People with social anxiety disorder (SAD) often hold negative beliefs about their own attributes and abilities. These beliefs can contribute to an intense fear of being evaluated and rejected by friends, family, and acquaintances—and some people are affected more severely than others. Research suggests that SAD may present differently in people who experienced emotional abuse and neglect during childhood, which can influence how self-beliefs are processed in the brain.

“Childhood emotional trauma may significantly affect an individual’s emerging self-concept and may bias learning such that negative feedback from others becomes more salient than positive feedback—a pattern observed in SAD,” wrote Anat Talmon (Stanford University) and colleagues in Clinical Psychological Science. “This may create a perpetuating effect, leading to a predominantly negative self-concept.”

Talmon and colleagues began investigating the relationship between early life experiences and self-beliefs through an initial study of 95 patients with SAD and 43 control participants without this condition. Participants completed measures of well-being and reported how frequently they had experienced different kinds of abuse and neglect as children.

These self-reports were accompanied by a self-referential encoding task, in which participants sorted a set of positive and negative social traits according to whether or not they would use each trait to describe themselves. In control trials, each participant simply judged if the traits were written in upper-
Finally, the researchers observed activity in the default-mode network (DMN) of each participant’s brain using functional magnetic resonance imaging (functional MRI). Previous studies have found activity in the DMN to be associated with self-referential processing.

Participants in the negative-self cluster reported more severe symptoms of SAD, more negative self-beliefs in the encoding task, lower life satisfaction, and higher stress than participants in the positive-self cluster. These participants also reported more frequent emotional abuse and neglect—but not more physical or sexual abuse—during childhood than those in the other cluster. Additionally, those in the negative-self cluster were found to have higher DMN activation during negative-trait and self-belief judgments in the encoding task than participants in the positive-self cluster.

Talmon and colleagues successfully replicated most of these results in a second sample of 97 people with SAD and 34 control participants. Participants in the negative-self cluster were not found to have more severe symptoms of SAD in this sample, however.

Overall, the results suggest that there could be two distinct clusters of patients within the larger SAD diagnosis. “Early life adversity is associated with the specific presentation of SAD later in life,” Talmon and colleagues wrote.

These findings may help inform treatment options for SAD. Estimated to affect 12% of people over their lifetime, SAD is the most common anxiety disorder, making it a valuable target for more precise treatment, the researchers noted.

“Considering the patterns of self-referential processing and childhood experiences may be informative about the type of treatment that could be most beneficial for different people who share the same clinical diagnosis on the basis of their classically defined symptoms,” Talmon and colleagues wrote.

For instance, patients with more positive self-beliefs may be able to more effectively challenge their negative self-beliefs through cognitive behavioral therapy (CBT), the researchers suggested. Alternatively, pairing CBT with mindfulness/acceptance-based therapies may benefit patients with more negative self-beliefs and experiences of childhood maltreatment by helping them learn to manage the emotional reactivity that can result from trauma.

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