



## “IT RAISES MORAL CONCERNS, SO IT MUST BE RISKY”

### INVESTIGATING RISK AND MORALITY

#### INTRODUCTION

Why do people reject some technologies such as nuclear power or genetic engineering as risky while they judge others such as telecommunications technologies as less risky? Why do people perceive great potential threat in terrorism but less potential threat in global warming (or climate change) despite general scientific consensus of the seriousness of the latter?

How do people judge if something is risky or not? Does it matter if an issue is hotly debated among scientists or not?

We assume that when people judge something as a risk, moral judgments also play a role (e.g., judging something as morally reprehensible). More specifically, we assume that the relationship between risk and morality depends on whether people conceptualize an issue as more or less disputed in science. We will present two experimental studies using explicit and implicit measurements in a priming paradigm in order to test our assumptions.

We assume that the more people perceive a risk issue to be controversial and disputed, the stronger the association between their risk and moral judgments.

#### METHOD

**Experimental Manipulation:** We created three different conditions by priming participants (word sorting task) according to scientific dispute.

- I. **High-dispute** condition: science as preliminary, ambiguous, etc.
- II. **Low-dispute** condition: science as clear, unambiguous, etc.
- III. **Control Condition:** neutral priming

**Dependent Measures:** We measured risk and morality judgments.

#### STUDY 1

- Between-subjects measurement of variables: Participants gave either risk or morality judgments
- Implicit and explicit measurement of variables: Participants gave both implicit and explicit judgments (of either risk or morality), implicit judgments were measured using a single-category IAT (see Figure 1).

#### STUDY 2

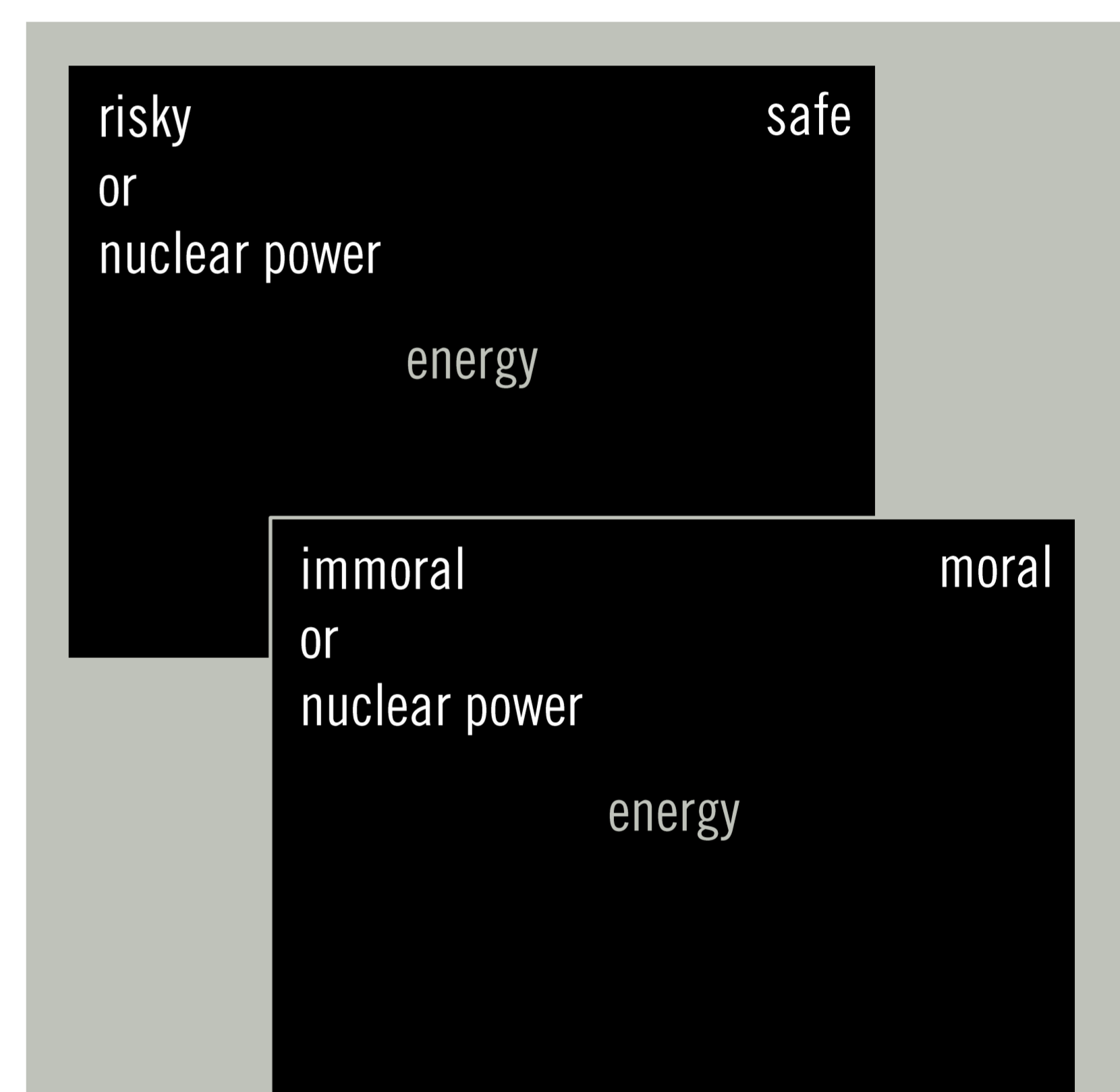
- Within-subjects Measurement: Participants gave both risk and morality judgments
- Implicit Measurement: Risk and morality judgments were measured using implicit measures (two adaptations of the single-category IAT)

#### RESULTS

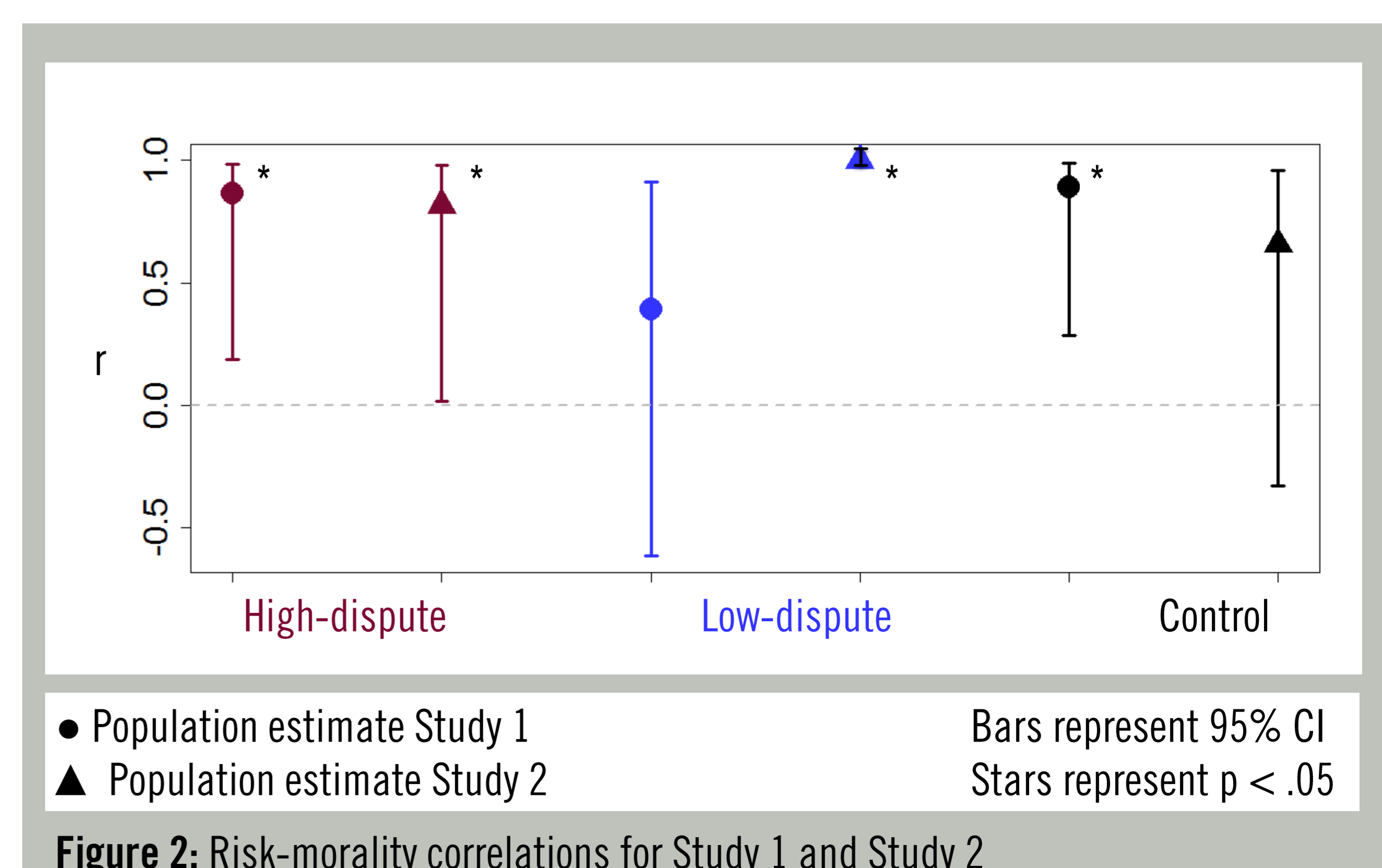
In study 1, explicit risk-morality correlations did not differ from zero in any of the three conditions.

Aggregated implicit risk-morality correlations found in Study 1 [●] and in Study 2 [▲] are displayed in Figure 2.

In line with our assumptions, risk-morality correlations were in both studies high in the high-dispute condition. However, the pattern of risk-morality correlations across all three conditions differs between Study 1 and Study 2. Even though it seems that on an aggregated level risk and morality judgments are highly related with each other, this does not seem to be affected by the general perception of scientific dispute.



**Figure 1:** Example IAT screen (trials with nuclear power)  
Upper pane: Single-category IAT trial on risk  
Lower pane: Single-category IAT trial on morality



**Figure 2:** Risk-morality correlations for Study 1 and Study 2