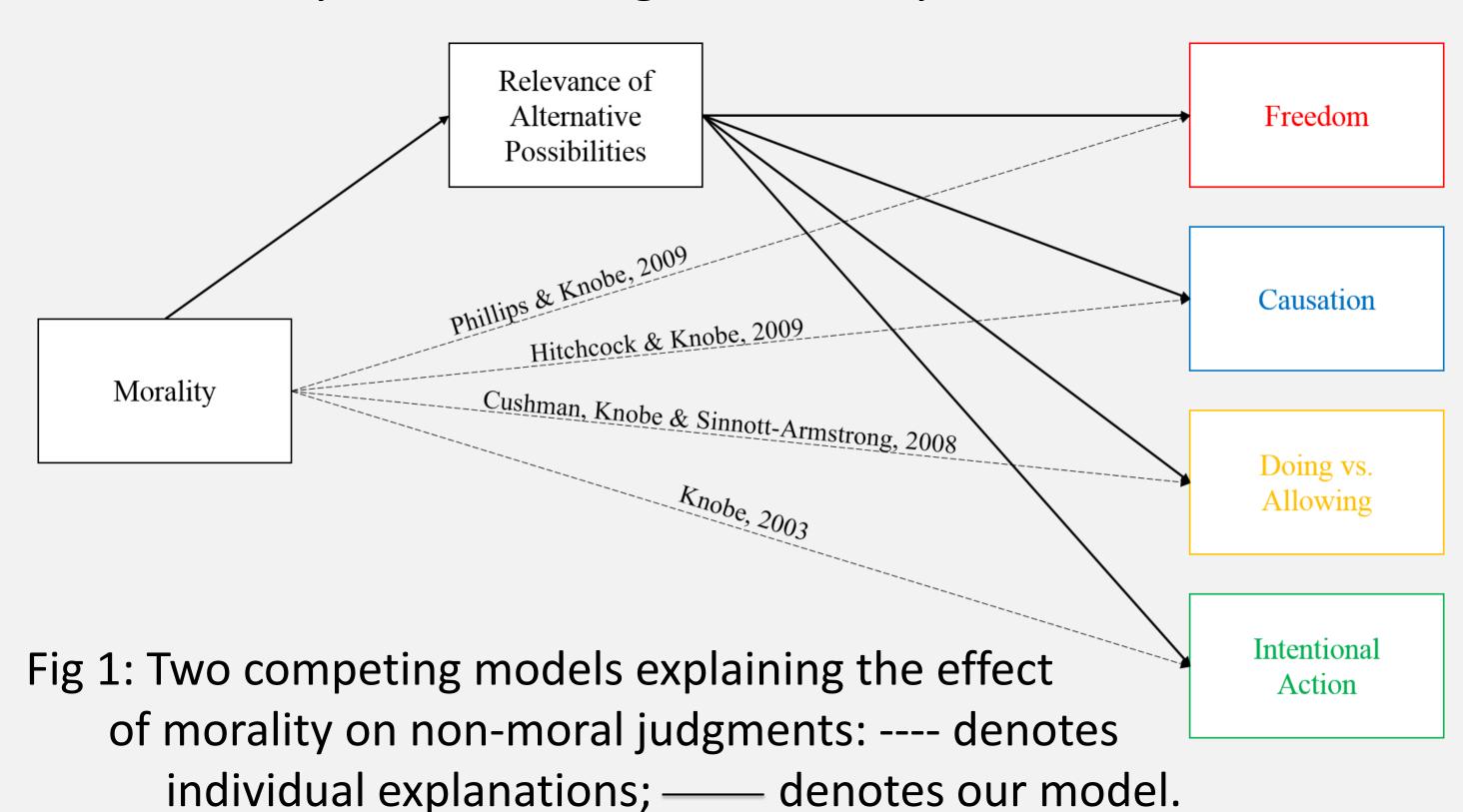
Unifying morality's influence on non-moral judgments: The relevance of alternative possibilities

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Morality's effect on non-moral judgments

A growing body of research has demonstrated that moral judgments have an influence on judgments of *freedom*, causation, doing vs. allowing, and intentional action.

While research investigating these effects has tended to pursue explanations of these effects individually (see fig. 1), we take the opposite approach and provide evidence for a unified way of accounting for morality's influence.



The relevance of alternative possibilities

Research in a number of different fields has independently argued for the importance of alternative possibilities (e.g., Lewis, 1973; Kratzer, 2012). However, people do not treat all alternative possibilities equally. Instead, they regard certain possibilities as *relevant*, while treating others as completely *irrelevant* (Halpern & Hitchcock, 2014; Portner, 2009; Roese, 1997). To the extent that an alternative possibility is regarded as irrelevant, it plays little role in their judgments.

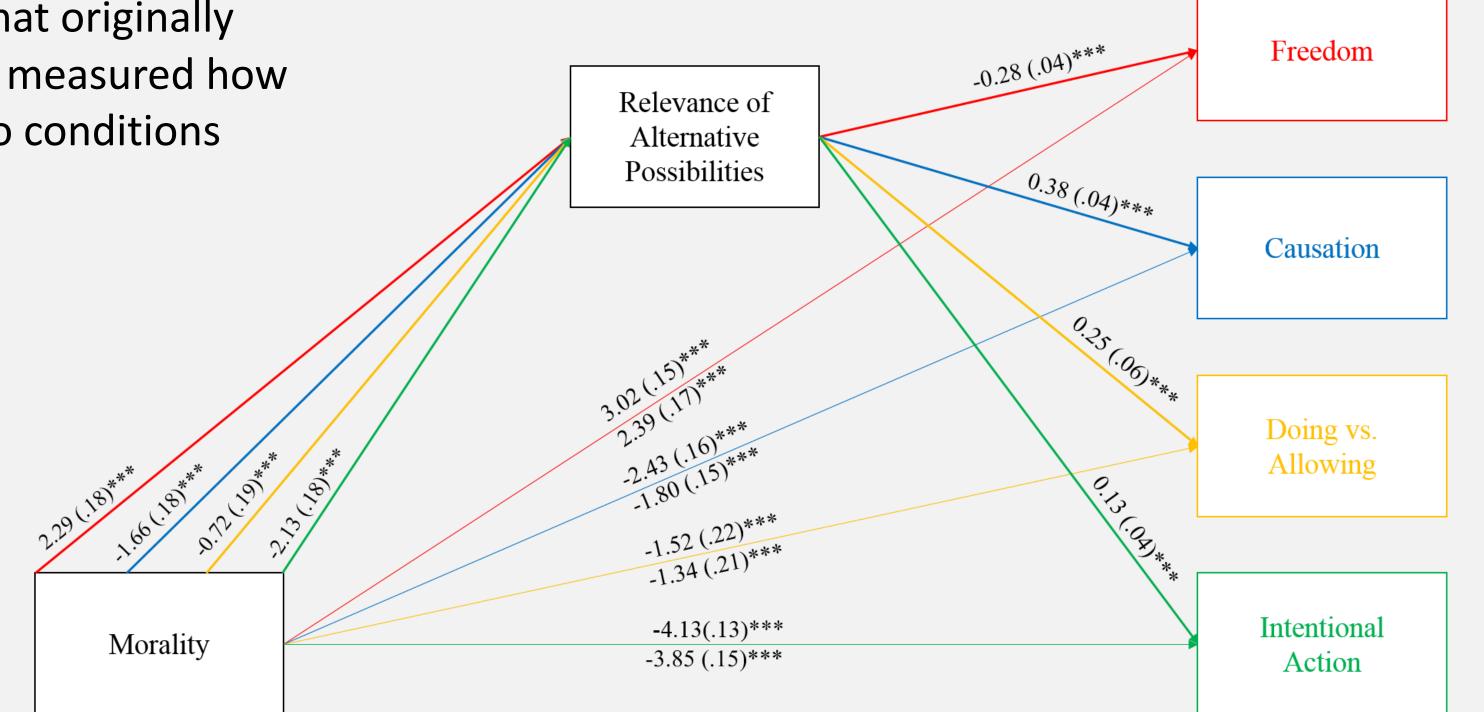
Morality and the relevance of alternatives

While past work offers theoretical support for the idea that the influence of morality may occur by altering people's intuitions about the relevance of possibilities, there has been little empirical work that directly investigates this possibility. This is the aim of the present work. We propose to explain the impact of morality by arguing that (1) moral judgments affect the relevance of alternatives and (2) the relevance of alternatives affect people's judgments in each of these four domains.

Studies 1-4: The relevance of alternatives mediates the effect of morality in all four domains

To test this model, we took the materials from four previously published studies that originally demonstrated morality's influence in each domain (see fig. 1). We then directly measured how relevant participants found alternatives to the agent's actions to be in these two conditions and asked whether these judgments of relevance mediated morality's effects.

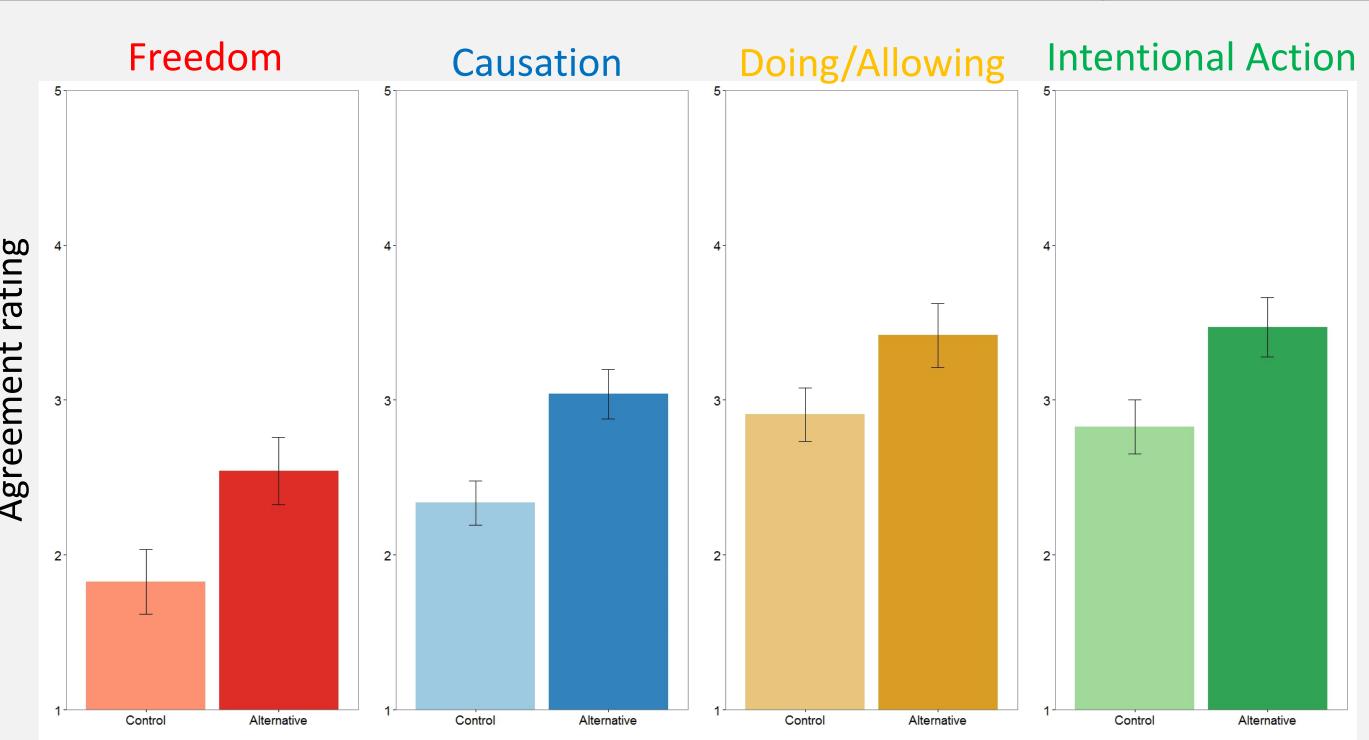
Results. We replicated the four original results and also found that changes in morality had significant effect on the judgments of the relevance of alternatives. Moreover, there was also an indirect effect of morality through judgments of relevance. This pattern held in the domain of *freedom*, t(388.48)=12.529, p<.001, d=1.253, mediation: 95% CI [.413, .909], *causation* t(397)=9.14, p<.001, d=.915, mediation: 95% CI [-.862,-.433], *doing vs. allowing* t(397)=3.79, p<.001, d=.38, mediation: 95% CI [-.342,-.072] and *intentional action* t(399)=12.10, p<.001, d=1.21, mediation: 95% CI [-.50,-.12].



Study 5a-d: Non-moral manipulations of relevance have the same effect as moral manipulations

If morality affects judgments in these domains by changing the relevance of alternative possibilities, then we should observe similar effects for completely non-moral changes to the relevance of alternative possibilities. We tested this using the morally neutral scenarios from the four previous studies. In each case, we non-morally manipulated the relevance of alternatives to the agents' actions by asking half of the participants to write about what else the actor could have done (the other half of participants simply summarized the story they read).

Results. In each of the four domains, we observed that non-morally manipulating the relevance of alternatives had the same pattern of impact as morality. This pattern was found in the domains of **freedom**, t(104) = 2.36, p = .02, d = .46, **causation**, t(322.00) = 3.31, p = .001, d = 0.42, **doing vs. allowing**, t(236) = 1.99, p = .047, d = .26, and **intentional action**, t(225.95) = -2.47, p = .014, d = .32.

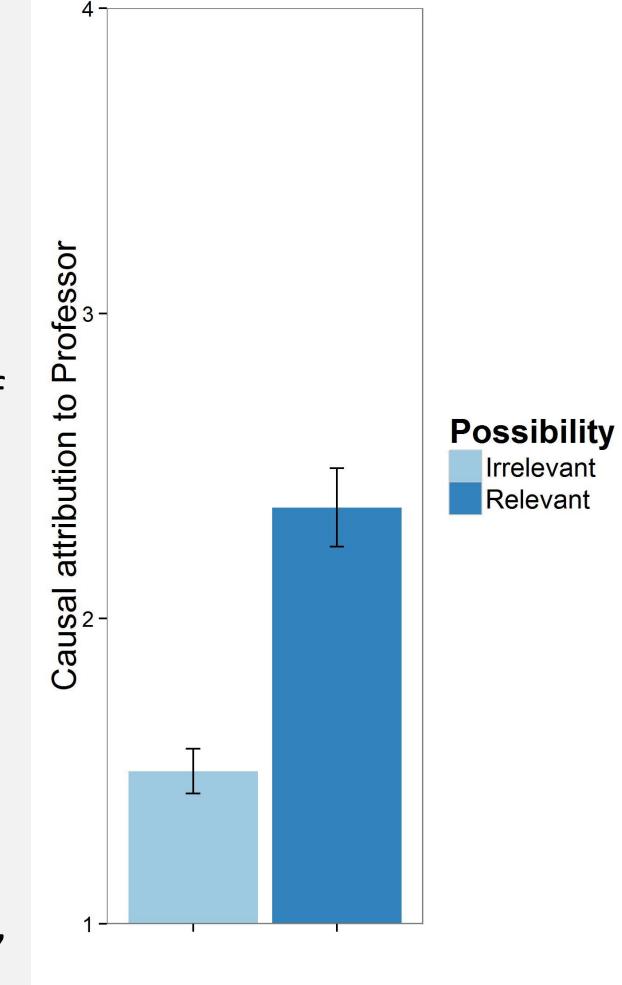


Study 6: Only alternatives that are relevant affect judgments

On our proposal, the central factor that affects these judgments is not just whether an alternative possibility is considered, but whether that possibility is regarded as relevant. Thus, we predict that even when people explicitly consider a particular possibility, their judgments will depend on whether or not they regard that possibility as relevant.

To test this, participants were asked to read about a busy and distracted student athlete who failed a professor's chemistry class during a semester when the professor did not devote much time to teaching. Half of participants were asked to consider a relevant possibility (that Prof. Smith could have spent more time helping the student) and the other half considered an immoral and thus irrelevant possibility (that he could have illicitly altered the student's grade). Participants then judged whether the student's failing was caused by the Professor.

Results. Participants who considered the relevant alternative possibility were more likely to agree that the student's failing was caused by Professor Smith (M=2.36, SD=1.39) than participants who considered a morally bad and thus irrelevant alternative possibility (M=1.50, SD=0.84), t(188.00)=-5.85, p<.001, d=.76.



Summary

Using the materials that originally demonstrated the effect of morality on judgments of freedom, causation, doing/allowing, and intentional action, Studies 1-4 provide support for the idea that the relevance of alternative possibilities partially mediate morality's impact. Going beyond morality, Studies 5a-d offer more direct support for the relationship between the relevance of alternatives and judgments in each domain. Finally, Study 6 provides evidence that the effect observed in these judgments is due to the relevance of alternative possibilities rather than the mere consideration of them. Together, these results demonstrate that a framework for the relevance of alternative possibilities can unify morality's pervasive impact.