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A Descriptive Analysis of the Appropriate Use of Cognitive Bias Terminology in Forensic Science Literature

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ABSTRACT

Cognitive bias occurs without a person's awareness and can affect decision-making abilities. In forensic science, bias can be especially detrimental to making accurate decisions about the evidence in a criminal investigation. There are many academic studies in identifying, describing, and suggesting ways to mitigate cognitive biases in forensic science. Many authors will give a known cognitive science concept a new name or create their own bias. This is a problem in the literature because nobody knows for sure how many published studies are referring to or testing the same phenomena since authors are using different definitions or terminology to describe the same concept. This study systematically identified bias terms that different domains of research use when conducting forensic science research. After identifying the bias term(s) used in each study, each error was categorized by domain (e.g., psychologists, lawyers, forensic scientists), by type of bias (e.g., confirmation bias, anchoring bias, made up bias term) and how the authors define the bias term (i.e., correct definition, incorrect definition, no definition, or made a new definition). Overall, this study shows that authors were more likely to use a correct bias term and bias definition (29%) than make up a bias term and bias definition (25%). A majority of the authors in this study are not cognitive scientists and, therefore, are not heavily trained in cognitive terminology. The issue of the incorrect use of cognitive bias terminology is a serious one for forensic science and has yet to be noted or investigated until this preliminary analysis. The responsibility for forensic scientists who are not trained in cognitive science to understand the bias literature and to adopt the correct terminology is fundamental for proper communication among scientific professionals.

KEYWORDS

Cognitive bias, forensic science, criminal justice, confirmation bias, contextual bias, psychology