## **New Research From Psychological Science**

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

## Replicability and Robustness of Genome-Wide-Association Studies for Behavioral Traits

Cornelius A. Rietveld, Dalton Conley, Nicholas Eriksson, Tonu Esko, Sarah E. Medland, Anna A. E. Vinkhuyzen, Jian Yang, Jason D. Boardman, Christopher F. Chabris, Christopher T. Dawes, Benjamin W. Domingue, David A. Hinds, Magnus Johannesson, Amy K. Kiefer, David Laibson, Patrik K. E. Magnusson, Joanna L. Mountain, Sven Oskarsson, Olga Rostapshova, Alexander Teumer, Joyce Y. Tung, Peter M. Visscher, Daniel J. Benjamin, David Cesarini, Philipp D. Koellinger, and the Social Science Genetics Association Consortium

In 2013, Rietveld and colleagues conducted a genome-wide association (GWA) study that included more than 100,000 individuals. This study found three single-nucleotide polymorphism associations that reached genome-wide significance. In the current study, the authors investigated whether the results of this study could be replicated. The authors found that they were able to replicate the previous findings in a new dataset (Study 1), in a subset of the original data using methods that more stringently controlled for population stratification (Study 2), and in a new within-families dataset (Study 3). These findings suggest that GWA studies — when done well — can provide reliable and replicable results describing the genetics of behavioral traits.

Christopher F. Chabris will be presenting a workshop at the <u>27th APS Annual Convention</u> in New York, NY, USA.

Growth and Change in Attention Problems, Disruptive Behavior, and Achievement From Kindergarten to Fifth Grade

Amy Claessens and Chantelle Dowsett

Do problems with attention and disruptive behavior in childhood result in later achievement problems, or is the opposite true? More than 16,000 children who were part of the Early Child Longitudinal Study – Kindergarten were assessed in kindergarten, 1st, 3rd, and 5th grades for achievement, classroom attention, and disruptive problems. The researchers found that improvements in attention — but not disruptive behavior — during kindergarten predicted achievement gains during children's first 3 years of schooling. While the researchers did find evidence that increases in achievement influence children's attention and disruptive behavior, these findings were less consistent. The authors suggest that improving children's classroom attention could lead to lasting improvements in achievement.

<u>Differences in the Effects of Crowding on Size Perception and Grip Scaling in Densely Cluttered 3-D Scenes</u>

## Juan Chen, Irene Sperandio, and Melvyn Alan Goodale

Nearby objects are known to influence the way we perceive a target, especially if the target object is crowded or appears in a cluttered scene; however, little research has examined the effect of crowding on visually guided action. In a series of studies, participants were shown a target disk in isolation (uncrowded) or surrounded by flanker disks (crowded). Participants' movements were recorded either as they reached out and grasped the target object or as they estimated the size of the target disk using their fingers. The researchers found that performance on the size-estimation task was influenced by crowding, whereas performance on the grasping task was not, indicating that visually guided action is based on more than just visual perception.