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# WHO CARES ABOUT THE OUTGROUP?

Political Ideology, Empathy,  
and Moral Decision-Making

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# Who Cares about the Outgroup? Political Ideology, Empathy, and Moral Decision-Making

## Abstract

Conservatives are known to display smaller moral circles, have less empathy, and make utilitarian decisions. The present study aimed to understand the relationships between political ideology and empathetic concern ( $n = 513$ ), and between ideology and moral decision-making ( $n = 210$ ) in an inter-group setting, using an Indian sample. We measured trait empathetic concern and empathetic concern for the ingroup (i.e., their own religion) and outgroup (i.e., Muslims) using the Interpersonal Reactivity Index, and measured moral decision-making for a non-denominational group and in- and out-group using modified moral dilemmas. We found that right-leaning individuals, in terms of greater adherence to cultural norms, displayed higher levels of trait empathetic concern, as well as that for in- and outgroups; they were also more willing to sacrifice the outgroup to save multiple ingroup members in moral dilemma tasks, and thus made utilitarian moral decisions when sacrificing outgroup lives were concerned. Additionally, those leaning left, in terms of lower adherence to hierarchical structures, showed higher levels of empathetic concern for the outgroup. Implications and future avenues are discussed.

*Keywords:* political ideology, empathetic concern, social identity theory, moral decision-making, ideology in India

### **Who Cares about the Outgroup? Political Ideology, Empathy, and Moral Decision-Making**

India, as a country, is full of multitudes. This includes the presence of multiple intersecting identities, along the lines of caste, class, and religion, among others. This also implies that there may be many forms of outgroups in India. Empathy is often influenced by social categorization (Tarrant et al., 2009), in the sense that empathy for outgroups is often lower than that for ingroups. This is likely to be affected by political ideology as well. For instance, conservatives in the U.S. tend to have a smaller moral circle, compared to liberals (Waytz et al., 2016), implying that conservatives display greater moral consideration for those closest (and more similar) to them, as opposed to liberals who tend to have a wider moral circle. The present study aims to understand, using religion as an identity group in India, the extent to which political ideology predicts empathetic concern for the in- and the out-group, as well as moral decision-making for in- and out-groups.

#### **Political Ideology and Empathy**

Empathy may be broadly defined as “reactions of one individual to the observed experiences of another” (Davis, 1985, p. 113). It has been linked to prosociality in a number of instances (Halperin & Tagar, 2017; but see Buffone & Poulin, 2014). On the other hand, Bloom (2017) has argued that empathy may not necessarily cause people to act morally.

Whether differences in policy positions across the political aisle stem from differences in basic psychological mechanisms, like empathy, has been debated for a long time (Brandt et al., 2014; Caprara et al., 2006; Jost et al., 2003). Political ideology has been found to affect the extent to which one experiences empathy (see Iyer et al., 2012), in the sense that conservatism has been linked to lower levels of empathy. Waytz et al. (2016) have also argued that conservatives may have smaller

empathetic circles than liberals. Stitka and Tetlock (1992) have argued that conservatives may attribute others' plight to internal causes, whereas liberals may attribute them to external causes, contributing to higher empathy among the latter. Empathetic concern for others is also likely to be lower among those with higher levels of Social Dominance Orientation (SDO; Pratto et al., 2006). Those with high levels of SDO tend to endorse hierarchy and higher inequality between groups. SDO also has a negative relationship with empathy (e.g., Bäckström & Björklund, 2007; Chiao et al., 2009), and is a key characteristic of political conservatism (Pratto et al., 1994). On the other hand, Morgan et al. (2010) find that situational attributions may depend on whether the situations are consistent with their value positions. It may be argued that the targets of empathy may be different for liberals and conservatives; however, this may be context-dependent.

Specifically, conservatives are more likely to be empathetic towards family (opposed to friends), the nation (opposed to the world), and humans (opposed to nonhumans). Liberals, on the other hand, report more empathic concern than conservatives on an average, as well as with friends (Waytz et al., 2016). However, liberalism is not related to empathy across the board; in fact, when the moral circle was restricted to one's family, ideology and empathy had no significant relationship. In exploring the association between ideology and 'love of humanity,' conservatism was related to love of family compared to liberals, who on the other hand, reported higher love for friends than conservatives, implying that liberalism is related to universal compassion (Waytz et al., 2016). As conservatives experience greater empathy for their smaller moral circles (e.g., family, in-group; Hasson et al., 2018; Waytz et al., 2016), they might lack the motivation to be concerned about those outside their moral circle, while liberals would be motivated to spend resources on understanding others' emotions.

Moreover, Hasson et al. (2018) found that liberals were more motivated to be empathetic

compared to conservatives; further, both liberals and conservatives were less motivated to and experienced less empathy towards outgroups. In other words, they argue that political ideology is linked not just to motivated social cognition, but also to motivated social emotion.

### **Intergroup Empathy**

Studies in social categorization have shown that individuals instinctively categorize themselves into salient social groups (Hewstone et al., 2002), which then leads to maximization of group differences (Johnson et al., 2006). This also translates to individuals experiencing empathy differently for different groups. For instance, Cikara et al. (2014) found that people feel less empathy towards the outgroup versus the ingroup (see also Tarrant et al., 2009). Work in social neuroscience has also suggested that individuals experience lesser empathy towards outgroup members in pain, compared to ingroup members (Xu et al., 2009).

Trait empathy may be related to the extent to which one dehumanizes other groups (Krumhuber et al., 2015). However, there is also evidence to the contrary. Specifically, an “empathy gap” has been reported with respect to intergroup empathy. Differences in empathetic responding may also affect intergroup prosociality (Cuddy et al., 2007). Further, intergroup behaviors have been reported to be predicted by “parochial empathy” (Bruneau et al., 2017). The intergroup emotions theory, for instance, argues that one’s ingroup may be of emotional significance. Thus, if one feels empathy towards a specific out-group member, action may be taken on behalf of that out-group. On the other hand, if one feels empathy towards a specific ingroup member, one may be motivated to take action against the out-group (Mackie et al., 2009).

### **Moral Decision-Making**

Empathy has also been increasingly associated with morality both theoretically (e.g., Pizarro,

2000) and empirically (e.g., Crockett et al., 2010; Sarlo et al., 2012), including with moral decision-making (Lotto et al., 2014; Patil & Silani, 2014). For instance, the inability to fully experience affective empathy has been associated with utilitarian choices (Choe & Min, 2011; Glenn et al., 2010; Patil & Silani, 2014).

The dual process theory of moral decision-making posits that moral decisions are driven by two processing systems: a fast, automatic, emotional system, and a slow, controlled, deliberative system (Greene et al., 2008; Greene & Haidt, 2002). The former drives deontological choices (e.g., not favoring the sacrifice of one to save many), while the latter drives utilitarian choices (e.g., favoring of sacrificing one life to save more lives).

Moral decision-making is often studied in terms of moral dilemmas, wherein individuals are required to make a choice between saving the life of one versus that of many. The engagement of emotions while making moral decisions depends on the nature of the dilemma (Moore et al., 2008; Sarlo et al., 2012).

### **Moral Decision-Making and Political Ideology**

Political conservatives tend to make decisions based on sacred rhetoric and transcendent authority, rather than based on “projected numbers and plans” as liberals do (Marietta, 2009, p. 388), implying they are more concerned about traditions and group norms. Political conservatives may also exhibit a pattern for high levels of adherence to group norms, in-group preference, rejection of individuals who deviate from the group, and resistance to change within the group (Kruglanski et al., 2006). Political ideology also drives moral evaluations (Hatemi et al., 2019), especially in the context of the moral foundations theory (Graham et al., 2009). Conservatives also tend to be less utilitarian in their decision-making (Luke & Gawronski, 2021). Bostyn et al. (2016) also show that individuals with

high levels of right-wing authoritarianism (RWA) and SDO (both often linked to conservatism) also tend to make utilitarian (i.e., consequences-focused), rather than deontological (i.e., rules-focused) judgements in trolley dilemmas.

With respect to other aspects of morality, research has found that the outgroup may be considered immoral and unjust, which might precipitate negative attitudes and behaviors towards the outgroup (Schwartz & Struch, 1989). Ingroup members usually dehumanize outgroup members in intergroup settings (see Goff et al., 2008; Harris & Fiske, 2006), especially when group categorization is meaningful (Demoulin et al., 2009). Dehumanization of the outgroup may be driven by viewing the outgroup as failing to live up to one's ingroup values (Schwartz & Struch, 1989). An enemy group may also be seen as opportunistic, manipulative, and immoral, or they may be seen as ruthless, crude, or barbaric (see Alexander et al., 2005). Social connection with others in the ingroup increases dehumanization of others in multiple ways: acceptability of treating others as animals, failing to attribute human-like mental states to others, and increases willingness of punishing suspected terrorists more harshly (Waytz & Epley, 2012).

Studies have also shown that individuals who believe ingroup membership to be salient and identify strongly with ingroups tend to highly dehumanize the outgroup (Pacilli et al., 2016). Similarly, Cassese (2021) linked dehumanization with perceptions of greater moral distance among political opponents. However, Rai et al (2017) have found that dehumanization may increase instrumental, but not moral violence.

### **Intergroup Relations in India: Communalism**

Previous work has also suggested that blatant dehumanization of Muslims was associated with partisanship (Kteily & Bruneau, 2017). Indeed, politicians themselves have often likened Muslims to



animals (e.g., Scott, 2015). In the Indian context, anti-Muslim beliefs are not new. The history of communalism in India has been located in the political context of colonialism. For instance, most instances of colonial historiography, regardless of the specific issue concerned, has been essentialized as a religious conflict (Das, 1995; Pandey, 1999). Though there are multiple minority religions in India, and communal tensions have been observed across religions, the history of partition has ensured the endurance of Hindu-Muslim conflict in India, including communal riots and state-sponsored programs (Brass, 2003; Khan & Chakrabarty, 2021; Pillai, 2002).

Qualitative work has also shown Islamophobia in public and academic discourse, symbolically as well as narratively, including dehumanizing the targets of communal violence (see Singh, 2009). Mathur (2008) has argued that there is a link between culture and violence, supported by the institutions that are supported by the democratically-run state, and with tacit public consensus. Pandey (1999) has also argued that combined with the idea of “barbaric” Muslim colonizers and political enquiry stoked by religion and ethnicity, Indian nationalism has taken the form of the Muslim community against the rest of the country.

More recently, hate speech and disinformation about the role of Muslims in spreading the coronavirus has been rampant across social media platforms, including through memes and other posts (Rajan & Venkatraman, 2021). Though this originated from Hindu nationalists and established Islamophobic accounts, it was shared and amplified across the globe (Soundararajan et al., 2020). Intergroup emotions, such as anger and disgust predict Islamophobic attitudes, especially among those with higher levels of ingroup identification, including in India. On the other hand, those with low levels of SDO was linked to higher levels of fear of Islam and Muslims (Uenal et al., 2021).

### **Political Ideology in India**

The concept of ideology has been understudied in India, especially in the context of individual differences. However, theoretically, previous studies have indicated a two-factor structure that is similar to social or cultural ideology, as described in the West. Specifically, Jaffrelot (2017) discussed two aspects of conservatism: the ethos of extended families and caste hierarchies, and valuing of rituals and ancient beliefs. Similarly, Chibber and Verma (2018) discuss two criteria along which ideological debates developed in a post-independent India: whether the state should have to accommodate the interests of marginalized groups in the historically hierarchical society of India, and whether the state should have a role in changing social norms in India. The present study utilizes this two-factor model through the use of the Political Ideology Scale (Puthillam et al., 2021). Ancillary, a third factor of economic ideology is also explored.

The first factor of norms is similar to the purity foundation of the moral foundations theory (Graham et al., 2011). *Norms* was defined as moral and cultural norms, along which ideological debates have been conducted in India. Specifically, it includes themes such as religion, dowry, and censorship. The second factor of *obedience to hierarchical authority* is theoretically similar to the system justification theory (Jost et al., 2003) and the conceptualization of SDO (Sidanius et al., 2013) and RWA (Altemeyer & Altemeyer, 1981). These two factors fall broadly within the socio-cultural domains and have been explored in the present study. The third factor consists of economic ideology, which includes themes relating to whether the state should interfere in the economy and businesses.

### **The Present Study**

Considering the location of India as a country with multiple identities and therefore, multiple definitions of outgroups, diminished empathy for the outgroup may pose a serious challenge. This is especially true considering that Indians compete for the same finite resources (see de Waal, 2012).

Empathetic concern includes the motivational component of empathy that specifically refers to care and compassion when watching others in distress; it may motivate prosociality (Batson et al., 1995; Morelli et al., 2014).

Political ideology plays an important role in predicting emotions and attitudes towards different groups. The present study investigates the link between political ideology and moral judgements in the context of empathetic bias shown towards Muslim others by non-Muslims in India. Those leaning right of the political spectrum have been shown to expend lower empathy towards smaller moral circles compared to those leaning left, who tend to be more universally compassionate (Waytz et al., 2016). Among Indians, Islamophobic sentiments have been especially mainstream historically (Jaffrelot, 2009), as well as more recently (Hussain et al., 2019; Ushama, 2020). Often in India, especially among those leaning right and sometimes in bureaucracies, many religions other than Muslims are accepted as having a “Hindu origin” or being indigenous to India (Dhondy, 2020; Joshi, 2015; Rao, 2019) and hence are not vilified to the extent that Muslims are as a religious outgroup. We contend that right-leaning individuals would show more empathetic concern for in-groups, compared to out-groups, whereas left-leaning individuals would show no such difference. We also argue that right-leaning individuals would make utilitarian choices for the out-group (i.e., easily sacrifice multiple out-group lives for a single in-group life), within the context of moral dilemmas.

Based on the literature presented above, the following hypotheses were pre-registered:

- H1a. Political ideology (specifically the socio-cultural sub-scales of the Political Ideology scale) positively predicts empathetic concern for the in-group.
- H1b. Political ideology negatively predicts empathetic concern for the out-group.
- H2a. Political ideology positively predicts spending more money to save a single ingroup member on

sacrificial moral dilemmas when multiple Muslim lives are at stake.

H2b. Political ideology negatively predicts spending more money to save a single Muslim member on sacrificial moral dilemmas when multiple non-Muslim lives are at stake.

## Method

### Participants

The total sample comprised Indian nationals. However, due to missing data for some measures, the sample was divided based on the hypotheses. Specifically, the first group (Set A, from now on), comprised those who responded to all measures pertaining Hypotheses 1a and 1b; the second group (Set B, from now on) comprised those who responded to the measures pertaining Hypotheses 2a and b. Participants were recruited online, owing to the pandemic restrictions. The online Qualtrics form was circulated through social media as well as through online classes at various colleges in India. Apart from age (i.e., >18 years), nationality (i.e., Indians), English proficiency ( $\geq 5$  on a scale of 1 to 10), self-reported honesty ( $\geq 5$  on a scale of 1 to 10), and attentiveness in responding ( $\geq 5$  on a scale of 1 to 10), as well as the correct response to one attention check, no additional restrictions were placed on participant selection, in order to ensure a more diverse sample and thereby allow greater generalizability of results.

An effect size of .27 (Blair, 2017) was considered pertinent for a priori sample size calculation using G\*Power. Given the two tested predictors of political ideology (i.e., the two subscales of norms and hierarchies) and possible control variables of social desirability, age, and gender, a sample size of 64 was required to achieve the power of .90 and an error probability of .017. A sample size of 192 was preregistered, with a total sample of 225 based on attrition. However, the extent of missing data was

much higher than anticipated, and 513 participants were included in Set A.

### **Set A**

The respondents' ages were between 18 and 62 ( $M = 26.36$ ,  $SD = 6.12$ ) years. This included 268 women, 224 men, 1 non-binary/trans/genderqueer person, 5 who did not disclose, and 15 who did not respond. Further, 217 (42.30%) self-identified as Hindus, 55 (10.72%) as Christians, 38 (7.41%) as Buddhists, 81 (15.80) as Muslims, 20 (3.90%) as Jains, 3 (0.58%) as Sikhs, 3 (0.58%) as Parsis, 30 (5.85%) as others; 65 (12.67%) did not disclose. The data from Muslim participants were removed for analyses as empathetic concern of non-Muslims towards Muslims was assessed in this study.

### **Set B**

Considering the nature of the stimuli, participants who self-reported that they had some form of color blindness, as well as who could not pass the 2-item colorblindness test (based on the Ishara test; see Appendix A) were excluded from the analyses. Further, those who self-reported being a Muslim were also removed from the analyses. Finally, those who said they were uncomfortable responding to the moral decision-making task were excluded from the analyses.

Set B, then, comprised 210 respondents between the reported ages of 18 and 49 ( $M = 26.88$ ,  $SD = 6.06$ ) years. This included 106 women, 101 men, and 2 who did not disclose, and 1 who did not respond. Further, 123 (58.57%) self-identified as Hindus, 26 (12.38%) as Christians, 30 (14.29%) as Buddhists, 12 (5.71%) as Jains, 1 (0.48%) each as Sikh and Parsis, 16 (7.62%) as others; 1 (0.48%) person did not disclose.

### **Measures**

#### ***Political Ideology Scale*** (Puthillam et al., 2021)

This scale measures the extent to which individuals identify with left and right ideologies across

social (norms and hierarchies) and economic issues in India. As in the original construction, the first factor of *social and cultural norms* and the second factor of *obedience in hierarchical authority* had acceptable internal consistency scores ( $\alpha_{\text{norms}} = .89$ ,  $\alpha_{\text{hierarchies}} = .93$ ), but the economic ideology factor did not ( $\alpha_{\text{economic}} = .21$ ). Means and standard deviations are presented in Table 1b. A higher score in each subfactor represents higher right-wing ideology or conservatism.

### ***Moral Decision-Making Tasks***

Participants were presented with modified versions of three dilemmas: Transplant, Fumes, and Burning Building (see Appendix B), along with a scale to measure to what degree they are willing to make a utilitarian (versus non utilitarian) choices (i.e., (1) \$0 (I'd do it for free); (2) \$10; (3) \$100; (4) \$1000; (5) \$10,000; (6) \$100,000; (7) a million dollars; (8) never for any amount of money). Even though most studies using moral dilemmas present participants with a binary response option (i.e., will/will not engage in the behavior), the present study asked them the degree to which they were willing to engage in saving or sacrificing an individual with a monetary tradeoff, based on the Moral Foundations Sacredness Scale (Graham & Haidt, 2012). Ascribing monetary values to measure the degree of willingness was included to increase ecological validity. Means and standard deviations are presented in Table 1c.

### ***Empathetic Concern***

A 7-item measure from the longer Interpersonal Reactivity Index (IRI; Davis, 1980), rated on a scale of 1 (= does not describe me well) to 5 (= describes me well) was used to measure empathetic concern ( $\alpha = .65$ ). It was further modified (Appendix C) to measure the extent of concern for out-group ( $\alpha = .72$ ) and in-group members ( $\alpha = .53$ ). Means and standard deviations are presented in Table 1b.

### ***The Balanced Inventory of Desirable Responding Short Form (BIDR-16; Hart et al., 2015)***

This scale comprises a multi-dimensional 16 item social desirability measure, using a 7-point rating scale (ranging from 1 = 'Not True' to 7 = 'Very True'). It provides separate scores for two dimensions of social desirability- Self-Deceptive Enhancement (SDE;  $\alpha = .70$ ) and Impression Management (IM;  $\alpha = .55$ ). Self-Deceptive Enhancement (SDE) refers to over-reporting of positive behavior, and Impression Management refers to under-reporting of negative behavior. This scale is important because of the susceptibility of participants responding in a socially desirable manner.

### ***Attention Checks***

To test whether participants have been paying attention, the response to an attention check within the vignette section was assessed.

### **Design**

A repeated-measures experimental design was employed, wherein participants had to choose one of the presented outcomes: save multiple outgroup members by sacrificing an ingroup member, save multiple in-group members by sacrificing an outgroup member, and a control group, wherein no information about religion was presented. Each participant was presented with one of the three moral dilemma vignettes, which represented any one of the possible outcomes; the order of presentation of the moral dilemma vignettes were counterbalanced. Participants were presented with the demographic form, the political ideology scale, and all three versions of the empathetic concern scale.

### **Procedure**

The present study received ethical clearance from [masked for review #025-018]. Participants were informed that their responses will be confidential and anonymous, and were told that if at any stage they felt unease or if they wished to withdraw participation, they could do so by closing their browser window without any penalty. Once participants read the consent form, they were presented

with a basic demographic form, wherein they were asked to report their gender and age. They then responded to the political ideology scale, following which they reported their religious identity. If participants reported that they identify with Islam, they did not respond to the empathetic concern scale or the moral decision-making vignettes. For every other religion, participants were then led to the three empathetic concern scales. Then, participants were asked whether they have any form of colorblindness. If they responded yes, they were not presented with the moral decision-making vignettes; if they responded “maybe” or “no,” they were shown the vignettes. They then were presented with the color-blindness test. Next, participants responded to the social desirability scale, followed by a detailed demographic form. Finally, they were debriefed, and were told that they could get in touch with the researchers should they wish to withdraw. The procedure followed is represented in the Appendix D.

## Results

Demographic characteristics and zero-order correlations are presented in Tables 1a, b, and c.

### Empathetic Concern

To test whether political ideology predicts empathetic concern, hierarchical regressions were conducted with those demographic details that had a significant relationship with empathetic concern, along with social desirability as control variables. Specifically, gender, age, religious identity, caste (measured as whether they got reservations, coded as Yes= 3, No= 1, Maybe= 2), occupation, importance of religion in their life, and income were included as control variables based on significant correlations.

The relationship between ideology and empathetic concern is presented in Table 2. *Norms*



significantly predicted empathetic concern. Specifically, the lower the importance of norms (i.e., the less conservative one is), the higher the empathetic concern. *Norms* also negatively predicted concern for the ingroup, contrary to H1a. *Norms* negatively predicted empathetic concern for the outgroup, in line with H1b, whereas ancillary, economic ideology positively predicted empathetic concern for the outgroup (Supplementary Table 1).

When trait empathetic concern is accounted for, none of the factors significantly predicted empathetic concern for the in- or the out-group. Furthermore, there is no significant difference between the empathetic concern scores for in- and out-group in the case of any of the facets of political ideology [Norms:  $z = .62$ ,  $p = .30$ ; Hierarchies:  $z = .29$ ,  $p = .62$ ; Economic ideology:  $z = -.33$ ,  $p = .37$ ].

Ancillary analyses show that these results are replicated in a subsample of only Hindus (Supplementary Table 2).

### **Moral Decision-Making**

To test the relationship between ideology and moral decision-making, hierarchical regressions were conducted, controlling for the following: gender, religion, caste (i.e., reservations), occupation, income, and importance of religion, based on significant correlations.

Political ideology did not predict moral decision-making in the neutral condition. *Norms* and hierarchies predicted sacrificing a single outgroup member to save multiple ingroup members supporting H2a (Table 3). However, ideology did not predict sacrificing a single ingroup member to save multiple outgroup members.

Ancillary results replicating the findings in a subsample of Hindus are presented in Supplementary Table 3 and the mediating role of empathetic concern in the relationship between ideology and moral decision making are presented in Supplementary Figure 1.

## Discussion

The present study aimed to understand whether political ideology predicts empathetic concern in general, and whether this relationship changes when directed at Muslim others versus when directed at the religious in-group, defined as non-Muslims here. We also tested whether political ideology predicts moral decision-making in general, and when sacrificing an outgroup member to save ingroup members, and when sacrificing an ingroup member trying to save outgroup members.

### Empathetic Concern

We found that leaning left on social and cultural issues (i.e., norms) displayed higher levels of empathetic concern in general, as well as for both, the in- and out-groups. Normative expectations affect the relationship between willingness to interact with the outgroup as well as the attribution of a prosocial motivation to a helpful person (Borinca et al., 2021). Group identification that is morality-based, as in this case, may be conducive to negative emotions (Parker & Janoff-Bulman, 2013). Previous work among children has also indicated that norms drive intergroup relationships, including empathy. For instance, intergroup empathy bias can be reduced by making norms about the outgroup

salient among children (Sierksma et al., 2014). Among children who think their peers are biased against the outgroup, a negative link between empathy and outgroup bias has also been found (van Bommel et al., 2021).

Further, those leaning left on issues relating to the hierarchies reported higher levels of empathetic concern for the outgroup. Obedience to hierarchical authorities is closely linked to social dominance orientation. Thus, this is in line with previous evidence indicating an association between SDO and empathy (Sidanius et al., 2013). For instance, SDO negatively predicts dispositional empathy; SDO and empathy both also had a relationship with generalized prejudice (Bäckström & Björklund, 2007; McFarland, 2010). Further, SDO is strongly associated with activity in the left anterior insula and anterior cingulate cortices, which are associated with affective empathy (Chiao et al., 2009) as well as with left temporo-parietal junction, which is associated with concern for outgroup versus ingroup (Cheon et al., 2011).

Further, those leaning right on economic issues displayed higher levels of empathetic concern for the ingroup. This may be because those on the economic right in India, are especially the target audience of the pro-Hindutva politics. For instance, the platform for the ruling party in 2014 was a pro-business model (see Fazal, 2019 for why the economically oppressed may have voted pro-Hindutva; also see Iwanek, 2014 to trace a history of the Hindu nationalist's view of the economy).

### **Moral Decision-Making**

The results regarding moral decision-making were largely inconclusive; we found that those with higher levels of conservatism with respect to cultural norms would spend a lesser (rather than more) amount to save a single outgroup member to save multiple ingroup lives. In other words, this may be interpreted as those who were more conservative were more likely to choose a utilitarian

solution when multiple ingroup lives were in danger, but not necessarily when multiple outgroup or neutral lives were in danger.

On the other hand, it is possible that those on the ideological left may be more attuned to individual moral codes than the group, whereas those on the right prioritize both individual and group moral codes equally (Graham et al., 2009). Wildschut and Insko (2006) argue that moral codes may differ based on whether the decision is being made for the individual or the group. Further, when group morality becomes salient, those who adhere to individual morality may violate these tenets. In the context of the present study, it is interesting to note that those on the ideological right, especially as it pertains to cultural and normative issues, are more likely to sacrifice the outgroup in order to save multiple ingroup members. This is in line with various political actors who argue for a zero-sum game with respect to Hindu-Muslim relationships in India (Joshi, 2015; Sidharth, 2018; “Time to Call the Bluff, Bust Myths Created by Hindutva Groups to Demonise Muslims,” 2021).

Though previous work has indicated that SDO and RWA are related to utilitarianism (Bostyn et al., 2016), *hierarchies* did not affect moral decision-making. This may be because the normative and affective components of SDO and RWA predict utilitarianism. Indeed, Bostyn et al. (2016) found that the conventionalism and submission facets of RWA did not predict utilitarianism, but authoritarian aggression (i.e., aggression endorsed by authorities; Adorno et al., 2019) did. However, future research should assess this.

Ancillary, we found that empathetic concern did not mediate the role of ideology on moral decision making, which may imply that the relationships between ideology and moral decision making may be driven by other processes. However, considering the sample size in the moral decision-making hypotheses, a comparatively complex model such as mediation models should be interpreted with

caution.

### **Strengths, Limitations, and Future Avenues**

The present study assessed attitudes towards a religious outgroup (i.e., Muslims) that is often sanctioned in India. In general, political ideology and its correlates are understudied in the Indian context. Further, the study of political ideology and how it affects empathetic concern for various groups, as well as how it affects moral decision-making when various groups are concerned is also understudied. This is especially important given the nature of polarized rhetoric and political decisions (including voting). Moreover, studying emotional and moral attitudes towards the out- and in-group might provide important cues about polarization; this is especially important in the context of India, wherein religious polarization is an issue of increasing concern. Similarly, these findings are pertinent in the context of growing tensions between Muslims and non-Muslims in India and elsewhere. This is also relevant, especially considering the right-wing government in India (Ahmad, 2021), which believes in the pre-partition two-nation theory, i.e., Hindus and Muslims are two different civilizations (Kadir & Jawad, 2020; Şahbaz, 2020).

However, the present study has some limitations. First, the sampling was largely done online (due to the pandemic) and only in English, limiting the generalizability of the findings. However, the distribution in terms of religion, gender, and caste was similar to that of the national average (see Table 1). Future research should aim to include participants in more Indian languages. A number of individuals also were uncomfortable with responding to the moral decision-making task (see Supplementary Figure 2), and therefore, there was missing data from the vignettes. Next, the internal consistencies of some scales (e.g., empathetic concern) were not ideal. Future research should attempt to assess these constructs using different scales and could also attempt to improve

measurement within an Indian sample. Further, the nature of Islamophobia in India is likely to be different than that within different countries. Future research should attempt to study the same across countries, including building more cohesive and global theories.

On the other hand, this was a first step in understanding how ideology intersects with religious prejudice and otherizing, especially as it relates to empathetic concern and moral decision-making.

### **Conclusion**

The present study assessed how political ideology affects empathetic concern and moral decision-making as it relates to individuals from their own religion (i.e., ingroup) and those who are Muslim others (i.e., the out-group). We found that those on the left concerning norms reported higher empathetic concern in general, as well as towards in- and out-groups; they also were more hesitant to sacrifice the out-group to save multiple in-group members. Those on the left on issues relating to hierarchies were more likely to have higher empathetic concern for the outgroup.

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Table 1a

Participant Characteristics

Variable		Empathetic Concern (N = 513)	Moral Decision-Making (N = 210)	Census (2011)
		N	N	Percentages
Gender	Men	224	101	52
	Women	268	106	48
	Prefer not to say	5	2	NA
	Non-binary/Trans/Questioning	1	NA	NA
	Other	14	NA	NA
Religion	Buddhism	38	30	.08
	Christianity	55	26	2.3
	Hinduism	217	123	80.5
	Islam (removed from analyses)	81	NA	13.4
	Jainism	20	12	.08
	Other	30	16	.6
	Sikhism	3	1	1.9
	Zoroastrianism	3	1	NA
	Unknown	65	NA	.1
				<a href="#">Link</a>
Residence	India	327	177	
	Other	69	25	
	Unknown	116	1	
Education	Diploma/Vocational Training	40	18	Overall literacy levels: 64.8%
	Finished High School	66	25	
	Graduate	41	29	
	Less than matriculation	1		
	Matriculation	9	4	
	Other	7	4	
	Post-graduate	63	36	
	Some college/in-college	169	86	
	Unknown	116	7	
				<a href="#">Link</a>
Caste	Adivasi	2	1	SC: 16.2% ST: 8.2%
	Bahujan	17	6	
	Brahmin	78	27	
	Dalit	47	21	
	Do not wish to disclose	34	22	
	General	44	28	

Variable		Empathetic Concern (N = 513)	Moral Decision- Making (N = 210)	Census (2011)
	Kshatriya	58	36	
	Other	14	7	
	Other higher castes	34	23	
	Other oppressed/lower castes	6	3	
	Vaishya	34	17	
	Unknown	2	18	
				<a href="#">Link</a>
Primary Language	English	347	176	
	Other	49	26	
	Unknown	116	7	
Income	10,001-15,000 INR	77	30	
	15,001-20,000 INR	55	35	
	20,001-40,000 INR	51	31	
	2001-6000 INR	43	9	
	6001-10000 INR	59	25	
	2000 INR	4	1	
	40,001 INR	107	71	
Reservations	Yes	149	64	
	Maybe/Other	111	48	
	No	136	90	

Table 1b

Zero-order Correlations (Empathetic Concern)

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1. Age	26.36	6.12	—																			
2. Gender	1.48	0.56	.16***	—																		
3. Norms	46.98	18.89	.31***	.31***	—																	
4. Hierarchies	68.7	22.3	.26***	.30***	.78***	—																
5. Economic	23.17	4.64	.15**	.14**	.36***	.48***	—															
6. Religion	3.36	1.6	-0.08	-.09*	-.31***	-.34***	-.15**	—														
7. Socially Desirable Enhancement	24.31	5.3	.28***	.23***	.31***	.40***	.21***	-.14**	—													
8. Impression Management	24.18	4.74	.12*	0.08	0.01	0.09	0.08	-0.01	.42***	—												
9. BIDR (Total)	48.48	8.46	.24***	.19***	.20***	.30***	.17***	-0.1	.86***	.82***	—											
10. Caste (coded)	1.49	0.82	-0.07	-0.02	-0.05	-0.09	0.02	-0.06	-0.04	-.15**	-.11*	—										
11. Reservation (Coded)	2.04	0.85	.22***	.13**	.51***	.48***	0.06	-.22***	.30***	-0.02	.17***	-0.08	—									
12. Occupation (Coded)	2.35	0.94	.55***	.27***	.43***	.36***	.14**	-.19***	.35***	0.07	.26***	-0.02	.34***	—								
13. Income	4.81	1.76	-.15**	-.17***	-	-	-0.02	.23***	-.13**	0.04	-0.06	-0.03	-.42***	-.30***	—							
14. Self-reported social ideology	3.74	1.47	.17***	.18***	.64***	.47***	.47***	0.05	-.17***	.20***	0.05	.15**	-0.1	.32***	.21***	-	-.26***	—				
15. Self-reported political ideology	3.88	1.56	.18***	.16**	.51***	.46***	-0.03	-.15**	.16**	0.06	.14**	-.15**	.29***	.19***	-.33***	.72***	-	—				
16. Self-reported economic ideology	3.97	1.39	.18***	.15**	.42***	.39***	-0.02	-0.06	.18***	.10*	.17***	-.17**	.24***	.20***	-.21***	.61***	.64***	-	—			
17. Self-reported socioeconomic ideology	63.76	16.83	.17***	-	-0.02	0.1	-0.02	-0.002	.13*	0.07	.12*	-.20***	0.01	.12*	.21***	.14**	0.09	.23***	-	—		
18. Importance of religion	3.6	1.31	.29***	.16**	.62***	.69***	.14**	-.35***	.37***	.10*	.29***	-0.06	.54***	.33***	-	.40***	.37***	.32***	0.02	—		
19. Trait empathetic concern	25.99	4.75	-.16**	-.20***	-	-	0.001	0.09	-0.01	.16**	0.08	-0.01	-.21***	-.21***	.43***	-	-	-.27***	0.07	-.18**	—	
20. Empathetic concern for ingroup	23.8	4.94	-0.02	0.04	-.04	.17**	.14**	-.12*	.21***	.21***	.25***	0.05	0.07	0.02	.12*	0.04	0.01	-0.02	0.07	.26***	.52***	—

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
21. Empathetic concern for outgroup	24.48	5.6	-0.08	-.14*	-.39***	-.27***	0.07	.14**		-0.07	.16**	0.05	-0.03	-.16**	-.12	.27***	-.34***	-.35***	-.32***		-	-0.14	.61***	.40***
																			0.03					

Note: \*p<.05, \*\*p<.01, \*\*\*p<.001

Table 1c.

Zero-order correlation (Moral Decision Making)

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Age	26.88	6.06	—																									
2. Gender	1.51	0.56	.19**	—																								
3. Norms	46.5	17.6	.41***	.37***	—																							
4. Hierarchies	72.19	19.59	.35***	.42***	.74***	—																						
5. Economics	24.87	3.54	.31***	.25***	.34***	.32***	—																					
6. Religion	3.12	1.72	-.27***	-.013	-.43***	-.36***	-.21**	—																				
7. Socially Desirable Enhancement	24.28	6.89	.34***	.32***	.40***	.52***	.25***	-.20**	—																			
8. Impression Management	24.24	6.11	0.12	.17*	0.06	.23***	.19**	0.01	.63***	—																		
9. BIDR	48.53	11.73	.26***	.28***	.27***	.43***	.24***	-.011	.91***	.89***	—																	
10. Caste	1.5	0.84	0.01	0.08	0.09	-0.03	-0.01	-0.13	-0.05	-0.08	-0.08	—																
11. Reservations	1.87	0.87	.28***	.15*	.46***	.47***	.14*	-.23***	.39***	0.05	.27***	-0.05	—															
12. Occupation	2.31	0.94	.61***	.33***	.48***	.43***	.32***	-.31***	.43***	0.12	.32***	-0.04	.37***	—														
13. Income	5.31	1.61	-.22**	-.26***	-.60***	-.46***	-.18*	.35***	-.16*	0.05	-0.07	-.17*	-.37***	-.32***	—													
14. Self-reported social ideology	3.53	1.49	.24***	.22**	.51***	.52***	.16*	-.23***	.30***	0.05	.21**	-0.04	.33***	.24***	-.25***	—												
15. Self-reported political ideology	3.57	1.53	.21**	.16*	.48***	.49***	0.08	-.20**	.22**	0.05	.16*	-0.09	.28***	.19**	-.23***	.72***	—											
16. Self-reported economic ideology	3.76	1.42	.23***	.16*	.47***	.43***	0.07	-0.11	.22**	0.12	.20**	-0.11	.30***	.21**	-.20**	.59***	.65***	—										
17. Socioeconomic status	63.97	16.05	0.12	-0.09	0.003	0.03	-0.03	-0.04	0.11	0.11	0.12	-.14*	0.07	0.05	.27***	0.08	0.05	.20**	—									
18. Importance religion	3.44	1.42	.36***	.23***	.60***	.71***	.25***	-.40***	.48***	0.14	.37***	0.04	.50***	.38***	-.34***	.44***	.36***	.33***	-0.01	—								
19. Empathetic concern (trait)	26.45	4.91	-.16*	-.17*	-.40***	-.21**	-0.1	0.09	-0.01	0.11	0.05	-0.04	-0.07	-.22**	.37***	-.22**	-.21**	-.24***	0.03	-0.05	—							
20. Empathetic concern (ingroup)	24.58	5.09	-0.04	0.06	-0.03	.20**	0.07	-0.09	.21**	.19**	.22**	0.13	0.14	-0.01	0.11	0.06	0.04	-0.03	0.01	.32***	.58***	—						
21. Empathetic concern (outgroup)	25.02	5.7	-0.12	-0.12	-.36***	-.21**	0.01	0.13	-0.1	0.12	0.01	-0.07	-0.11	-.16*	.30***	-.32***	-.29***	-.29***	-0.05	-0.06	.70***	.54***	—					



Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
22. Occupation	2.31	0.94	.61***	.33***	.48***	.43***	.32***	-.31***	.43***	0.12	.32***	-0.04	.37***	1.00***	-.32***	.24***	.19***	.21***	0.05	.38***	-.22***	-0.01	-.16**	—				
23. Saving 5 ingroup members	27.32	39.31	-0.05	.16*	.14*	.15*	-0.01	-.16*	0.06	-	0.04	0.11	0.06	0.1	-.17*	-0.03	-0.01	0.06	-0.03	0.02	0.03	0.06	0.03	0.1	—			
24. Saving 5 outgroup	32.52	42.35	-0.05	0.07	.15*	.14*	-0.03	-0.11	0.04	0.003	-0.02	0.01	0.09	0.02	0.05	-0.13	0.03	0.04	0.12	-0.09	0.04	0.05	0.06	0.04	0.05	.60***	—	
25. Moral decision-making (neutral)	28.71	40.64	-0.04	0.04	0.11	0.11	-0.03	-0.05	0.06	0.05	0.06	-0.06	0.03	0.06	-0.14	-	0.08	0.08	-0.07	-	-0.03	0.06	0.09	0.06	.52***	.63***	—	
26. Saving ingroup index	33.83	46.91	-0.07	0.05	0.12	0.09	-0.01	-0.07	0.02	-0.02	0.004	0.04	-0.02	0.02	-0.11	-0.01	0.02	0.08	-0.09	-0.01	0.04	0.08	0.08	0.02	.56***	.88***	.80***	—
27. Saving outgroup index	31.53	46.59	-0.08	0.09	0.13	0.12	-0.01	-0.12	0.02	-0.01	0.003	0.03	0.02	0.03	-0.14	-0.04	0.05	0.08	-0.04	-0.02	-0.02	0.03	0.04	0.03	.78***	.66***	.82***	.79***

Note: \*p<.05, \*\*p<.01, \*\*\*p<.001

Table 2

Results for hierarchical regression analyses testing the relationships between (social) ideology and empathetic concern

	Norms			Hierarchies		
	b	SE	R <sup>2</sup>	b	SE	R <sup>2</sup>
Trait Empathetic Concern	-.11***	.02	.29	-.01	.02	.23
Empathetic Concern for in-group	-.07***	.02	.22	.01	.02	.19
Empathetic Concern for out-group	-.14***	.03	.17	-.05	.02	.10

Note. \*\*\* $p < .001$ , \*\* $p < .01$ , \* $p < .05$

Table 3.

Results for hierarchical regression analyses testing the relationships between (social) ideology and moral decision making

	Norms			Hierarchies		
	b	SE	R <sup>2</sup>	b	SE	R <sup>2</sup>
Moral Decision-Making (Neutral)	-.03	.02	.07	-.01	.02	.06
Moral Decision-Making (Save 5 ingroup)	-.06***	.02	.26	-.02*	.02	.20
Moral Decision-Making (Save 5 outgroup)	-.01	.02	.09	.00	.02	.09

Note. \*\*\*p<.001, \*\*p<.01, \*p<.05

Supplementary Table 1.

Results for hierarchical regression analyses testing the relationships between (economic) ideology and empathetic concern

	Economic Ideology		
	B	SE	R <sup>2</sup>
Trait Empathetic Concern	.07	.07	.23
Empathetic Concern for in-group	.09	.07	.19
Empathetic Concern for out-group	.22**	.09	.11

Note. \*\*\*p<.001, \*\*p<.01, \*p<.05

Supplementary Table 2.

Results for hierarchical regression analyses testing the relationships between (social) ideology and empathetic concern among Hindus

	Norms			Hierarchies		
	b	SE	R <sup>2</sup>	b	SE	R <sup>2</sup>
Trait Empathetic Concern	-.13***	.03	.30	-.00	.03	.22
Empathetic Concern for in-group	-.09**	.03	.23	.04	.03	.20
Empathetic Concern for out-group	-.18***	.04	.18	-.05	.04	.08

Note. \*\*\*p<.001, \*\*p<.01, \*p<.05

Supplementary Table 3.

Results for hierarchical regression analyses testing the relationships between (social) ideology and moral decision making among Hindus

	Norms			Hierarchies		
	b	SE	R <sup>2</sup>	b	SE	R <sup>2</sup>
Moral Decision-Making (Control)	-.01	.02	.05	-.02	.03	.05
Moral Decision-Making (Save 5 ingroup)	-.04*	.02	.22	-.05*	.02	.23
Moral Decision-Making (Save 5 outgroup)	-.01	.02	.12	-.03	.02	.14
With trait empathetic concern as a control						
Moral Decision-Making (Control)	-.01	.03	.05	-.02	.03	.05
With empathetic concern for the outgroup as a control						
Moral Decision-Making (Save 5 ingroup)	-.04*	.02	.22	-.05*	.23	.23
Moral Decision-Making (Save 5 outgroup)	-.01	.02	.12	-.03	.02	.14
With empathetic concern for the ingroup as a control						
Moral Decision-Making (Save 5 ingroup)	-.04*	.02	.22	-.05*	.02	.23
Moral Decision-Making (Save 5 outgroup)	-.01	.02	.13	-.03	.02	.14

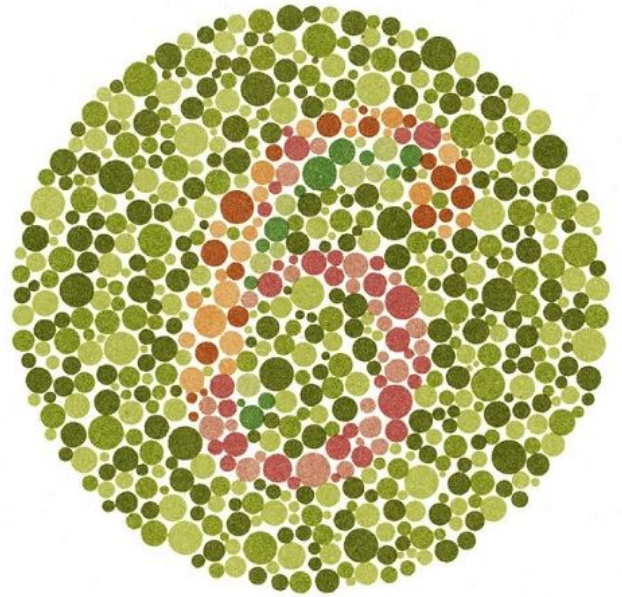
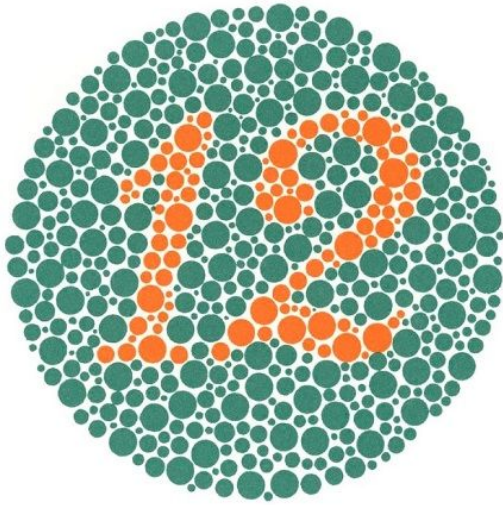
Note. \*\*\*p<.001, \*\*p<.01, \*p<.05

Appendix for Political Ideology, Empathy, and Moral Decision-Making

**A. Ishara Test**

In the next 4 pages, you will see a circle with many dots - some dots of different colors forming a number. Identify the hidden number. If you do not see a number, write NA. For example, in this figure, you should see 12. If not, you would write NA.

What number do you see in the following figure? If you see no number, please write NA



## B. Moral Decision-Making Task

### Response options:

1. I'd do it for free
2. Rs. 100
3. Rs. 1,000
4. Rs. 10,000
5. Rs. 1,00,000
6. Rs. 10,00,000
7. One crore rupees
8. Never for any amount of money
9. This is making me uncomfortable

### Dilemma #1 - Modified Burning Building

#### Save multiple ingroup

X and four other individuals following your own religion are trapped in a burning building. There is only one emergency exit through which all five could escape to safety, but it is blocked by burning debris. You, a fire department officer, notice another person Y, from a different religion, in the hallway leading to the exit who has been injured but is about to crawl to safety through a small hole at the bottom of the exit door. X and others behind X do not have time to climb through the small hole. You realize that you could grab the injured man and use his body as a battering-ram to break through the burning blockage in the hallway that is preventing the escape of X and others.

Doing this is certain to kill Y (see Figure above).

However, if you do not do this, X and others will die.

For what amount of money would you to kill Y in order to save X and four others of your religion?





Appendix for Political Ideology, Empathy, and Moral Decision-Making

**Save multiple outgroup**

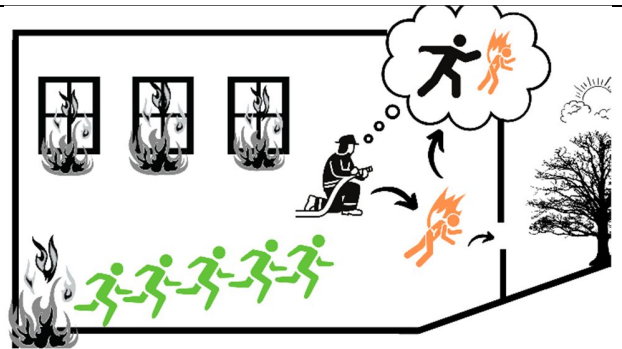
X and four other individuals following a religion different than yours are trapped in a burning building. There is only one emergency exit through which all five could escape to safety, but it is blocked by burning debris. You, a fire department officer, notice another person Y, from your religion, in the hallway leading to the exit who has been injured but is about to crawl to safety through a small hole at the bottom of the exit door. X and others behind X do not have time to climb through the small hole.

You realize that you could grab the injured man and use his body as a battering-ram to break through the burning blockage in the hallway that is preventing the escape of X and the four others.

Doing this is certain to kill Y (see Figure above).

However, if you do not do this, X and others will die.

For what amount of money would you to kill Y in order to save X and others of a religion other than yours?

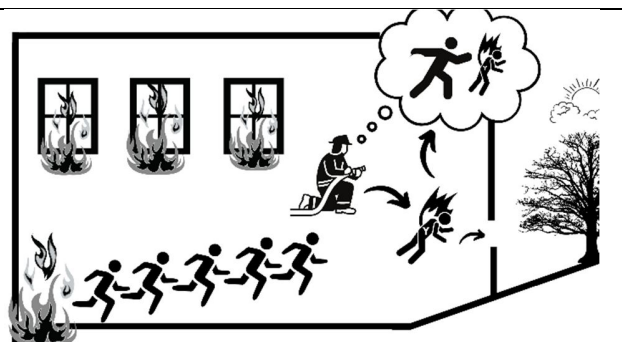


**Neutral**

X and four other individuals of unknown religion are trapped in a burning building. There is only one emergency exit through which all five could escape to safety, but it is blocked by burning debris.

You, a fire department officer, notice another person Y, of unknown religion, in the hallway leading to the exit who has been injured but is about to crawl to safety through a small hole at the bottom of the exit door.

X and the others do not have time to climb through the small hole. You realize that



Appendix for Political Ideology, Empathy, and Moral Decision-Making

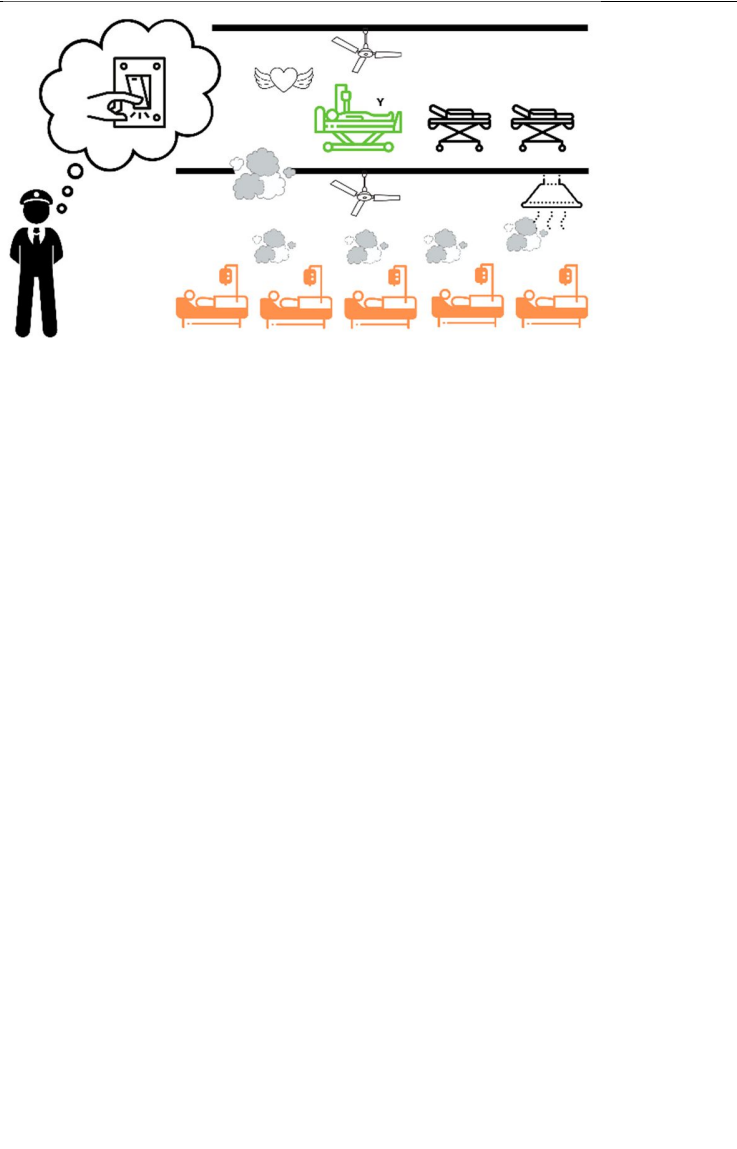
<p>you could grab the injured man and use his body as a battering-ram to break through the burning blockage in the hallway that is preventing the escape of X and others. Doing this is certain to kill Y (see Figure above). However, if you do not do this, X and others will die.</p> <p>For what amount of money would you to kill Y in order to save X and others?</p>	
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**Dilemma #2 -Modified fumes**

**Save multiple ingroup**

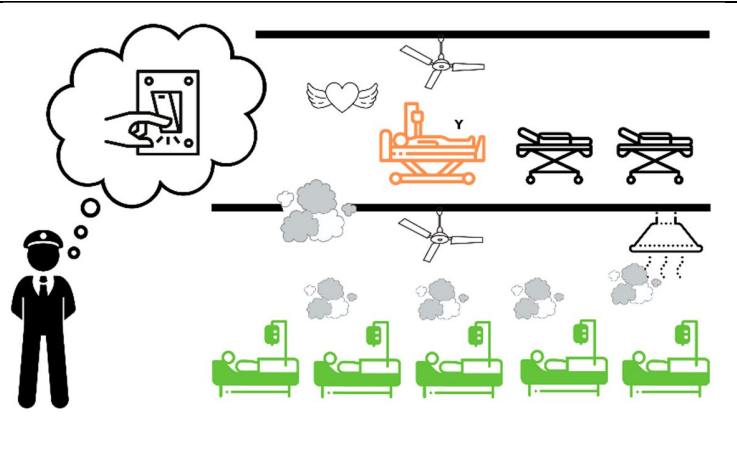
You are on the night watch in a hospital. A chemical product has been spilled from a large crack on the air duct in a room with five patients from your religion. This chemical is highly toxic and it will kill all of the patients of your religion in the room. You don't have much time to evacuate all the patients. If you activate the ventilation system the poisonous gas will be taken out of the room. However, it will be transferred into a room upstairs with one patient, Y, from a different religion than you, whom you won't be able to evacuate in time. This will kill patient Y, but it will save the other five of your religion.

For what amount of money would you divert the gas out of the room by activating the ventilation system, causing it to be transferred to the room with Y, so the other five patients of your religion won't be poisoned?



**Save multiple outgroup**

You are on the night watch in a hospital. A chemical product has been spilled from a large crack on the air duct in a room with five patients. These patients follow a different religion than you. This chemical is highly toxic and it will kill all of the patients in the room. You don't have much time to evacuate all the patients. If you



Appendix for Political Ideology, Empathy, and Moral Decision-Making

activate the ventilation system the poisonous gas will be taken out of the room.

However, it will be transferred into a room upstairs with one patient, Y, from the same religion as you, whom you won't be able to evacuate in time. This will kill patient Y, but it will save the other five of a different religion.

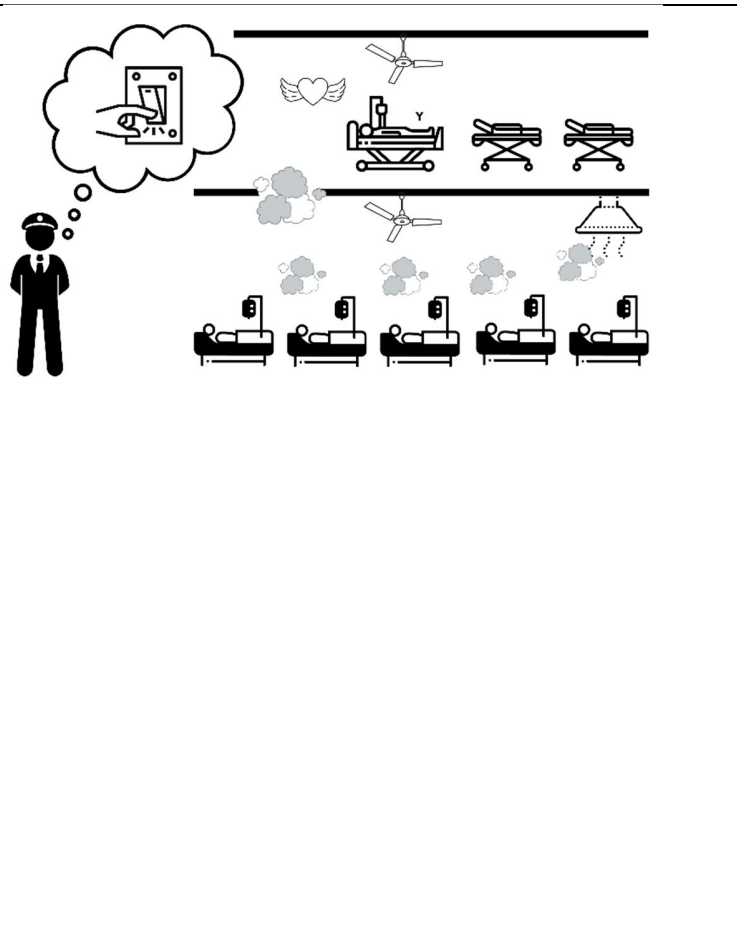
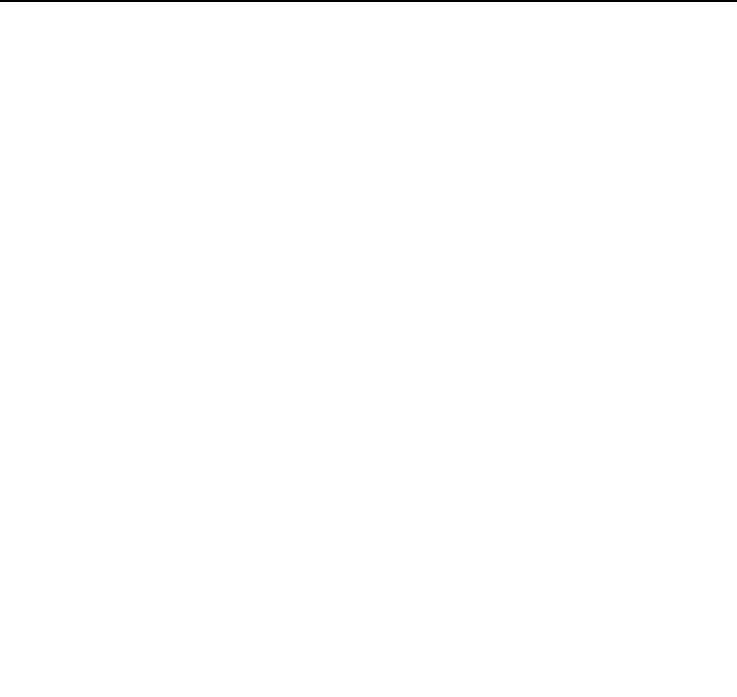
For what amount of money would you divert the gas out of the room by activating the ventilation system, causing it to be transferred to the room with Y, so the other five patients of a different religion won't be poisoned?

**Neutral**

You are on the night watch in a hospital. A chemical product has been spilled from a large crack on the air duct in a room with five patients of unknown religion. This chemical is highly toxic and it will kill all of the five patients in the room. You don't have much time to evacuate all the patients. If you activate the ventilation system the poisonous gas will be taken out of the room.

However, it will be transferred into a room upstairs with one patient, Y, from an unknown religion, whom you won't be able to evacuate in time. This will kill patient Y, but it will save the other five.

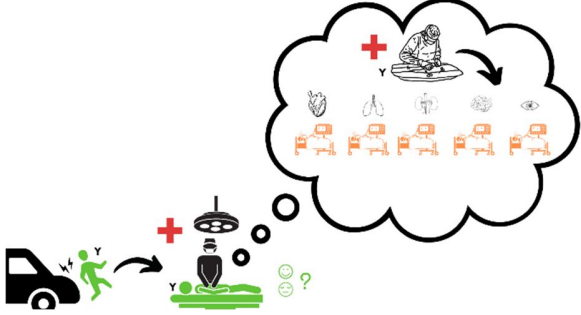
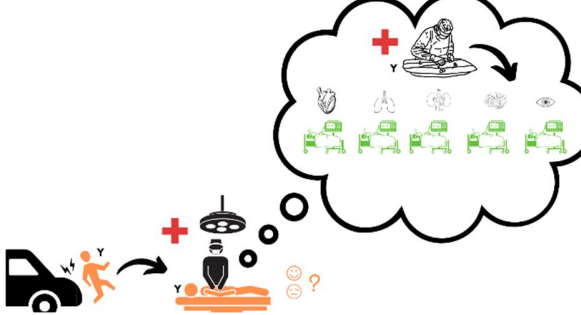
For what amount of money would you divert the gas out of the room by activating the ventilation



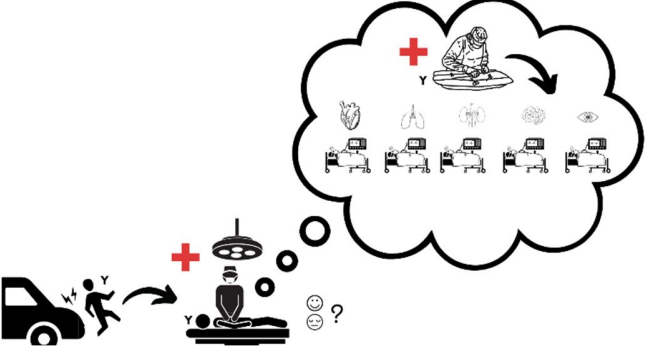
Appendix for Political Ideology, Empathy, and Moral Decision-Making

system, causing it to be transferred to the room with Y, so the other five patients won't be poisoned?	
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**Dilemma #3 -Modified transplant**

<p><b>Save multiple ingroup</b></p> <p>You are a doctor. You have five patients of your own religion who will all die if they don't get an immediate organ transplant. Another patient, Y, who is of a different religion, is just being rushed to the hospital after a serious car accident. This person is critically injured, but you can probably save them by means of a long and complicated operation. If you secretly cut Y's carotid artery during surgery it will cause their death and you will have the organs for the other five patients. You will kill them, but you will save the other five patients.</p> <p>For what amount of money would you cut the carotid artery of the accident victim, Y, obtaining the organs so you can undertake the transplantations for the other five patients?</p>	
<p><b>Save multiple outgroup</b></p> <p>You are a doctor. You have five patients, who all follow a different religion than you, who will all die if they don't get an immediate organ transplant. Another patient, Y, who follows your religion, is just being rushed to the hospital after a serious car accident. Y is critically injured, but you can probably save Y by means of a long and complicated operation. If you secretly cut Y's carotid artery during surgery it will cause Y's death and you will have the organs for the other five patients. You will kill Y, but you will save the other</p>	

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<p>five patients of a different religion (see Figure). For what amount of money would you cut the carotid artery of the accident victim, Y, obtaining the organs so you can undertake the transplantations for the other five patients?</p>	
<p style="text-align: center;"><b>Neutral</b></p> <p>You are a doctor. You have five patients of unknown religion who will all die if they don't get an immediate organ transplant. Another patient, X, is just being rushed to the hospital after a serious car accident. X is critically injured, but you can probably save them by means of a long and complicated operation.</p> <p>If you secretly cut their carotid artery during surgery it will cause their death and you will have the organs for the other five patients. You will kill X, but you will save the other five patients.</p> <p>For what amount of money would you cut the carotid artery of the accident victim, obtaining their organs, so you can undertake the transplantations for the other five patients?</p>	

### **C. Empathetic Concern**

#### Neutral

1. When I see someone being taken advantage of, I feel kind of protective toward them.
2. When I see someone being treated unfairly, I sometimes don't feel very much pity for them.
3. I often have tender, concerned feelings for people less fortunate than me.
4. I would describe myself as a pretty soft-hearted person
5. Sometimes I don't feel sorry for other people when they are having problems.
6. The misfortunes of others do not usually disturb me a great deal.
7. I am often quite touched by things that I see happen.

#### **Outgroup**

1. When I see a Muslim being taken advantage of, I feel kind of protective toward them.
2. When I see a Muslim being treated unfairly, I sometimes don't feel very much pity for them.
3. I often have tender, concerned feelings for Muslims who are less fortunate than me.
4. I would describe myself as a pretty soft-hearted person towards Muslims
5. Sometimes I don't feel sorry for Muslims when they are having problems.
6. The misfortunes of Muslims do not usually disturb me a great deal.
7. I am often quite touched by things that I see happen to Muslims.

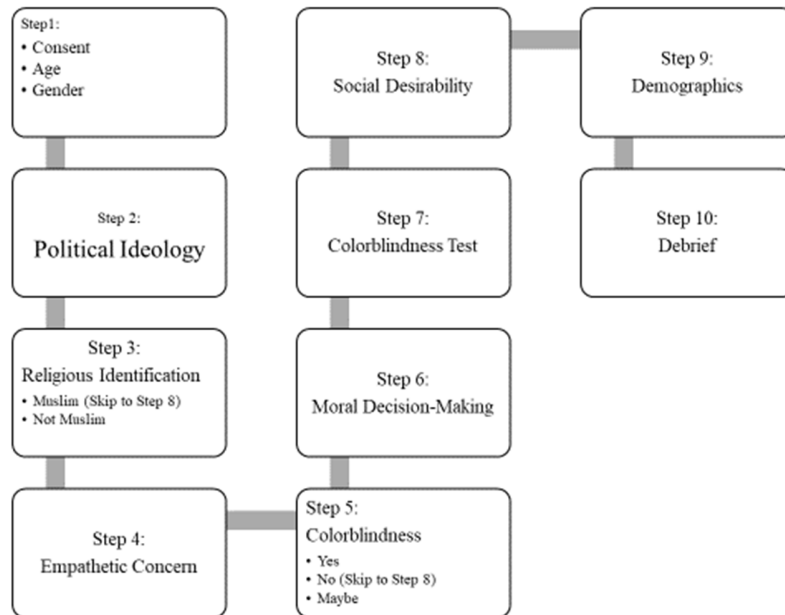
#### **Ingroup**

1. When I see someone of my religion being taken advantage of, I feel kind of protective toward them.
2. When I see someone from my religion being treated unfairly, I sometimes don't feel very much pity for them.
3. I often have tender, concerned feelings for people of my religion who are less fortunate than me.
4. I would describe myself as a pretty soft-hearted person towards those who follow my religion
5. Sometimes I don't feel sorry for other people from my religion when they are having problems.
6. The misfortunes of others from my religion do not usually disturb me a great deal.
7. I am often quite touched by things that I see happen to those who follow my religion.

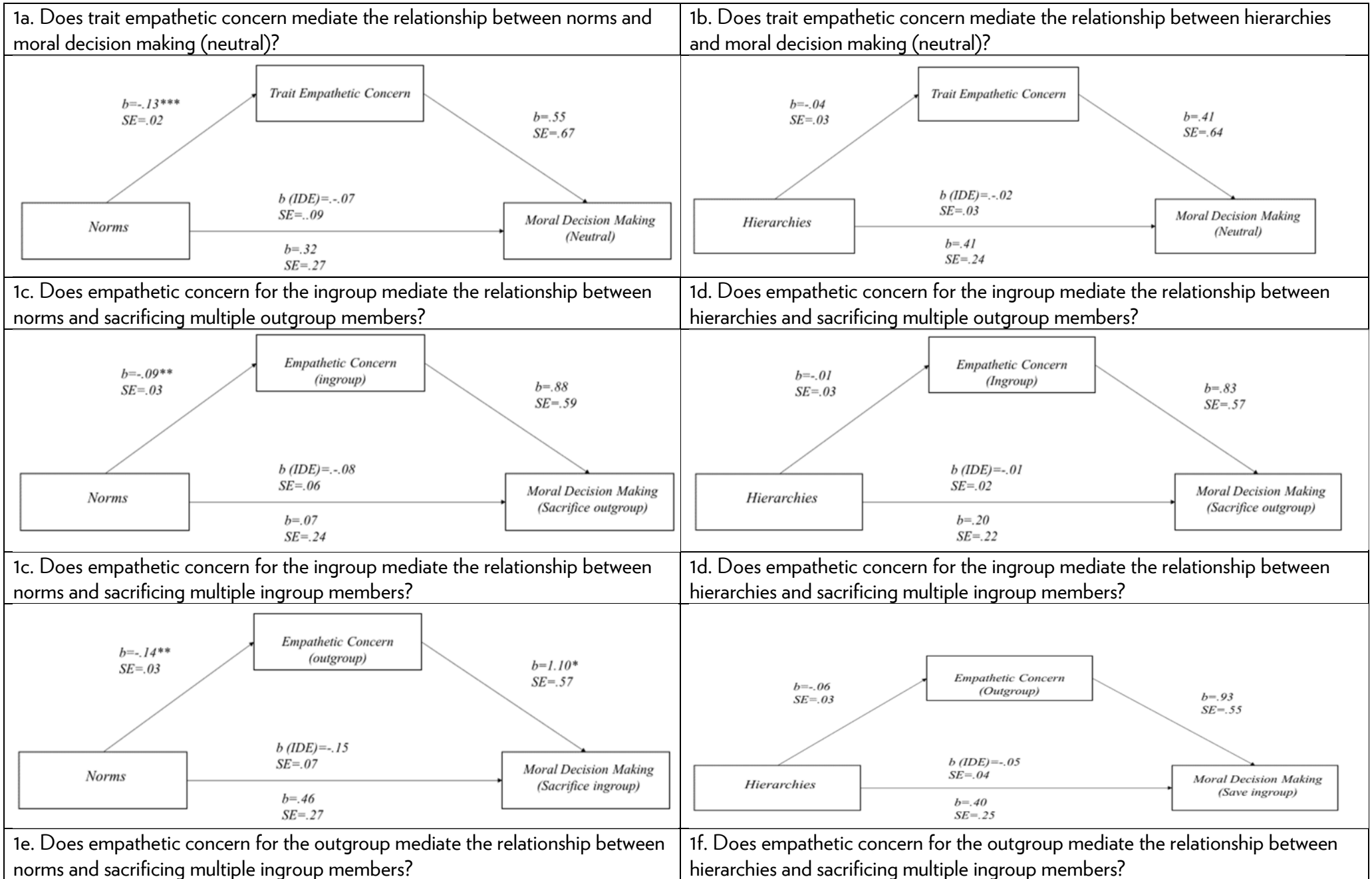


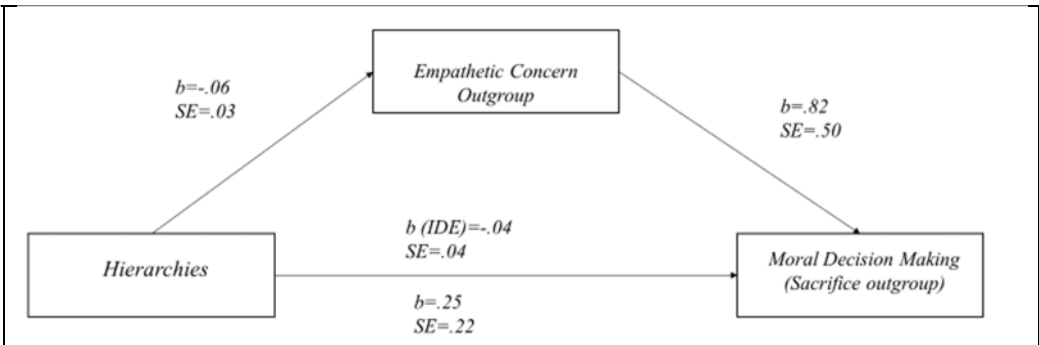
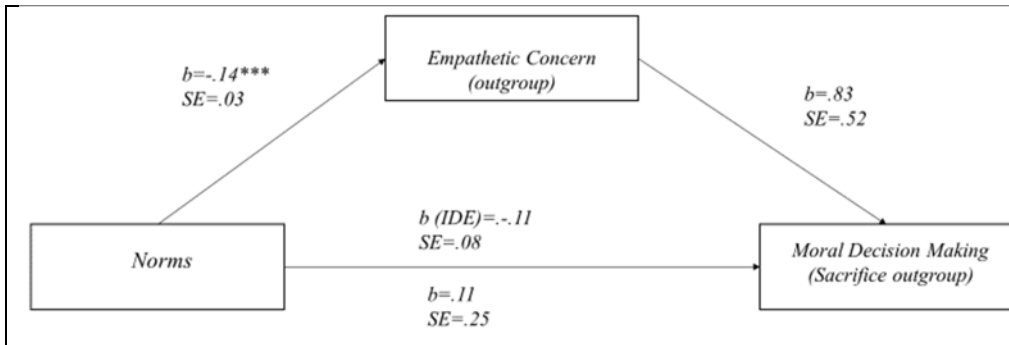
## Appendix for Political Ideology, Empathy, and Moral Decision-Making

### D. Survey Flow/Flowchart



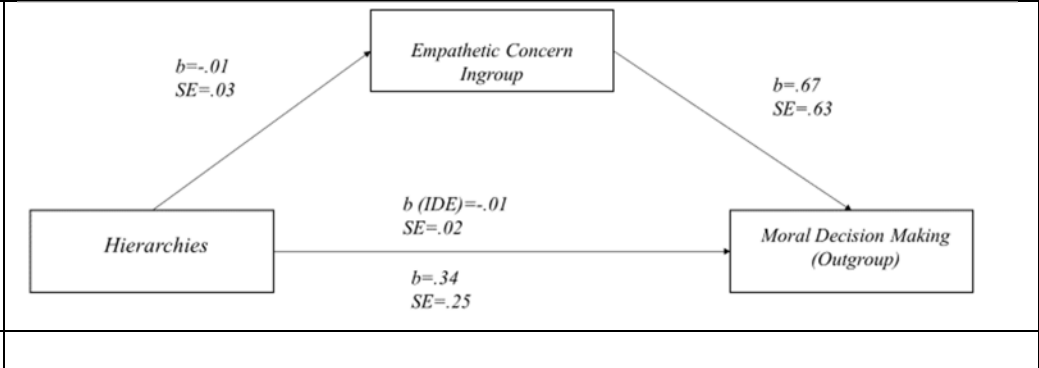
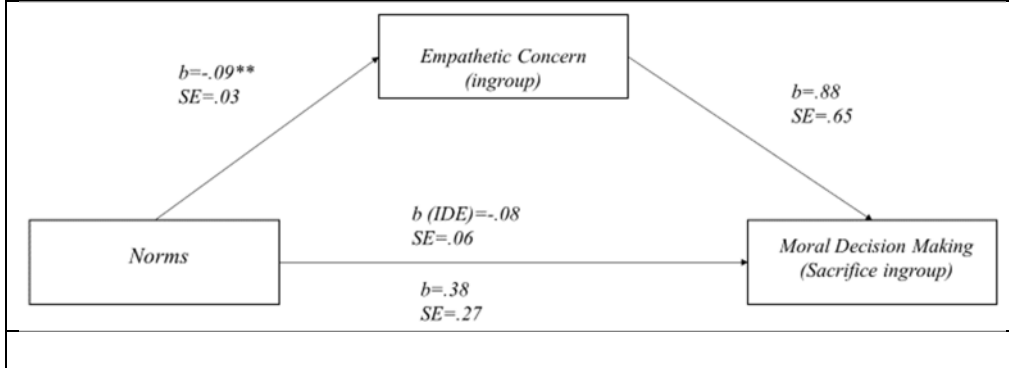
Supplementary Figure 1





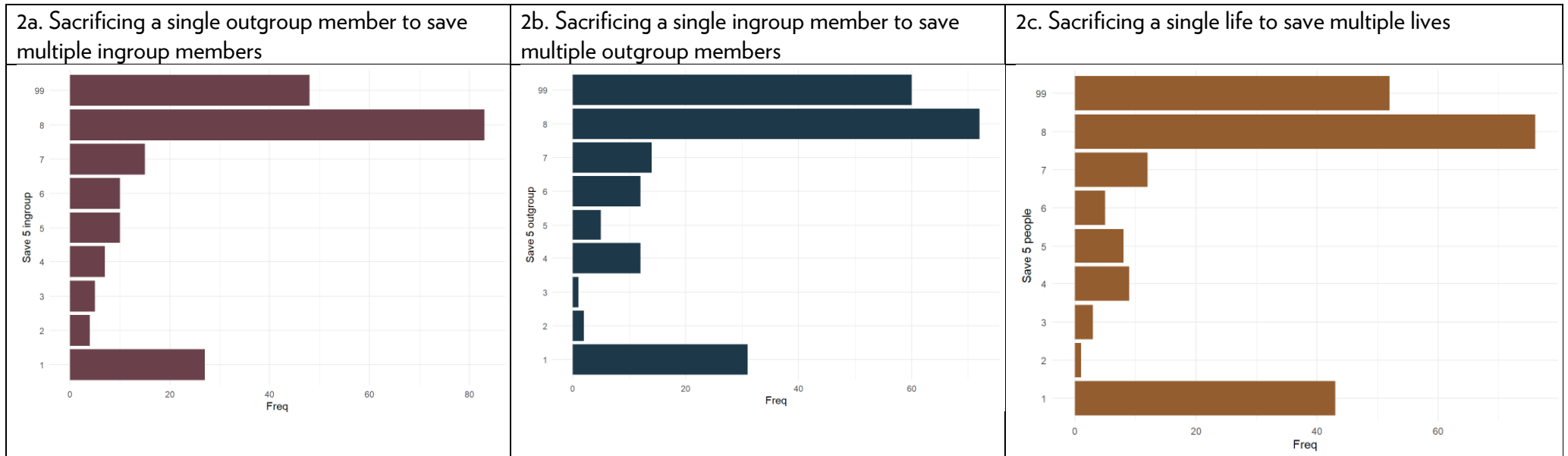
1e. Does empathetic concern for the ingroup mediate the relationship between norms and sacrificing multiple ingroup members?

1f. Does empathetic concern for the ingroup mediate the relationship between hierarchies and sacrificing multiple ingroup members?



## Supplementary Figure 2

### Missing data in the moral decision making tasks



Note. 99 represents participants' response that they were uncomfortable with responding to the item.