New Content From Perspectives on Psychological Science

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A Comparison of Two Neurobiological Models of Fear and Anxiety: A "Construct Validity" Application?

Kenneth F. Schaffner

Schaffner discusses the application of "construct validity," relating it to the concepts of "truth" and "validity" in science. The author uses an example from recent fear research involving the Ledoux and Pine two-system model (TSM) and the fear-center model (FCM). He summarizes empirical findings and arguments for and against each model, using an argument-based analysis of their construct validity and applying "epistemic values." His analysis (i.e., a construct-progressivity assessment) ultimately favors the TSM, with the caveat that any future analysis of this type may change depending on instruments and advances.

The Multiverse of Methods: Extending the Multiverse Analysis to Address Data-Collection Decisions Jenna A. Harder

Researchers may make multiple decisions while analyzing data (e.g., which participants to exclude). In a classic multiverse analysis, they analyze each possible data set to examine how each decision affects the results. However, their decisions affect the results even before the analysis phase. Harder proposes a multiverse-of-methods analysis, in which the multiverse of data sets is composed of real data sets from studies with different data-collection methods. She demonstrates the application of this method using 19 studies on shooting decisions.

Meditation and the Wandering Mind: A Theoretical Framework of Underlying Neurocognitive Mechanisms

Tracy Brandmeyer and Arnaud Delorme

Brandmeyer and Delorme provide a theoretical framework of the neurocognitive mechanisms by which meditation may influence mind wandering and other spontaneous thought processes. This framework

suggests that brain networks linked to meditation mediate spontaneous thought processes, and that the practice of meditation impacts cognitive and sensory processes implicated in emotion regulation and attention. The authors suggest that meditation's benefits may result from increased engagement of the neural networks that regulate attention, emotions, cognition, and perception.

How Can Intranasal Oxytocin Research Be Trusted? A Systematic Review of the Interactive Effects of Intranasal Oxytocin on Psychosocial Outcomes

A. Mierop, M. Mikolajczak, C. Stahl, J. Béna, O. Luminet, A. Lane, and O. Corneille

Mierop and colleagues present a review of the research on how psychosocial outcomes (e.g., altruism, lie detection, empathy, threat perception, emotion recognition) are affected by the administration of intranasal oxytocin (IN-OT). These effects appear to be highly heterogeneous and seldom replicated. Moreover, statistical power has been very low, and the research practices have been characteristic of exploratory research. These results make it difficult to tease apart the true and false effects of IN-OT, write Mierop and colleagues. They suggest next steps to move the IN-OT field forward.

The Sisyphean Cycle of Technology Panics

Amy O. Orben

Throughout history, new technologies (e.g., radios, smartphones) have raised concerns and, even as the old concerns are dismissed, new concerns arise with new technologies. Orben examines this Sisyphean cycle of technology panics and synthesizes what we have learned about past panics, what causes them to keep occurring, and why research fails to address them. Historically, she notes, psychologists have been encouraged to research how new technologies affect people in order to calm a worried population, but they often fail because of a lack of established theory. Thus, Orben suggests the need for improved research and policy approaches to new technologies.

<u>Psychosocial Vulnerabilities to Upper Respiratory Infectious Illness: Implications for Susceptibility to Coronavirus Disease 2019 (COVID-19)</u>

Sheldon Cohen

Cohen's laboratory has extensively studied psychosocial factors that affect susceptibility to illness after exposure to a virus affecting the respiratory tract. Here, he cautiously suggests that similar factors might help to identify who is at a higher risk of developing complications after exposure to coronavirus 2, the virus responsible for COVID-19. Smoking, inadequate vitamin C levels, and chronic psychological stress are associated with greater risk of respiratory illness after virus exposure, whereas social integration, social support, physical activity, good sleep, and moderate alcohol intake are associated with a decreased risk of illness.