New Content From Current Directions in Psychological Science

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Back to Basics: The Importance of Conceptual Clarification in Psychological Science

Laura F. Bringmann, Timon Elmer, and Markus I. Eronen

Bringmann and colleagues argue that better conceptual clarification of psychological phenomena is needed to move psychology forward as a science. They demonstrate how conceptual unclarity seeps through all aspects of psychological research. In offering recommendations on how to improve conceptual clarity, they emphasize the importance of seeing research as an iterative process in which it is necessary to revisit the phenomena that are the foundations of theories and models, as well as how they are conceptualized and measured.

The Slow Development of Real-Time Processing: Spoken-Word Recognition as a Crucible for New Thinking About Language Acquisition and Language Disorders

Bob McMurray, Keith S. Apfelbaum, and J. Bruce Tomblin

McMurray and colleagues review research that used sensitive real-time measures (eye tracking) of school-age children processing familiar words. This research indicates that changes in the rate at which decisions unfold in the lexical system can characterize the development of word recognition skills. These real-time skills appear to develop slowly, at least through adolescence, contrary to the standard view that they largely develop during infancy and toddlerhood. In contrast, language disorders can be linked to differences in the degree to which competing interpretations of words are suppressed. These findings have implications for reading difficulties and second-language acquisition.

Identifying Objects and Remembering Images: Insights From Deep Neural Networks Nicole C. Rust and Barnes G. L. Jannuzi

Rust and Jannuzi summarize how researchers have used deep artificial neural networks to gain insights into how the high-level visual cortex contributes to object identification and image memorability—the systematic variation with which some images are remembered better than others. Important insights

from this work include support for the idea that stacks of simple model neurons can recapitulate the core aspects of object-identification behavior, and the revelation that at least some component of imagememorability variation emerges from a system optimized for object categorization.

Toward a Holistic Approach to Reducing Academic Procrastination With Classroom Interventions
Akira Miyake and Michael J. Kane

Miyake and Kane propose a novel approach to developing effective classroom interventions for procrastination, based on the ideas that changing complex behaviors requires a holistic, multipronged approach and that intervention research must embrace objective measures of procrastination behavior. They illustrate what such intervention efforts may look like by deriving some easily implementable techniques from a simple process model of self-control, which characterizes procrastination as a goal-management failure resulting from a need to repair negative emotion triggered by impending academic tasks. Among others, these techniques aim to reduce task aversion, make long-term goals more accessible, encourage reflection, and build community.

Constructing Craving: Applying the Theory of Constructed Emotion to Urge States Stephen J. Wilson

Craving (a strong desire to ingest a substance or engage in an activity) is a key symptom of addiction but also a source of motivation for several appetitive behaviors. Wilson suggests that a state of craving emerges when the brain makes predictions that categorize sensory inputs as an instance of craving on the basis of prior experience and the context in which the inputs occur. Using the theory of constructed emotion, which posits that emotions are created in the brain, the author reviews evidence supporting the idea that the brain constructs craving in an experience-dependent and situation-specific manner.

From Semantic Vectors to Analogical Mapping

Keith J. Holyoak, Nicholas Ichien, and Hongjing Lu

Human reasoning goes beyond knowledge about individual entities and extends to inferences based on relations between entities. Holyoak and colleagues focus on the use of relations in verbal analogical mapping (the process by which one can understand concepts by analogy). They propose combining research in artificial intelligence with work in psychological science to create a computational framework that takes as inputs vector representations of individual word meanings, coupled with semantic representations of the relations between words, and uses these inputs to form semantic-relation networks for individual analogues. Analogical mapping is operationalized as graph matching under cognitive and computational constraints.

Book Language and Its Implications for Children's Language, Literacy, and Development Kate Nation, Nicola J. Dawson, and Yaling Hsiao

Nation and colleagues review the nature and content of language in children's books. They argue that exposure to this language provides opportunities for learning words and syntactic constructions that are only rarely encountered in spoken language and that this rich experience can drive further developments in language and literacy. They also propose that the range, variety, depth, and sophistication of book language may promote children's social and emotional development. The authors suggest researchers

need to better understand how and why reading shapes minds and becomes associated with a range of skills and abilities across the life span.

Successive Relearning: An Underexplored but Potent Technique for Obtaining and Maintaining Knowledge

Katherine A. Rawson and John Dunlosky

Successive relearning involves practicing a task until it is performed correctly and then practicing it again until it is performed correctly during other spaced practice sessions. Rawson and Dunlosky review evidence suggesting that successive relearning is effective in formal educational settings. The authors assert that investigations of successive relearning will shift research agendas away from single-session studies in which time on task is fixed toward studies involving multiple practice sessions in which time on task is tailored for students and is treated as an outcome variable of interest. Doing so, they say, will align the outcomes of cognitive-education research with real-world learning objectives.

Whither Inhibition?

Kaitlyn M. Werner, Michael Inzlicht, and Brett Q. Ford

Inhibition is considered a process essential to goal pursuit and thus has become a central construct in many disciplines in psychology and adjacent fields. Here, Werner and colleagues propose a framework that redefines inhibition as the target outcome, rather than a process to obtain a goal. Werner and colleagues leverage existing process models to elucidate how people can achieve the goal of inhibition by actively regulating impulses and desires. The authors believe that the field has been led astray by classifying inhibition as a process and that their framework provides greater practical utility to the study of goal pursuit.

A Scripted Sexuality: Media, Gendered Sexual Scripts, and Their Impact on Our Lives L. Monique Ward, Danielle Rosenscruggs, and Erick R. Aguinaldo

Gendered sexual scripts reflect cultural expectations for how women and men interact in courtship and romantic relationships, prioritizing passivity and appearance for women and assertiveness and emotional detachment for men. Ward and colleagues show that heavier media exposure appears to be associated with greater acceptance of these scripts, which in turn is linked to greater psychological distress, diminished sexual agency, and dysfunctional beliefs about relationships. Moreover, researchers have voiced additional concerns for African American youths, who must also negotiate culturally specific racialized gender stereotypes. The authors suggest that future research extend to new media platforms, more diverse populations, and potentially positive scripts that contradict racialized and gendered sexual scripts.

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