

New Research From Psychological Science

November 09, 2017



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

[When Your Kind Cannot Live Here: How Generic Language and Criminal Sanctions Shape Social Categorization](#)

Deborah Goldfarb, Kristin Hansen Lagattuta, Hannah J. Kramer, Katie Kennedy, and Sarah M. Tashjian

How does the language used to describe a group influence the decisions people make regarding who belongs to those groups? To examine this question, 5-year-olds, 8-year-olds, and adults were told about a group of beings called Twiggums who lived in a valley. One day a group of Twiggums moved to the mountains and called themselves Zuttles. Twiggums and Zuttles were physically indistinguishable but differed in some behavioral and psychological characteristics. Participants were told about these differences using generic or specific language. Participants then completed a task in which they had to classify beings as Twiggums (citizens) or Zuttles (noncitizens) on the basis of sets of character traits. In the noncriminal context, the classification had no ramifications; in the criminal context, categorization as a noncitizen led to jail time and eventual deportation back to the mountains. Participants in the specific-language condition, compared with those in the general-language condition, categorized fewer beings as noncitizens — an effect that increased when this categorization led to criminal penalties. They also used higher evidentiary standards to declare a being to be a noncitizen and reported less certainty in their classification.

[Persistent Genetic and Family-Wide Environmental Contributions to Early Number Knowledge and Later Achievement in Mathematics](#)

Gabrielle Garon-Carrier, Michel Boivin, Yulia Kovas, Bei Feng, Mara Brendgen, Frank Vitaro, Jean R. Séguin, Richard E. Tremblay, and Ginette Dionne

Early number knowledge serves as a foundation for the development of counting strategies and, in turn, later-developing problem-solving abilities. It is therefore important to understand the contributors to the development of number knowledge across early childhood. This study is the first to examine genetic and environmental contributions to the continuity and variation in number knowledge during the transition from preschool to first grade. Monozygotic and dizygotic twins who were part of the Quebec Newborn Twin Study were assessed for number knowledge at ages 5 (Preschool) and 7 (Grade 1) and for mathematical achievement at ages 10 (Grades 4) and 12 (Grade 6). The researchers found genetic continuity from preschool-age number knowledge to late-elementary math achievement. New genetic contributions appeared in late-elementary-aged math achievement. Shared and nonshared environmental contributions were found to decrease from ages 5 to 12 but contributed to continuity across time from preschool-age number knowledge to later-elementary math achievement. These findings indicate that children at risk for math problems may be able to be identified early and that early and continuing intervention might best support the development of math skills in these children.

[Attachment and Effortful Control in Toddlerhood Predict Academic Achievement Over a Decade Later](#)

Lilian Dindo, Rebecca L. Brock, Nazan Aksan, Wakiza Gamez, Grazyna Kochanska, and Lee Anna Clark

Past research suggests that children's attachment to their caregivers is important in their development, and that school achievement includes nonintellectual strengths. Yet very little research has examined these components within a long-term developmental pathway to predict school achievement. The present longitudinal study investigated the influence of attachment in toddlerhood on children's effortful control (i.e., the ability to voluntarily constrain dominant responses to initiate subdominant responses) and the ability of those variable to predict adolescent academic achievement. Researchers used existing data measuring attachment (ages 2 and 3) and effortful control (age 3) from two previous studies. Then, for the present study, they followed up with the same families when the children reached ages 11 to 15. Adolescent academic achievement scores were collected from the Iowa Testing Program, and mothers rated their children's level of difficulties in school (i.e., child performance, remedial education services, grade repetition). Researchers found that attachment security and effortful control each predicted academic achievement, and that effortful control mediated the relationship between toddler attachment and adolescent school achievement.

[Probing Birth-Order Effects on Narrow Traits Using Specification-Curve Analysis](#)

Julia M. Rohrer, Boris Egloff, and Stefan C. Schmukle

Recent research has indicated small to negligible effects of birth order on personality traits; however, these studies often vary in the strategies and specifications they use to examine birth-order effects. The researchers examined the impact of birth order on a variety of traits using *specification-curve analysis* — a technique that allows researchers to report results for all theoretically and statistically reasonable analytical decisions. The researchers analyzed data from the German Socio-Economic Panel, an ongoing study of private households in Germany that began in 1984. The researchers examined data reporting birth order, locus of control, positive reciprocity, negative reciprocity, life satisfaction, interpersonal trust, risk taking in different domains, global risk taking, patience, impulsivity, political orientation, and intellect. The analysis found a small but significant impact of birth order on self-reported intellect but no

significant findings for any of the other variables of interest. The researchers indicate that it may be worth pursuing additional studies of birth-order effects, but they suggest that these studies use large sample sizes, be preregistered (or use specification-curve analysis), and follow recommendations for replicable research.