

New Content From *Current Directions in Psychological Science*

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[Performance, Well-Being, Motivation, and Identity in an Age of Abundant Data: Introduction to the “Well-Measured Life” Special Issue of Current Directions in Psychological Science](#)

Robert L. Goldstone

Goldstone introduces a special issue of *Current Directions in Psychological Science* on the “Well-Measured Life,” which reviews current research on the potential for increasingly prevalent technologies that allow recording and measuring daily lives to affect individuals and society. Goldstone examines the promises of measurement technologies (e.g., coaching, monitoring of health and well-being, reducing biases, providing data on naturally occurring behaviors) and their perils (e.g., fostering narcissism and performance anxiety, reducing diversity, neglecting things that matter if they cannot be measured), as well as their application in subfields within psychology.

See summaries of “well-measured life” articles in this Observer article: [“The Promise and Perils of Behavioral Measurement Technologies.”](#)

[Field Experiments on Social Media](#)

Mohsen Mosleh, Gordon Pennycook, and David G. Rand

Studying online behavior can further understanding of misinformation and political psychology. Mosleh and colleagues discuss the strengths, weaknesses, and ethical constraints of two approaches to studying online behavior: hybrid lab-field experiments and field experiments. In hybrid lab-field studies, researchers can control and randomize participants’ exposure to social-media content in the lab and then, in the field, survey participants’ attitudes and beliefs as well as observe their online behavior. In field experiments, researchers can use the online environment to manipulate social media exposure (e.g., via private messages or public posts) without disclosing their research and then observe the effects of the manipulation on participants’ online behavior.

[Similarity of Computations Across Domains Does Not Imply Shared Implementation: The Case of](#)

[Language Comprehension](#)

Evelina Fedorenko and Cory Shain

There are apparent similarities between the mental operations required for language comprehension and those required by other cognitive domains. Fedorenko and Shain argue, however, that the multiple-demand network (domain-general brain circuits implicated in executive functions and associated with intelligence and problem solving) does not appear to play a core role in language comprehension. Instead, the language network, which is selective for high-level language processing, appears to be the most important for language comprehension. Fedorenko and Shain suggest that the multiple-demand network's contributions to cognition have to do with supporting flexible behavior and the ability to solve new problems.

[What's to Come of All This Tracking "Who We Are"? The Intelligence Example](#)

Wendy Johnson

Despite increased requirements and encouragements to track what we do and how we do it in different areas of our lives, from job performance to sleep and diet, evidence suggests that constant tracking might not help that much with health and well-being and instead might have dire social consequences. Johnson uses human intelligence, which has been the object of efforts to track for more than 100 years, as an example of tracking's social consequences. For instance, intelligence tracking exacerbated social differences between those tracked and those untracked. The author suggests the potential for tracking activities to lead society into a dystopian future, much like the one portrayed in Huxley's *Brave New World*.

[Integrating Insights About Human Movement Patterns From Digital Data Into Psychological Science](#)

Joanne Hinds et al.

Digital data generated via smartphones and social-media interactions can provide information about people's movements and locations. Although research has used these data to detect movement patterns, Hinds and colleagues suggest that it has not integrated these data with psychological science, which could allow for a better understanding of thoughts, feelings, behaviors, and attitudes associated with movement. Hinds and colleagues argue that combining approaches from psychological and data science can improve researchers' and policy makers' predictions about individuals' and groups' movement patterns, with several potential applications (e.g., predicting the spread of disease).

[Toward a "Standard Model" of Early Language Learning](#)

George Kachergis, Virginia A. Marchman, and Michael C. Frank

Research on early language learning has been driven by the theory that early language accumulates through discrete experiences with individual words. Many computational models of early language acquisition reflect this theory by making predictions for individual children based on environmental sources of word variation. Kachergis and colleagues situate these models in a common psychometric framework (item-response theory models), allowing them to be used to connect theoretical assumptions to data. This modeling framework makes it possible to formalize, test, and improve the understanding of language learning while highlighting the need for different approaches to data collection.

[Daylong Mobile Audio Recordings Reveal Multiscale Dynamics in Infants' Vocal Productions and Auditory Experiences](#)

Anne S. Warlaumont, Kunmi Sobowale, and Caitlin M. Fausey

Warlaumont and colleagues review recent research about how infants' vocal productions and auditory experiences are organized over a day, with implications for development. Everyday vocalizations appear to be clustered hierarchically in time (e.g., there is more difference in vocalization quantity from one hour to the next hour than from one 5-min interval to the next). Vocalizations also appear to be a type of exploratory foraging for social responses, with patterns of vocal exploration changing as children develop. Regarding the sounds infants encounter, different musical frequencies may foster learning about category generalization.

[Personality Change Through Digital-Coaching Interventions](#)

Mathias Allemand and Christoph Flückiger

By definition, personality traits are relatively stable, but recent research has begun to investigate whether individuals can intentionally change their personalities. One intervention that might lead to personality change relies on the use of digital applications to coach people on achieving their desired personality change. Allemand and Flückiger provide a rationale for nonclinical personality-change interventions, noting that personality traits predict several life outcomes, personality change can lead to better health, and many studies have already indicated that personality traits are malleable. The researchers also discuss motivations to change and the possible use of digital applications to foster change.

[Maximizing the Potential of Digital Games for Understanding Skill Acquisition](#)

Tom Stafford and Nemanja Vaci

When people play digital games, they leave digital traces that can be used to track their skill development from novice to expert levels. Stafford and Vaci argue that future studies can leverage these data to understand skill acquisition. To do so, the researchers suggest using learning-curve analysis, which allows learning rate, initial performance, and the limits of performance to be analyzed individually and provides insights about which factors affect skill development. Stafford and Vaci review existing research on skill development in digital gaming, explore how this research can inform understanding of expertise, and make recommendations for future experimental studies on digital gaming.