

# New Research From *Clinical Psychological Science*

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## [Executive Functions and Impulsivity Are Genetically Distinct and Independently Predict Psychopathology: Results From Two Adult Twin Studies](#)

*Naomi P. Friedman, Alexander S. Hatoum, Daniel E. Gustavson, et al.*

In two studies with adult twins, Friedman and colleagues examined whether a genetic and phenotypical relation exists between a common executive function (EF) factor (a factor that is thought to capture individual differences in abilities necessary for different executive functioning tasks, including response inhibition and working memory updating) and self-reported impulsivity (i.e., urgency, lack of premeditation and perseverance, and sensation seeking). They found that (a) EF and impulsivity were related only moderately at the genetic and phenotypic levels, (b) EF and impulsivity independently predicted externalizing psychopathology (e.g., conduct disorders), and (c) impulsivity but not EF predicted internalizing psychopathology (e.g., depression). These findings suggest that EF and impulsivity capture overlapping but separable dimensions of control, both relevant for psychopathology.

## [Affective Dynamics Across Internalizing and Externalizing Dimensions of Psychopathology](#)

*Lori N. Scott, Sarah E. Victor, Erin A. Kaufman, et al.*

Scott and colleagues examine how young women with diverse diagnoses of externalizing disorders (e.g., substance abuse) or internalizing disorders (e.g., depression) show different dynamics of positive and negative affect. After a diagnostic interview, participants completed seven assessments of their affective states every day for 21 days. Those with externalizing disorders reported less persistent positive affect (i.e., not being stuck in a persistently positive affective state) and more variable positive emotionality. Those with internalizing disorders reported that negative affect was more intense and variable and that positive affect was less variable. These findings may have implications for the development of interventions tailored to internalizing and externalizing disorders.

### [Distinct Risk Profiles in Social Anxiety Disorder](#)

*Esther S. Tung and Timothy A. Brown*

Different risk profiles that predict different manifestations of social anxiety disorder (SAD) can identify subtypes of SAD, this research suggests. Tung and Brown analyzed the profiles of individuals seeking treatment for anxiety and identified one group with low positive temperament (e.g., low extraversion) and another with high positive temperament. The two groups did not differ much regarding neurotic temperament and were equivalent in autonomic arousability (e.g., shortness of breath, shaking). The group with low positive temperament had a higher percentage of men and individuals with depressive disorders and higher SAD severity than the group with high positive temperament.

### [Increasing Diagnostic Emphasis on Negative Affective Dysfunction: Potentially Negative Consequences for Psychiatric Classification and Diagnosis](#)

*Kasey Stanton*

Negative affective dysfunction (NAD)—maladaptive experiences of negative mood—is not specific to a given disorder, but the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5, published in 2013) introduced features intended to capture manifestations of NAD. Stanton comments on the potential risks that diagnostic emphasis on NAD might have for disorder overlap and differential diagnosis (e.g., the diagnosis of attention-deficit/hyperactivity disorder could be confounded with major depressive disorder in patients reporting both attention and negative emotional difficulties). Stanton calls for caution when proposing DSM-5 additions in order to capture nonspecific psychopathology features such as NAD.

### [Effort, Avolition, and Motivational Experience in Schizophrenia: Analysis of Behavioral and Neuroimaging Data With Relationships to Daily Motivational Experience](#)

*Adam J. Culbreth, Erin K. Moran, Sri Kandala, Andrew Westbrook, and Deanna M. Barch*

Some patients with schizophrenia may be hard-wired to be less willing to allocate effort. Participants with schizophrenia and severe negative symptoms (e.g., anhedonia, reduced social drive, amotivation) expended less effort for monetary rewards, relative to their healthy counterparts and patients with fewer negative symptoms. Neuroimaging data indicated that this group showed reduced activation of the bilateral ventral striatum while performing an effortful task. The decreased effort to obtain rewards among these individuals seems to vary with the severity of their negative symptoms, associated with hypoactivation of the ventral striatum during effort-based choice.

### [Neural Connectivity Subtypes Predict Discrete Attentional Bias Profiles Among Heterogeneous Anxiety Patients](#)

*Rebecca B. Price, Adriene M. Beltz, Mary L. Woody, Logan Cummings, Danielle Gilchrist, and Greg J. Siegle*

On average, patients with anxiety tend to show early vigilance toward threat and later avoidance of threat, accompanied by altered connectivity between brain regions. Price and colleagues organized

patients with anxiety into two subgroups characterized by different altered brain connectivity associated with their attention to threat. One group exhibited executive network influences on sensory brain regions and the referred “vigilance-avoidance” patterns, whereas the other group exhibited limbic influences on sensory brain regions and atypical and inconsistent attention to threat.