New Research From Clinical Psychological Science

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Read about the latest research published in *Clinical Psychological Science*:

<u>Unique and Transdiagnostic Symptoms of Hypomania/Mania and Unipolar Depression</u>

Kasey Stanton, Shereen Khoo, David Watson, June Gruber, Mark Zimmerman, and Lauren M.

Weinstock

The accurate detection of bipolar disorder might be complicated because depressive symptoms are often more persistent than hypomanic/manic states. However, it is important to differentiate bipolar disorders from unipolar depression because their treatments are often considerably different. In this research, Stanton et al. investigated the symptoms that are unique to bipolar disorder and unipolar depression and the symptoms that they share. They measured the levels of hypomanic/manic and depressive symptoms, social anxiety, personality traits (e.g., anxiousness, grandiosity, deceitfulness), alcohol and drug use, and attention-deficit/hyperactivity disorder (ADHD) in both a healthy community sample of adults and an outpatient sample of adults with a diagnosis of a depressive disorder or a bipolar disorder. Analysis indicated a general dimension involving sadness and irritability and associated with both unipolar and bipolar symptoms. But increased energy, grandiosity, and elevated mood (positive activation) seemed more specific to bipolar disorder. Thus, the researchers suggest that focusing on positive activation symptoms may be optimal for distinguishing bipolar disorders from unipolar depression and prescribing the most appropriate treatments.

Sample Size Requirements for Multivariate Models to Predict Between-Patient Differences in Best Treatments of Major Depressive Disorder

Alex Luedtke, Ekaterina Sadikova, and Ronald C. Kessler

Clinical trials have documented varied factors, among them social characteristics, biomarkers, and clinical features, that predict which types of treatments for major depressive disorder (MDD) are best for which patients. The importance of choosing the right treatment for the right patient gave rise to the development of models to guide precision depression treatment planning. Luedtke et al. analyzed the

sample size requirements for such models. They used a super learner algorithm to estimate the optimal treatment rule, which assigns each patient to the treatment with the better outcome given the individual characteristics of the patient. On the basis of that rule, they performed a simulation evaluating the sample size requirements to detect treatment effects large enough to be clinically significant. The results suggest that future studies designed to develop MDD precision-treatment models should be based on samples of at least 300 patients per treatment, which are considerably larger samples than the ones used in most studies.

Weakened Functional Connectivity Between the Amygdala and the Ventromedial Prefrontal Cortex Is Longitudinally Related to Psychopathic Traits in Low-Income Males During Early Adulthood Rebecca Waller, Arianna M. Gard, Daniel S. Shaw, Erika E. Forbes, Craig S. Neumann, and Luke W. Hyde

Psychopathy, characterized by deficits in affective personality traits (e.g., absence of remorse or empathy), interpersonal traits (e.g., charm and deceitfulness), impulsive behaviors (e.g., irresponsibility), and antisocial behaviors (e.g., criminality) seems to be related to a specific brain configuration — weakened connectivity between the amygdala and the ventromedial prefrontal cortex (vmPFC). A sample of 20-year-old men with low income (male gender and low income are risk factors for antisocial behavior) viewed angry, fearful, surprised, and neutral faces. While being assessed by functional MRI, the participants chose which face matched a target face. At age 22, the same participants completed measures of psychopathic traits. Disrupted functional connectivity between two brain regions (the amygdala and the vmPFC) during the processing of fearful faces was related to higher psychopathic traits. This pattern of results indicates that weakened connectivity of the amygdala-vmPFC during the processing of others' fear and distress may underlie psychopathic traits. These findings support the idea that impaired sensitivity to others' emotions of distress underpins psychopathy and suggest that the amygdala-vmPFC connection could be targeted in novel treatment strategies for antisocial behavior and psychopathy.

PTSD: Catastrophizing in Combat as Risk and Protection

Martin E. P. Seligman, Andrew R. Allen, Loryana L. Vie, Tiffany E. Ho, Lawrence M. Scheier, Rhonda Cornum, and Paul B. Lester

What are the protective and risk factors for posttraumatic stress disorder (PTSD)? By analyzing a sample of active duty soldiers, between the ages of 17 and 66, before being deployed to Iraq or Afghanistan between 2009 and 2013, the researchers found that preexisting high catastrophic thinking and exposure to high-intensity combat were predictors of developing PTSD. Specifically, soldiers who scored highest on catastrophic thinking were more likely to develop PTSD than soldiers with average scores, and soldiers who scored lowest were less likely to develop PTSD than soldiers with average scores. The risk for PTSD for soldiers with high catastrophic thinking and exposure to intense combat was 4 times greater than for soldiers with low catastrophic thinking and no exposure to intense combat. In this study, being older was also associated with greater PTSD risk, whereas higher education seemed to be a protective factor. Given these findings, the researchers suggest that choosing soldiers low in catastrophic thinking for intense combat could lead to lower causalities, less human suffering, and lower health costs.