

## COGNITIVE SCIENCE

# Choosing wisely

A high IQ isn't the liability this book suggests, but we can all learn to make better decisions

By **Aron K. Barbey**

Examining “why smart people make dumb mistakes,” *The Intelligence Trap* presents an accessible and engaging discussion of the nature of human intelligence. The reason for this paradox, suggests author David Robson, is that people with a high IQ are often unaware of the limits of their understanding and are therefore susceptible to poor judgment.

Robson reviews research that examines the relationship between IQ and decision-making (1). This work presents evidence that standard IQ tests fail to measure critical thinking skills that are at the heart of decision-making, and as a result, high IQ does not guarantee competent decisions.

To illustrate the role of critical thought in decision-making, consider the following example from the Cognitive Reflection Test (2) presented in the book: “A bat and a ball cost \$1.10. The bat costs \$1.00 more than the ball. How much does the ball cost?” Although “10 cents” immediately comes to mind, the application of logic and mathematics allows us to generate the correct solution (5 cents).

The importance of critical thinking for decision-making is well established (3) and supports inferences about the value of an outcome (value assessment), the likelihood of an event (belief assessment), and the capacity to combine this information to make an adaptive choice (information integration). Measurement tools to assess these essential competencies of decision-making have recently been developed and support the direct comparison of decision-making and IQ.

In a seminal study, published in 2007, Baruch Fischhoff and colleagues developed the “Adult Decision-Making Competence Test” (A-DMC) and demonstrated that performance on this measure predicts real-world decision outcomes even after

controlling for IQ (4). This finding contributes to a growing body of evidence that suggests that standard IQ tests may fail to capture critical thinking skills that are essential to decision-making.

This conclusion, however, is difficult to reconcile with the broad predictive power of IQ and the well-established association between IQ and performance on tests of reasoning and problem-solving (5). Researchers have therefore conducted experiments to further examine the nature of the association between IQ and decision-making.



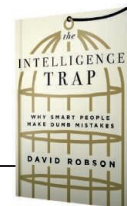
Mindfulness meditation can help enhance decision-making abilities.

In a recent study, Nikki Blacksmith and colleagues found that scores on the A-DMC were largely indistinguishable from IQ, with a construct-level correlation of 0.91 (6). It is also well known that performance on measures of critical thinking, such as the Cognitive Reflection Test, is positively correlated with IQ (0.43) (2). Thus, the question of whether IQ and decision-making can be empirically dissociated remains the focus of ongoing research and debate.

Critically, however, *The Intelligence Trap* argues not that IQ fails to capture essential facets of decision-making but that a high IQ is a liability for decision-making. Robson's thesis is that “smart people are not only just as prone to making mistakes as everyone else—they may even be *more* susceptible to them.”

## The Intelligence Trap Why Smart People Make Dumb Mistakes

David Robson  
Norton, 2019. 331 pp.



To support this view, evidence would need to suggest that a high IQ makes people more susceptible to errors in decision-making. This, however, is inconsistent with the high positive correlation observed in Blacksmith's recent study (0.91) (6) and the positive associations found in studies of the Cognitive Reflection Test (0.43) (2) and in research that Robson reviews from Stanovich and his colleagues (0.47) (1). In contrast to the book's premise, this suggests that IQ and decision-making are positively correlated and that a high IQ may be associated with better decisions.

Anecdotes abound of individuals with a high IQ who have made substantial blunders. But in terms of where the field stands, scientists are currently grappling with the question of whether IQ and decision-making can even be disentangled—rather than whether they are in opposition.

Robson dedicates the majority of the book to an engaging discussion of how to improve decision-making, surveying a broad landscape of research on “evidence-based wisdom,” emphasizing the importance of critical thought and self-reflection, and reviewing promising new areas of research [e.g., (7)]. Despite my concerns about the book's central premise, I found the presentation of topics and wealth of evidence

reviewed to be impressively accessible, with engaging storytelling, depth of discussion, and counterintuitive conclusions that are sure to engage the reader's capacity for critical thought and intelligent decision-making. ■

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The reviewer is director of the Center for Brain Plasticity, Beckman Institute for Advanced Science and Technology, University of Illinois at Urbana-Champaign, Urbana, IL 61801, USA. Email: barbey@illinois.edu

# Science

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