method can inform debates about construct proliferation. In a series of studies, leadership behaviors were defined using established theory and embedded into short events of characters interacting. Participants were presented with a sample event portraying servant leadership, followed by two comparison events, only one of which also represented servant leadership, while the other portrayed a different interaction (e.g., task-focused leadership or social interaction without leadership). Across studies, adults selected the correct servant leadership match at rates significantly above chance, indicating that they were able to categorize servant leadership as distinct from nonservant leadership (Bragger et al., 2023; Lakusta et al., 2025). This effect emerged even when social contexts varied across stimuli (e.g., pursuing goals such as kicking a ball into a net versus baking a cake) and when characters were depicted as anthropomorphized animals, thereby minimizing the influence of gender and race stereotypes. Together, these findings suggest that categorization was driven by theoretically defined relational patterns rather than superficial cues. These findings align with prior work arguing that servant leadership is a conceptually distinct leadership construct while also demonstrating that this distinctiveness is cognitively represented by perceivers (Banks et al., 2018; Hoch et al., 2018). Rather than inferring distinctiveness from scale-level discriminant validity, MTS directly tests whether non-SME individuals can distinguish fine-grained servant leadership behaviors from theoretically related alternatives.

Extending MTS to moral leadership constructs

Looking forward to how the MTS can be applied to I-O research, the focal article uses moral leadership constructs, such as ethical, authentic, and servant leadership, as a primary example of potential construct redundancy. This makes moral leadership an ideal domain in which to extend MTS methods. As reviewed by Lemoine and colleagues (2019), these constructs share substantial conceptual overlap but are theoretically distinguished by their core emphases: ethical leadership (EL) centers on norm adherence and moral management; authentic leadership (AL) emphasizes self-awareness, transparency, and alignment between values and behavior; servant leadership (SL) prioritizes balancing stakeholder needs and follower development.

An MTS paradigm could be designed to test whether these distinctions are cognitively represented. For example, to assess whether SL is reliably distinguishable from other forms of moral leadership, participants could be presented with a sample event portraying servant leadership,

https://doi.org/10.1017/iop.2026.10090 Published online by Cambridge University Press

followed by two comparison events, one servant leadership event and one ethical or authentic leadership event. By systematically varying samples, researchers can test whether non-SME (or SME) participants reliably discriminate among moral leadership styles.

Such an approach would directly address the focal article's call to examine whether purportedly distinct constructs "bring something new to the table." If leadership researchers, practitioners, or followers cannot reliably distinguish among moral leadership constructs in an MTS task, this would provide strong evidence of conceptual redundancy. Conversely, successful discrimination would support the theoretical claim that these constructs represent distinct forms of leadership understanding.

The theory of focus would be the "sample" tested against both closely related and more conceptually distinct leadership theories. In an ideal pattern, the central construct would show correlated yet statistically distinct responses relative to related constructs, while exhibiting weaker and qualitatively different relationships with conceptually distant constructs. This aligns with the broader goal of evaluating tightly defined concepts directly against one another in one assessment rather than proliferating new labels for similar relational patterns across several differentially specified constructs. A conceptual figure illustrating this approach could depict leadership constructs (ethical, authentic, and servant) embedded across multiple contexts designed by leadership researchers.

Broader implications and conclusion

We strongly agree with the focal authors that I-O psychology must remain open to multiple ways of understanding work-related phenomena. The goal is not to eliminate new constructs entirely but to ensure that those introduced are theoretically meaningful and empirically warranted. The MTS task represents one such method that can strengthen construct evaluation without replacing existing approaches. By enabling researchers to assess conceptual discrimination directly, the MTS offers a way to complement factor correlations and scale development. It provides a tool for testing whether constructs are distinguishable in the minds of those who perceive and enact them. In doing so, MTS can help the field address construct proliferation not by slowing inquiry but by sharpening it.

We therefore encourage leadership and I-O researchers to consider MTS methods alongside traditional approaches when evaluating new constructs, particularly in domains exhibiting problematic conceptual overlap. Doing so may help ensure that future theoretical developments rest on firmer conceptual foundations, advancing understanding rather than adding to the proliferation problem the focal article thoughtfully identifies.

Data availability statement. The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request. Additionally, a Public Repository containing supplement measurement material has been provided.

Funding statement. This research was supported by the National Science Foundation (grant number 2052245).

Competing interests. Rachel Helisch, Dr. Jennifer Bragger, and Dr. Laura Lakusta are employed at Montclair State University. Dr. Jennifer Bragger and Dr. Laura Lakusta received a grant from the National Science Foundation.

References

Banks, G. C., Gooty, J., Ross, R. L., Williams, C. E., & Harrington, N. T. (2018). Construct redundancy in leader behaviors: A review and agenda for the future. *Leadership Quarterly*, **29**(1), 236–251.

Bowling, N. A., Sessa, V. I., Shaffer, J. A., & Banks, G. C. (2026). Read my lips: No new constructs! Construct proliferation as a threat to the future of I-O psychology. *Industrial-Organizational Psychology*, **19**(2), 186–202.

Bragger, J. D., Hunt, L. N., Helisch, R., Myszko, Z., Kozas, L., Parlitsis, K., Abbasi, F., Morales, S., Stone-Taylor, J., & Lakusta, L. (2023). Adults' event representations: Categorizing servant leadership [Poster presentation]. Annual Meeting of the Cognitive Science Society, Sydney, Australia.

https://doi.org/10.1017/iop.2026.10090 Published online by Cambridge University Press

Gentner, D., & Asmuth, J. (2017). Metaphoric extension, relational categories, and abstraction. *Language, Cognition and Neuroscience*, **34**(10), 1298–1307. https://doi.org/10.1080/23273798.2017.1410560

Harnad, S. (2017). To cognize is to categorize: Cognition is categorization. In E. Margolis, R. Samuels, & S. P. Stich (Eds.), *The cognitive sciences: An interdisciplinary approach* (2nd ed., pp. 21–54). Elsevier. https://doi.org/10.1016/B978-0-08-101107-2.00002-6

Hoch, J. E., Bommer, W. H., Dulebohn, J. H., & Wu, D. (2018). Do ethical, authentic, and servant leadership explain variance above and beyond transformational leadership? A meta-analysis. *Journal of Management*, **44**(2), 501–529. https://doi.org/10.1177/0149206316665461

Lakusta, L., Helisch, R., Sherman, C., Buczek, E., Bragger, J., & Myszko, Z. (2025). The Match-to-Sample task: A new implicit leadership measure [Oral presentation]. 8th Interdisciplinary Perspectives on Leadership Symposium, Mykonos, Greece.

Lemoine, G. J., Hartnell, C. A., & Leroy, H. (2019). Taking stock of moral approaches to leadership: An integrative review of ethical, authentic, and servant leadership. *Academy of Management Annals*, **13**(1), 148–187. https://doi.org/10.5465/annals.2017.0005

Parolini, J. L., Patterson, K., & Winston, B. (2009). Distinguishing between transformational and servant leadership. *Leadership & Organization Development Journal*, **30**(3), 274–291. https://doi.org/10.1108/01437730910949544

Wright, K., Poulin, D. D., & Kelley, E. (2015). The animate-inanimate distinction in preschool children. *British Journal of Developmental Psychology*, **33**(1), 73–91. https://doi.org/10.1111/bjdp.12068

Cite this article: Helisch, R., Lakusta, L., & Bragger, J. (2026). The match-to-sample task: Adapting insights from cognitive psychology to address I-O construct proliferation. *Industrial and Organizational Psychology* **19**, 215–218. https://doi.org/10.1017/iop.2026.10090

https://doi.org/10.1017/iop.2026.10090 Published online by Cambridge University Press