

New Content From *Perspectives on Psychological Science*

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[Machine Learning and Psychological Research: The Unexplored Effect of Measurement](#)

Ross Jacobucci and Kevin J. Grimm

Machine learning (i.e., artificial intelligence, big data, data mining) can benefit many areas of psychological science, such as those that use biological or genetic variables. However, more traditional areas of research have not benefited from machine learning. Jacobucci and Grimm suggest that this might be because of measurement errors that prevent machine-learning algorithms from accurately modeling the data. They provide simulated examples that show that measurement quality is very important for model selection in machine learning, and they advance recommendations for better integration of machine learning with statistics in traditional psychological science.

[Rethinking Executive Function and its Development](#)

Sabine Doebel

Researchers usually think that executive function, which is fundamental for control over our thoughts and behaviors, develops as a set of general processes (e.g., inhibitory control). However, Doebel argues that the development of executive function is better understood as the emergence of skills for exercising control in the service of specific goals. Such goals are influenced by the knowledge and beliefs that children acquire with development and that therefore influence their performance on executive function tasks. Doebel examines how this account explains previous research and its implications for theory, measurement, and interventions to improve executive function.

[Common Academic Experiences No One Talks About: Repeated Rejection, Impostor Syndrome, and Burnout](#)

Lisa M. Jaremka, Joshua M. Ackerman, Bertram Gawronski, et al.

In this collection of short personal stories, scholars at various stages of their careers reflect on their experiences of repeated rejection, impostor syndrome, and burnout—negative academic experiences that

are rarely talked about publicly. The scarcity of conversations about the less-bright side of academia may lead to a sense of isolation and loneliness for scholars who presume they are alone in experiencing rejection, burnout, or self-doubt.

[A Call to Action: The Need for a Cultural Psychological Approach to Discrimination on the Basis of Skin Color in Asia](#)

Karim Bettache

Bettache argues that the strong preference for fair skin that appears to be the norm in Asia (colorism) is rooted in sociohistorical trajectories of different Asian societies that have attached meanings to skin color. The differences and similarities in such sociohistorical trajectories may, therefore, have influenced the variability in the expression of colorism throughout Asia. The author reviews the study of colorism in psychological science and calls for a psychological investigation of colorism in Asia.

[The Nomological Net of the HEXACO Model of Personality: A Large-Scale Meta-Analytic Investigation](#)

Ingo Zettler, Isabel Thielmann, Benjamin E. Hilbig, and Morten Moshagen

The HEXACO model of personality summarizes personality differences along the six broad trait dimensions of the acronym: honesty-humility, emotionality, extraversion, agreeableness, conscientiousness, and openness to experience. Zettler and colleagues analyzed 426 meta-analyses to test whether each HEXACO dimension is uniquely linked to personality traits related to one specific outcome domain (e.g., emotionality relates to traits specific to insecurity). Results showed that honesty-humility was linked to vulnerability to exploitation, emotionality to insecurity, extraversion to sociality, agreeableness to obstruction, conscientiousness to duty, and openness to experience to exploration.

[Technition: When Tools Come Out of the Closet](#)

François Osiurak, Mathieu Lesourd, Jordan Navarro, and Emanuelle Reynaud

Osiurak and colleagues review recent psychological and neuroimaging studies to propose that the human technical mind originated because of neurocognitive skills unique to humans, such as technical reasoning skills involving the area PF within the left inferior parietal lobe. The researchers thus propose a new field in the cognitive sciences—technition. Technition focuses on human technical skills and might allow researchers to better understand how humans transform their environment by making and using tools and by building constructions.

[Birthing Consciousness as a Case of Adaptive Altered State of Consciousness Associated With Transient Hypofrontality](#)

Orli Dahan

Dahan presents the concept of “birthing consciousness,” an altered state of consciousness (ASC) that can occur in women during natural childbirth. The author suggests that birthing consciousness is an adaptive pain-induced ASC that likely shares a similar brain mechanism to that postulated by the transient-hypofrontality theory for other ASCs (e.g., dreaming, certain drug states). This mechanism consists of a downregulation of brain networks that support high cognitive capacities. Dahan argues that before the advent of modern medicine, women who lacked the proclivity for this brain mechanism had a

lower chance of reproducing successfully.