New Research From Clinical Psychological Science

February 02, 2018



Read about the latest research published in Clinical Psychological Science:

<u>Increases in Depressive Symptoms, Suicide-Related Outcomes, and Suicide Rates Among U.S.</u>
Adolescents After 2010 and Links to Increased New Media Screen Time

Jean M. Twenge, Thomas E. Joiner, Megan L. Rogers, and Gabrielle N. Martin

Large, nationally representative studies have indicated that suicide rates have been increasing in the years between 2010 and 2015. The authors investigated increased media use as a potential contributor to this increase by examining data from two nationally representative surveys that have been collecting data since 1991: the Monitoring the Future survey and the Youth Risk Behavior Surveillance System. The researchers examined data measuring depressive symptoms, suicide-related thoughts and behaviors, electronic device use (e.g., social media use, consumption of news on the internet), and participation in activities unrelated to electronic devices (e.g., homework, paid jobs, sports, in-person social interactions). The researchers also collected data on suicide deaths since 1999. Adolescents who engaged in more screen time reported more mental-health problems than adolescents who spent more time on nonelectronic activities. This suggests that increased screen time may be a contributor to the somewhat recent rise in mental-health issues seen in this age group.

Explaining Memory Amplification: Is It All About the Test Format?

Melanie K. T. Takarangi, Jacinta M. Oulton, and Deryn Strange

Victims of trauma exhibit a "memory amplification" effect—as time progresses, they are more likely to report that they have been exposed to more traumatic events. However, Takarangi and colleagues wondered whether this effect might be the result of how questions about trauma are asked. In one experiment, online participants viewed a set of emotionally upsetting photographs and then completed a recognition test. Critically, the recognition-test items were either photos or descriptions of photos. The

researchers found that participants' memory was better on the photo test than on the description test. Moreover, participants were more likely to say that an item had been studied when taking the description version of the test. In a second experiment, participants followed a similar procedure, taking an additional recognition test 24 hours later. The results showed that participants were more likely to say they had seen items when tested after a 24-hour delay as opposed to immediately following the images. The authors conclude that test format plays a role in the traumatic memories people remember and how memory biases and errors increase over time.

The Use of Prior Knowledge for Perceptual Inference Is Preserved in Autism Spectrum Disorders

Sander Van de Cruys, Steven Vanmarcke, Ines Van de Put, and Johan Wagemans

Some researchers have theorized that symptoms common to autism spectrum disorders (ASD) may result from imbalances between bottom-up and top-down processing. To investigate, the authors presented participants with black-and-white representations of source images, called Mooney images. Participants attempted to guess what each image showed—a difficult task. They then saw the source images and, in the final phase, tried to identify each Mooney image again. Participants also completed the Autism-Spectrum Quotient (AQ) questionnaire, a measure of autism-like traits. The researchers found that participants' scores on the AQ questionnaire were not correlated with their ability to correctly identify the Mooney images. In a follow-up experiment, adolescents with diagnosed ASD and typically developing adolescents completed a similar set of tasks. In line with the first experiment, participants with ASD were no worse at identifying the images than were typically developing subjects. The authors conclude that ASD-related traits did not affect participants' ability to apply top-down processing in the task.

Evidence-Based Assessment From Simple Clinical Judgments to Statistical Learning: Evaluating a Range of Options Using Pediatric Bipolar Disorder as a Diagnostic Challenge

Eric A. Youngstrom, Tate F. Halverson, Jennifer K. Youngstrom, Oliver Lindhiem, and Robert L. Findling

Psychological scientists have shown that clinicians' abilities to diagnose mental disorders can be poor, especially in comparison with the diagnostic predictions made by statistical algorithms or statistical learning. This is especially true for conditions that are less likely to be covered in clinicians' training, such as diagnosing pediatric bipolar disorder. In this study, the authors tested a series of increasingly complex statistical models in an attempt to diagnose pediatric bipolar disorder in a sample of children. They then applied the models to a different sample of children. The authors found that more complex models improved diagnostic accuracy up to a point, but they also tended to over-fit the data to the initial sample, leading to reduced accuracy when attempting to diagnose individuals in another sample. The authors conclude that although all the models tested yielded better diagnostic accuracy than that seen in typical clinical practice, Naive Bayesian or relatively simple software-based models may be most effective for training and practice.