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Authors

Ludwin-Peery, Ethan

Bramley, Neil

Davis, Ernest

et al.

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A Generalization Test of Conjunction Errors in Physical Reasoning

Ethan Ludwin-Peery

New York University, New York, New York, United States

Neil Bramley

University of Edinburgh, Edinburgh, Scotland, United Kingdom

Ernest Davis

New York University, New York, New York, United States

Todd Gureckis

New York University, New York, New York, United States

Abstract

Ludwin-Peery, Bramley, Davis, and Gureckis (2019) reported finding evidence of conjunction fallacy errors in an intuitive physics reasoning task. However, this finding was limited to a single paradigm involving the behavior of only two objects, interacting in a consistent manner, in a highly regular setting. In this project, we provide an important generalization test of this result, and examine several new paradigms under which conjunction errors might be observed. We find some cases that produce the expected errors, representing an important generalization of the original finding, as well as some paradigms which do not appear to produce conjunction errors.