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Temporal stability in measurements matters only for stable constructs

The transition from reliance on introspection to the adoption of more objective measurement tools marked a pivotal moment in the evolution of modern psychology, helping to transform it into a rigorous scientific discipline. This shift underscored the importance of observable and quantifiable data in psychological research[1]. Corneille and Gawronski (Corneille, O. & Gawronski, B. Self-reports are better measurement instruments than implicit measures. *Nat. Rev. Psychol.* **3**, 835–846; 2024)[2] challenge the common view that self-reports and implicit measures such as response times are both valuable and relevant[3–5] and argue that self-reports are superior measurement tools to implicit measures. Although the importance of self-reports to psychological research remains undeniable, the central claim of the paper misrepresents their strengths and limitations as well as those of implicit measures. Consequently, the associated recommendations the authors make might be misguided.

Self-reports are often designed to capture stable, trait-like aspects of constructs (for example, personality or attitudes). In this context, high temporal stability is considered desirable because it suggests that the measure consistently captures the same construct across time and instantiations. However, many psychological constructs are inherently dynamic and subject to periodic or even moment-to-moment fluctuations[6,7]. High temporal stability is not desirable in such contexts — it reflects a failure to capture genuine fluctuations and suggests poor epistemic validity. Despite their limitations, implicit measures might provide snapshots of these transient states, making them better suited for capturing constructs that vary over time. By contrast, self-reports might fail to detect such fluctuations accurately, and this failure might be exacerbated by limitations such as retrospective bias (the tendency to distort or misremember past events, experiences or feelings, often influenced by current knowledge, beliefs or emotions).

Thus, important nuance is lost when self-reports and implicit measures are pitted against one another without considering the underlying research question. If the goal is to assess state-dependent variations (for example, how attitudes change as a function of experimental manipulations), tools such as experience sampling or momentary implicit measures might be more appropriate than self-report measures because the latter might lack the granularity needed to capture subtle, situational changes. Conversely, for more stable traits, self-reports might provide a more valid assessment of what the researcher or clinician wishes to capture than implicit measures. Given the inherently dynamic nature of brains and minds, assuming a psychological construct is stable cannot be a default position but is an assertion that requires substantiation.

Furthermore, offering predictive validity as evidence for superiority is not always a fair benchmark for comparing measurement tools[8]. Beyond the shared focus on stable, enduring characteristics between typical self-reports and predicted outcomes, which is bound to artificially inflate predictive power, self-reports often directly ask about constructs that closely align with the outcome variable. For instance, self-reports designed to assess attitudes or intentions might inherently overlap with the behaviours being predicted[9], giving them an artefactual advantage over implicit measures, which typically assess more dynamic, less consciously accessible constructs.

In many cases, combining self-reports and implicit measures can help to reveal consistencies and divergences between stable traits and momentary fluctuations, as well as how dynamic states influence more stable characteristics over time[3,4]. Rather than asking which measurement instrument is 'better,' it might be more useful to identify the specific aspect of a construct one wishes to measure[10] and to consider how multiple methods can be leveraged to triangulate insights[4]. This approach is more likely to provide the foundations for a healthy and constructive appraisal of psychological measurement tools.

There is a reply to this letter by Corneille, O. & Gawronski, B. *Nat. Rev. Psychol.* https://doi.org/10.1038/s44159-025-00436-y (2025).

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Competing interests

The author declares no competing interests.