## **New Research From Psychological Science**

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

Maternal Buffering of Human Amygdala-Prefrontal Circuitry During Childhood but Not During Adolescence

Dylan G. Gee, Laurel Gabard-Durnam, Eva H. Telzer, Kathryn L. Humphreys, Bonnie Goff, Mor Shapiro, Jessica Flannery, Daniel S. Lumian, Dominic S. Fareri, Christina Caldera, and Nim Tottenham

Primary caregivers often play a vital role in helping children regulate themselves. Researchers examined the mechanism through which caregivers assist with their children's regulation by having children (ages 4-10) and adolescents (ages 11-17) perform a task while being scanned in an fMRI machine. Each participant viewed happy and neutral pictures of his or her mother and a stranger. They pressed a button when the pictured individual displayed a happy face. The presence of maternal stimuli suppressed amygdala activity in children but not in adolescents. The researchers found that the children exhibited more mature amygdala-prefrontal connectivity — similar to that seen in adolescents — in the presence of maternal stimuli, suggesting a mechanism through which caregivers provide affect regulation to their children

Making Working Memory Work: A Meta-Analysis of Executive-Control and Working Memory Training in Older Adults

Julia Karbach and Paul Verhaeghen

Studies examining the impact of cognitive training have suggested that performance improvements can "transfer" to tasks that are not explicitly trained but that measure the same construct as the trained task. However, these transfer effects have not been consistently observed across studies. The authors conducted a meta-analysis of 49 articles that examined working memory (WM) or executive-functioning (EF) training. WM and EF training led to improvements on the trained tasks and to large near-transfer effects and smaller far-transfer effects. No differences in training-induced improvements were seen between younger and older adults. This meta-analysis provides additional support for the effectiveness and usefulness of training techniques as a cognitive intervention for older adults.

Optimism and Death: Predicting the Course and Consequences of Depression Trajectories in Response to Heart Attack

Isaac R. Galatzer-Levy and George A. Bonanno

How does the long-term trajectory of depression influence patient recovery following myocardial

infarction (MI; i.e., heart attack)? Data taken from the Health and Retirement Study — a study designed to measure aspects of aging in American adults — was used to model participants' health trajectories during the 6 years before, and the 4 years after, an MI. Participants who had depression that emerged after MI had an increased risk of mortality compared with people who had no increase in depression following MI. The authors posit that biological and behavioral characteristics — such as amplified immune response or noncompliance with health directives — that are associated with MI and depression may place people with emerging depression problems at greater risk for mortality after MI.

George A. Bonanno will be speaking in the Cross-Cutting Theme Program "<u>Milliseconds to Decades:</u> <u>Development as a Level of Analysis</u>" at the <u>27th APS Annual Convention</u> in New York, NY, USA.