

UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

Explanatory Schemata as Determinants of Performance in a Syllogistic Reasoning Task

Permalink

<https://escholarship.org/uc/item/0x1420tf>

Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 33(33)

ISSN

1069-7977

Authors

Lisa, Boucher
Jordan, Schoenherr
Robert, Thomson
et al.

Publication Date

2011

Peer reviewed

Explanatory Schemata as Determinants of Performance in a Syllogistic Reasoning Task

Boucher Lisa
Carleton University

Schoenherr Jordan
Carleton University

Thomson Robert
Carleton University

Lacroix Guy
Carleton University

Abstract: Recent findings have demonstrated that explanations provided by scientists are deemed better when they are supplemented with scientific evidence even when that evidence is irrelevant (Weisberg, Keil, Goodstein, Rawson, & Gray, 2008). In the present study, participants were asked to solve a syllogistic reasoning task. Two kinds of irrelevant explanations were provided: mechanistic explanations (e.g., forces, cause-and-effect) and anthropomorphic statements (e.g., like, want). Participants were further told either that 'scientists' or 'people' provided the explanations. Descriptions of natural phenomena were presented ranging in terms of the extent to which they were human-like (e.g., molecules, snakes, human group) to alter the congruency of the explanations and descriptions. Supporting our earlier findings (Schoenherr & Thomson, 2009), we found that participants performed better when there was a congruency between the explanations and natural phenomena and when scientists provided mechanistic explanations and people provided anthropomorphic explanations.