

# Research Briefs

August 28, 2020



## [Education and Cognitive Functioning Across the Life Span](#)

***Martin Lövdén, Laura Fratiglioni, M. Maria Glymour, Ulman Lindenberger, and Elliot M. Tucker-Drob***

*Psychological Science in the Public Interest*

Although education appears to affect cognitive ability, it does not necessarily attenuate the declines in cognition associated with aging. Rather, education can influence elderly people's cognitive functioning by contributing to the enhanced cognitive skills that emerge in their early adulthood and persist into their older age. Lövdén and colleagues present a review of the literature on education's associations with levels of and changes in cognitive functioning related to aging and dementia. Overall, education appears to promote cognitive functioning in old age, "but not because it simply attenuates cognitive decline. Instead, educational attainment is associated with advantages in cognitive functioning in early adulthood that are, at least partly, preserved into old age.

[Fighting COVID-19 Misinformation on Social Media: Experimental Evidence for a Scalable Accuracy-](#)

## [Nudge Intervention](#)

***Gordon Pennycook, Jonathon McPhetres, Yunhao Zhang, Jackson G. Lu, and David G. Rand***



*Psychological Science*

Nudging people to think about the accuracy of news headlines might be a simple way to improve their choices about what to share on social media. When directly asked about the accuracy of COVID-19-related news, participants were better at discriminating between true and false than when asked simply to decide whether to share it. Similarly, having participants judge the accuracy of non-COVID-19-related headlines increased their discernment about the accuracy of COVID-19-related articles and the quality of their subsequent intentions to share them.

## [On Intersectionality: How Complex Patterns of Discrimination Can Emerge From Simple Stereotypes](#)

***Neil Hester, Keith Payne, Jazmin Brown-Iannuzzi, and Kurt Gray***



*Psychological Science*

Black men are disproportionately stopped by police to a degree that cannot be explained by the simple or additive effects of being Black and male. What explains this pattern of discrimination? In a set of simulations, Hester and colleagues found that combining simple stereotypes with threshold models of behavior (e.g., “if someone’s threat level seems higher than X, stop that person”) can explain the patterns of complex discrimination found in gender-by-race and gender-by-age discrimination in police stops. These simulations suggest that some complex behaviors can arise from relatively simple cognitions.

## [A Meta-Analysis of the Relationship Between Sleep Problems and Loneliness](#)

***Melanie A. Hom, Carol Chu, Megan L. Rogers, and Thomas E. Joiner***

*Clinical Psychological Science*

Hom and colleagues analyzed 84 articles and found small-to-medium and medium associations between perceptions of loneliness and specific sleep complaints, such as insomnia, nightmares, and poor sleep efficiency and quality. Further analyses of longitudinal studies suggest that the relationship between sleep problems and loneliness is bidirectional. The authors propose that future research is needed to identify the mechanisms that underlie the relationship between sleep problems and loneliness and how they influence one another over time.

## [Helping or Harming? The Effect of Trigger Warnings on Individuals With Trauma Histories](#)

***Payton J. Jones, Benjamin W. Bellet, and Richard J. McNally***



## *Clinical Psychological Science*

Trigger warnings provide notification about forthcoming content that may cause distress, but they may have no benefits and even cause adverse side effects in trauma survivors, this research suggests. People who had experienced trauma (e.g., serious injury, sexual violence) in the past and received trigger warnings before reading distressing passages were equally affected by the passages as those who had not received trigger warnings. Moreover, trigger warnings reinforced participants' belief that their trauma was a central part of their identity.

### [\*\*The Psychology of Intolerance: Unpacking Diverse Understandings of Intolerance\*\*](#)

*Maykel Verkuyten, Levi Adelman, and Kumar Yogeeswaran*

#### *Current Directions in Psychological Science*

Verkuyten and colleagues compare and contrast three different understandings of intolerance, along with the different implications for how we react to intolerance. They discuss the affective state, psychological process, and behavioral outcomes of (a) prejudicial intolerance based on closed-mindedness and antipathy toward a group of people; (b) intuitive intolerance involving unreflective disapproval of out-group practices or beliefs; and (c) deliberative intolerance involving interference with out-group practices or beliefs that are considered to violate one's values. Verkuyten and colleagues suggest that attention to these diverse understandings of tolerance can enhance psychology's contribution to the development of intergroup relations.

### [\*\*Children's Language Skills Can Be Improved: Lessons From Psychological Science for Educational Policy\*\*](#)

*Charles Hulme, Margaret J. Snowling, Gillian West, Arne Lervåg, and Monica Melby-Lervåg*

#### *Current Directions in Psychological Science*

Hulme and colleagues review recent research indicating that some language interventions may improve children's oral language skills as well as their reading comprehension. The effects of language interventions aimed at improving children's vocabulary and narrative skills, among others, are not large, but they are significant, especially when the interventions are high quality and implemented in small groups rather than in whole classrooms. Although the authors recognize the need for further research examining the long-term effects of these interventions, they highlight the implications of these findings for education, as poor language skills likely create educational disadvantages.

### [\*\*Training Learning Strategies to Promote Self-Regulation and Transfer: The Knowledge, Belief, Commitment, and Planning Framework\*\*](#)

*Mark A. McDaniel and Gilles O. Einstein*

## *Perspectives on Psychological Science*

Students tend to use study strategies that do not result in more learning. Why not train them to use more effective learning strategies? McDaniel and Einstein propose the knowledge, belief, commitment, and planning (KBCP) framework to guide strategy training and foster the use of effective learning strategies. Using the KBCP framework, training must: (a) provide knowledge about the strategies, (b) foster beliefs that the strategy works, (c) create commitment to using the strategy, and (d) help with the planning of strategy implementation.

## **Rock the MIC: The Matrix of Implied Causation, a Tool for Experimental Design and Model Checking**

***Timothy R. Brick and Drew H. Bailey***



*Advances in Methods and Practices in Psychological Science*

Brick and Bailey introduce the matrix of implied causation (MIC) as a tool for easily understanding and reporting a model's implications for the causal relationships between variables. MICs can help to directly examine causal implications in path modeling, including structural equation modeling. The authors use examples from the literature to illustrate the use of MICs in model checking and experimental design and argue that when researchers use models with causal implications, they should also use MICs to help to differentiate among models with otherwise similar fit.