



Up Close & Personal: the Effects of Psychological Distance on Moral Judgments

Zachary Brustman and William Horton

EasyChair preprints are intended for rapid dissemination of research results and are integrated with the rest of EasyChair.

July 11, 2022

Up Close & Personal: The Effects of Psychological Distance on Moral Judgments

Zachary Brustman and William S. Horton

Department of Psychology

Northwestern University

Author Note

The authors declare that there are no conflicts of interest with respect to this preprint. This work was supported in part by a Summer Undergraduate Research Grant & an Academic Year Undergraduate Research Grant awarded to Zachary Brustman by the Office of Undergraduate Research at Northwestern University. Correspondence should be addressed to Zachary Brustman: Zacharybrustman2022@u.northwestern.edu

Abstract

In this study we examined how judgments of morally ambiguous actions are affected by text features that vary a reader's psychological distance to scenario events. According to Construal Level Theory (CLT; Trope & Liberman 2010), objects and situations can be mentally represented either abstractly, in terms of high-level goals ("why"), or concretely, via situational details ("how"). We modified the surface-level descriptions of four moral dilemmas to be either strongly distal (abstract) or proximal (concrete). In a third condition we left the original dilemmas unchanged. For each scenario, participants judged whether it was appropriate to sacrifice one life to save others. We found that people consistently found such actions less appropriate for proximal dilemmas, but distal construals did not make these actions seem any more acceptable compared to the original versions. In addition to providing partial support for predictions made by CLT, these results demonstrate the importance of evaluating the materials used to elicit moral judgments. In an exploratory analysis we also found that self-identified Republicans found potential utilitarian actions less acceptable compared to self-identified Democrats, but for distal scenarios only. Political ideology may shape how individuals evaluate morally ambiguous actions, especially when texts promote abstract construals.

Up Close & Personal: The Effects of Psychological Distance on Moral Judgments

According to construal level theory (CLT; Trope & Liberman 2010), people can represent actions and events as being either psychologically *proximal* or *distal*. Proximal construals are focused on immediate situational details and often concern “how” events unfold. In contrast, distal construals are focused on high-level goals and are relatively abstract, with an emphasis on “why” events occur. In the extensive literature on CLT (e.g., Fiedler et al., 2012), psychological construal has been shown to be shaped by at least four distinct situational dimensions: social distance (self vs. other), physical distance (close vs. far), temporal distance (now vs. far future), and hypotheticality (certain vs. probable).

In the present study, we examine how psychological distance shapes judgments about moral dilemmas, which describe situations where someone is forced to consider an action that would cause harm to someone else to prevent an even greater harm, such as the infamous “trolley problem” (Thomson, 1976). In such dilemmas, finding it acceptable to cause harm to one individual to save many is thought to reflect a utilitarian moral philosophy (i.e., a focus on the “greater good”), while rejecting such actions is thought to represent a more deontological, rule-governed philosophy (“do no harm”).

In the moral psychology literature, dilemmas used to elicit moral judgments are often written relatively abstractly, with an absence of descriptive details or context. This may allow utilitarian trade-offs to seem more acceptable because their abstract nature may be less likely to elicit strong emotional reactions (Alper, 2020). Moreover, prior research specifically examining possible effects of psychological construal on moral judgments has either used a separate task to prime a general abstract/concrete ‘mindset’ prior to the moral judgment (e.g., Gong & Medin,

2012) or has used materials that manipulate only a single dimension at a time, with mixed results across studies (e.g., Eyal, Liberman, Trope, 2008; Žeželj & Jokić, 2014). In the current study, we asked participants to make moral judgments after reading a set of dilemmas that we manipulated to *simultaneously* vary on each of the relevant dimensions identified by CLT (social, physical, temporal, and hypotheticality), resulting in scenarios that were either strongly proximal or strongly distal. As a control condition, we also included scenario versions that were unchanged from their original source. We hypothesized that participants in the distal condition would find utilitarian actions to be more acceptable compared to participants in the original scenario condition, despite their potential similarities, while those in the proximal condition would find these actions to be less acceptable.

Method

Participants. We recruited 339 participants through Amazon’s Mechanical Turk. All participants were pre-screened to be U.S. residents at least 18 years of age who considered English to be their first language, and with an 80% or higher MTurk approval rate. We eliminated responses from 20 participants (5.8%) for incorrect answers to at least 3 of 5 attention checks. We also eliminated responses from eight additional participants who reported using English less than 50% of the time in their daily lives at work or home. This left a final sample of 311 participants (156 men; 150 women; 5 nonbinary). Participants were randomly assigned to either the Original (106 participants), Distal (103 participants) or Proximal (102 participants) scenario condition.

Materials. Our materials were based on four of the moral dilemmas used in Greene et al. (2001)¹. Each scenario described a main character in a situation where their life and the lives of others

¹ Based on the data provided in Greene et al. (2001), we purposely chose scenarios that, in their original form, elicited only moderately utilitarian response patterns. The scenarios were “Lifeboat” (pushing someone off a lifeboat to avoid sinking; 71% utilitarian judgments), “Crying Baby” (smothering a crying infant to avoid being

were threatened, but if the character took an action that would inevitably result in the death of one particular individual, the lives of everyone else would be saved. In Greene et al. these scenarios were presented in the 2nd person (“You”) and were not explicitly located in time or space. We rewrote each dilemma to create two new versions: one strongly proximal and one strongly distal. The Proximal versions were rewritten in the 1st person, described events as happening in the immediate future, included specific and vivid descriptive details, and presented potential outcomes in the simple future (“the boat will stay afloat”) to convey certainty. The Distal versions were rewritten in the 3rd person, described events as happening at a distant time and place, contained few additional details, and presented outcomes in modal form (“the boat would stay afloat”) to convey less certainty. As a control, we also included an Original scenario condition that presented the items as used by Greene et al. to permit comparison with our other conditions. See Table 1 for all three versions of one of our scenarios.

Following each scenario was the critical moral judgment, which required participants to decide whether it was appropriate for the main character to take some harm-causing action to save the lives of others. For this decision, they used a 7-point scale that ranged from 0 for “*Completely inappropriate*” to 6 for “*Completely appropriate*.” Each scenario was also followed by a multiple-choice attention check question that required participants to accurately recognize a verbatim phrase mentioned in the scenario. A fifth attention check, which came at the end, asked participants to select the “best description of your task in this survey,” with the correct answer being “to judge the moral acceptability of various actions.”

discovered by an enemy; 60% utilitarian), “Euthanasia” (killing an injured soldier to allow everyone else to escape; 63% utilitarian), and “Sophie’s Choice” (allowing one child to be killed rather than having them both die; 62% utilitarian). Importantly, we did not include any version of the trolley problem, believing this would be too well-known by potential participants. Other dilemmas involving healthcare and/or vaccines were also not included due to controversy surrounding Covid-19 at the time.

Table 1. *Example moral dilemma in the Original, Distal, and Proximal versions.*

Original (from Greene et al. 2001)

You are on a cruise ship when there is a fire on board, and the ship has to be abandoned. The lifeboats are carrying many more people than they were designed to carry. The lifeboat you're in is sitting dangerously low in the water—a few inches lower and it will sink. The seas start to get rough, and the boat begins to fill with water. If nothing is done it will sink before the rescue boats arrive and everyone on board will die. However, there is an injured person who will not survive in any case. If you throw that person overboard the boat will stay afloat and the remaining passengers will be saved.

Is it appropriate for you to throw this person overboard in order to save the lives of the remaining passengers?

Distal

Imagine that sometime 10 years from now someone is on a ship in distant waters when there is an emergency and the ship has to be abandoned. All the lifeboats, however, are overloaded, and the boat they are in is dangerously low in the water—any lower and it could sink. The seas start to become treacherous, and the boat takes on water. If nothing is done the boat could sink before the rescue ships arrive, and everyone aboard would die. In the boat is an injured person who wouldn't survive in any case. If they sacrifice that person, the boat would stay afloat and those who remain would be saved.

Is it appropriate for them to throw this person overboard in order to save the lives of the remaining passengers?

Proximal

Imagine that a couple days from now I am on a luxury cruise ship when a smoky fire breaks out on one of the decks, and the captain comes over the PA and orders us to make our way to the nearest lifeboat. It soon becomes clear to me that the narrow lifeboats are carrying many more people than they were designed to carry. My lifeboat is dipping dangerously low in the water—a few inches lower and it will sink. The waves start to get higher, and I watch water begin to slop over the edge of the boat, slowly filling it up. I can see that if nothing is done the tiny boat will sink before the rescue ships arrive and all the passengers huddled aboard will drown. However, I see another water-soaked passenger who is bleeding badly and clearly will not survive. If I throw that passenger overboard, the lifeboat will stay afloat and those of us who remain will be rescued.

Is it appropriate for me to throw this person overboard in order to save the lives of the remaining passengers?

Procedure. Participants followed a link to a Qualtrics survey that, after a series of demographic questions, presented instructions explaining they would be presented with four interpersonal scenarios, each describing a situation in which someone is confronted with a choice to take an action that would cause harm to someone else to prevent a greater harm. The participants' task was described as judging how morally appropriate they believed the suggested action to be. Instructions for the Distal and Proximal conditions contained additional guidance intended to strengthen our manipulation of psychological distance. For the Proximal condition, participants were told "These scenarios will all be written as if you are a direct participant in the situation, experiencing these events as they unfold. While reading try to imagine yourself having these experiences." For the Distal condition, the instructions stated "These scenarios will all be written as if you were an outside observer watching these events as they unfold. While reading, try to imagine yourself observing someone else having these experiences." The Original scenario condition contained no additional instructions. Otherwise, the instructions were identical across conditions.

Through Qualtrics, we randomly assigned each participant to one of our three conditions. Scenario order was randomized as well. Participants read each scenario at their own pace and then rated the appropriateness of the potential action described in the scenario. The next screen presented the attention check question for that scenario. After completing all four scenarios and the final task comprehension check, participants were asked for their thoughts on the study and debriefed.

Results

Figure 1 shows the average appropriateness ratings for each of our three between-subject conditions. In general, average ratings for the Original ($M=3.23$, $SD=2.06$) and Distal ($M=3.12$,

SD=1.99) conditions were each higher than the average appropriateness ratings for the Proximal condition ($M=2.59$, $SD=1.92$). To analyze this pattern, we fit mixed-effects models with Condition as a single fixed effect. Our initial model specified two contrasts; one comparing the Proximal and Distal conditions, and one comparing the Original and Distal conditions. The Proximal vs. Distal contrast was significant ($b=0.296$, $p<.03$), but the Original vs. Distal contrast was not ($b=-0.082$, $p=.54$). A second model tested the Original vs. Proximal contrast, which was also significant ($b=-0.378$, $p<.01$).

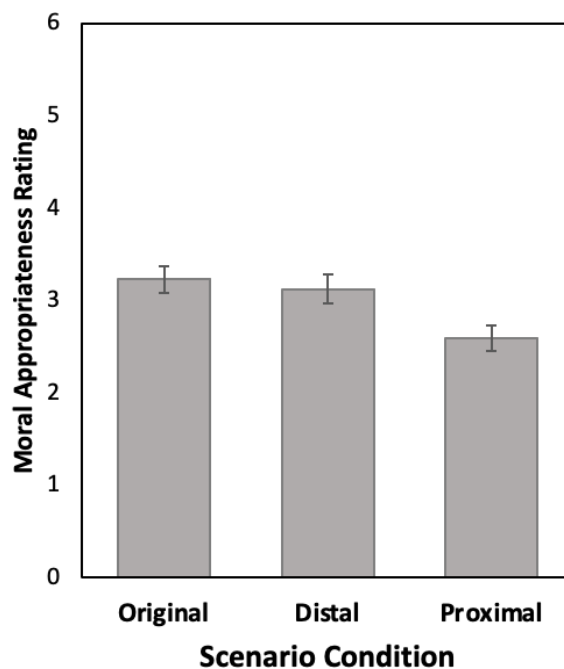


Figure 1. Average moral appropriateness ratings (0-6 scale) for each scenario condition. Error bars represent standard error of the subject means for each condition.

Secondary analysis of political affiliation. In moral judgment literature, individuals' willingness to endorse utilitarian actions has been shown to vary by political ideology, with political conservatism often associated with more deontological perspectives (Piazza & Sousa, 2014). In a secondary data analysis, we explored whether the effects of psychological distance on

moral judgments would interact with participants' political affiliation. In the initial demographic questions, participants self-identified as "Republican" (N=68), "Democrat" (N=144), "Independent" (N=89), or "Other" (N=10). For this exploratory analysis, we focused on participants identifying as either Democrat or Republican². Figure 2 presents the average appropriateness ratings for each scenario condition, grouped by participants' self-reported political affiliation.

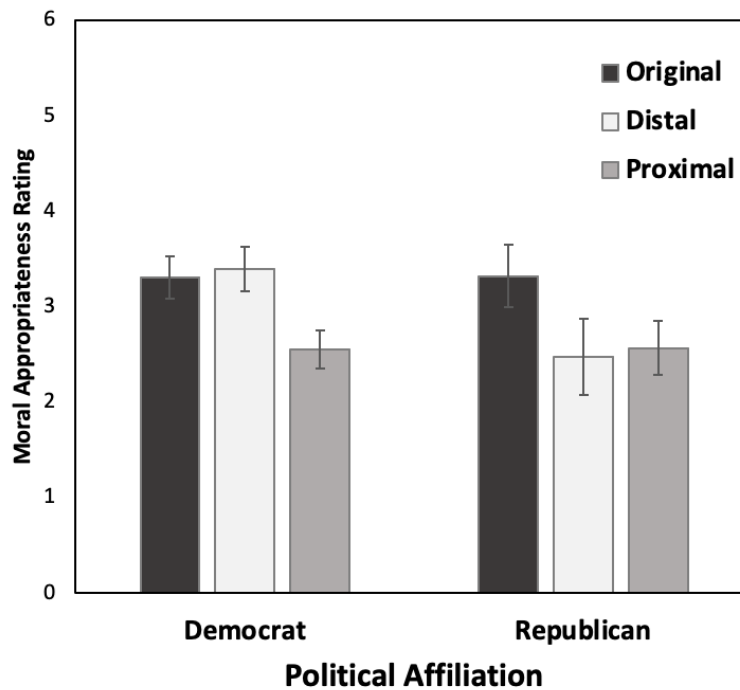


Figure 2. Average moral appropriateness ratings (0-6 scale) for each scenario condition by participant political affiliation. Error bars represent standard error of the subject means for each condition.

While both Democrats and Republicans gave lower appropriateness ratings for Proximal scenarios ($M_{\text{Dem}}=2.55$, $SD=1.88$; $M_{\text{Rep}}=2.56$, $SD=2.06$) than the Original control scenarios ($M_{\text{Dem}}=3.31$, $SD=2.04$; $M_{\text{Rep}}=3.32$, $SD=2.29$), this pattern differed for the Distal scenarios. For

² Self-reported Independents patterned mostly like Democrat respondents.

Distal scenarios, ratings by Republicans were lower ($M=2.47$, $SD=2.07$; similar to the Proximal condition) than ratings by Democrats ($M=3.39$, $SD=1.99$; similar to the Original condition).

Mixed-effect models revealed marginal interactions between political affiliation and the Distal vs. Original contrast ($b=0.466$, $p=.11$) and between political affiliation and the Distal vs. Proximal contrast ($b=0.467$, $p=.10$), but political affiliation did not interact with the Original vs. Proximal contrast ($b=.007$, $p=.99$).

Discussion

Our primary findings are partially consistent with the claims of CLT. When the scenarios were written in a way that made the situation seem “proximal,” people appeared to rely more heavily on deontological rules like “do no harm” in judging the described actions as less acceptable. In contrast, when the scenarios were written in a way that made the situation seem “distal,” people appeared to be more willing to rationalize taking a utilitarian action that would cause some harm in order to prevent other, more negative outcome. However, the degree to which people viewed the critical actions as acceptable in the Distal condition was not different from judgments for the Original scenarios used by Greene et al. (2001). It is possible that our manipulations in the Distal versions were not able to extend the sense of psychological distance beyond that already present in the original scenarios, which may have been written in a way that promotes distal thinking.

However, we did obtain some indication of differences in response patterns to the Distal condition across self-reported political leanings, with Republicans showing lower acceptability scores than Democrats. A possible explanation can be found in Moral Foundations Theory (MFT; Graham et al., 2013), which breaks individual morality into five factors: purity/sanctity, harm/care, fairness/reciprocity, ingroup/loyalty, and authority/respect. Though all people place

some level of importance on each of these factors, MFT argues that group-level differences in moral values will emerge from the relative weighting of some factors over others. Among other findings, it has been argued that political liberals tend to place higher value on harm/care and fairness/reciprocity, while political conservatives place higher value on purity/sanctity, ingroup/loyalty, and authority/respect. Thus, a Republican (which, given our U.S. sample, we tentatively equate with conservative values) may be less willing to break ingroup norms by killing one person to save the others, as killing is generally considered to be taboo. Also, killing may be seen to violate norms of purity/sanctity for these individuals. In contrast, a Democrat (which we tentatively equate with liberal values) may prioritize either or both of harm/care and fairness/reciprocity in accepting actions that would result in the least amount of harm. According to CLT, distal levels of psychological construal generally promote access to abstract, high-level values (Trope & Liberman 2010). Speculatively, these political differences could be appearing primarily in the Distal condition because evoking a distant construal makes these values more salient.

Beyond these unexpected findings, the fact that our Proximal scenarios appeared to push people toward relatively deontological perspectives suggests at the very least that researchers working on moral reasoning should attend to how their materials lend themselves to particular psychological construals. Conclusions about the generality of utilitarian thinking in moral reasoning will likely depend in part on the nature of the texts used to elicit these judgments (and, potentially, who the participants are). In future research, we would like to disentangle the effects of each of the text dimensions relevant for shaping psychological distance, as well as further probe possible differences in moral judgments using more sensitive measures of political ideology.

References

- Alper, S. (2020). Explaining the complex effect of construal level on moral and political attitudes. *Current Directions in Psychological Science, 29*, 115-120.
- Eyal, T., Liberman, N., & Trope, Y. (2008). Judging near and distant virtue and vice. *Journal of Experimental Social Psychology, 44*, 1204-1209.
- Fiedler, K., Jung, J., Wänke, M., & Alexopoulos, T. (2012). On the relations between distinct aspects of psychological distance: An ecological basis of construal-level theory. *Journal of Experimental Social Psychology, 48*, 1014-1021.
- Gong, H. & Medin, D. L. (2012). Construal levels and moral judgment: Some complications. *Judgment and Decision Making, 7*, 628-638.
- Graham, J., et al. (2013). Moral Foundations Theory: The pragmatic validity of moral pluralism. In P. Devine & A. Plant (Eds.), *Advances in Experimental Social Psychology, 47*, 55-130.
- Greene, J. D., et al. (2001). An fMRI investigation of emotional engagement in moral judgment. *Science, 293*, 2105-2108.
- Johnson, J. J. (1976). Killing, letting die, and the trolley problem. *The Monist, 59*, 204-217.
- Piazza, J., & Sousa, P. (2014). Religiosity, political orientation, and consequentialist moral thinking. *Social Psychological and Personality Science, 5*, 334-342.
- Trope, Y., & Liberman, N. (2010). Construal-level theory of psychological distance. *Psychological Review, 117*, 440-463.
- Žeželj, I. L., & Jokić B. R. (2014). Replication of experiments evaluating impact of psychological distance on moral judgment. *Social Psychology, 45*, 223-231.