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LOYOLA UNIVERSITY CHICAGO

GROUP-LEVEL DIFFERENCES OF MORAL FOUNDATIONS

A THESIS SUBMITTED TO
THE FACULTY OF THE GRADUATE SCHOOL
IN CANDIDACY FOR THE DEGREE OF
MASTER OF ARTS

PROGRAM IN APPLIED SOCIAL PSYCHOLOGY

BY
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CHICAGO, ILLNOIS
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At the descriptive level, certainly, you would expect different cultures to develop different sorts of ethics and obviously they have; that doesn't mean that you can't think of overarching ethical principles you would want people to follow in all kinds of places.

-Peter Singer

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ABSTRACT

Previous research has started to map the moral domain for individual actors. In particular, Haidt and colleagues (Haidt, 2007, 2008; Haidt & Graham, 2007; Haidt & Joseph, 2004) have extended the moral domain beyond the traditional notions of justice and rights concerns. From this line of research, moral foundations theory emerged, which holds moral intuitions derive from innate psychological mechanisms that co-evolved with cultural institutions and practices. However, to date, there has not been a systematic demonstration of how these moral foundations operate within intergroup settings. Janoff-Bulman and Carnes (2013) have proposed a comprehensive model of the moral landscape that includes a group component; however, this model has received some criticism (e.g., Graham, 2013). The current study examined how moral foundations operate from a group perspective. Moreover, potential outgroup moderators of moral foundations were examined. Participants were placed into one of two conditions in which they rated the extent to which various concerns were relevant when making moral judgments about their ingroup and various outgroups. Two sets of three different outgroups conforming to the various quadrants of the stereotype content model were used. Results showed significant differences for the harm, fairness, and loyalty foundations between ingroups and outgroups. Moreover, the type of outgroup significantly influenced moral foundations scores. Taken together, these findings demonstrate the importance of considering moral foundations at the group level.

CHAPTER I

INTRODUCTION

Recently, researchers have begun mapping the moral domain that individuals use to make moral judgments. In particular, work by Haidt and colleagues (Haidt, 2007, 2008; Haidt & Graham, 2007; Haidt & Joseph, 2004) has expanded notions of the moral domain beyond the justice and rights concerns of individuals traditionally associated with moral psychology. Indeed, an oft-cited definition of morality comes from Turiel (1983, p.3), who defined the moral domain as “prescriptive judgments of justice, right, and welfare pertaining to how people ought to relate to each other.” Since there are many individuals (e.g., conservatives, people of non-Western cultures) who fall outside of this moral domain, Haidt (2008) put forth an alternative approach to defining morality that does not exclude moral concerns that involve no harm to people (e.g., obedience, prayer, purity).

In this new approach, Haidt specified the functions of moral systems rather than the content of a particular moral judgment: “Moral systems are interlocking sets of values, practices, institutions, and evolved psychological mechanisms that work together to suppress or regulate selfishness and make social life possible” (p. 70, 2008). Haidt further described two common kinds of moral systems (i.e., two ways of suppressing selfishness). Some cultures attempt to suppress selfishness by protecting individuals directly and by teaching individuals to respect the rights of other individuals. This

individualizing approach focuses on individuals as the locus of moral value. Other cultures attempt to suppress selfishness by strengthening groups and institutions and by binding individuals to roles and duties in order to constrain their imperfect natures. This binding approach focuses on the group as the locus of moral value.

Moral foundations theory (Haidt & Graham, 2007; Haidt & Joseph, 2004) holds moral intuitions derive from innate psychological mechanisms that co-evolved with cultural institutions and practices. These innate but modifiable mechanisms provide socializing agents (e.g., parents) the moral foundations to build on as they teach children their local virtues, vices, and moral practices.

To derive the moral foundations proposed in moral foundations theory, Haidt and Joseph (2004) surveyed lists of virtues from various cultures and eras, along with taxonomies of morality from anthropology, psychology, and evolutionary theories about human and primate sociality. They looked for cases of virtues or other moral concerns found widely across cultures for which there were plausible and published evolutionary explanations of related psychological mechanisms. They found human obsession with fairness, reciprocity, and justice fit well with writings about reciprocal altruism, and the human concern with caring, nurturing, and protecting vulnerable individuals fit well with empathy. Respectively, these were labeled the fairness/reciprocity foundation and the harm/care foundation. Graham, Haidt, and Nosek (2009) refer to these two foundations as the individualizing foundations because they are the source of intuitions that emphasize the rights and welfare of individuals.

However, as mentioned, many people do not limit their virtues to those that protect individuals. Haidt and Joseph (2004) found virtues of loyalty, patriotism, and self-

sacrifice aligned with work on the evolution of coalitional psychology. Virtues of subordinates combined with virtues of authorities matched writings on the evolution of hierarchy in primates and research on ethic of community. Lastly, virtues of purity and sanctity that play large roles in religious laws aligned with writings on the evolution of disgust and contamination sensitivity. Graham and colleagues (2009) refer to these three foundations (i.e., loyalty, authority, and purity) as the binding foundations because they are the source of intuitions that emphasize group-binding loyalty, duty, and self-control.

Moral foundations theory has received a fair amount of attention in the research literature. Haidt and colleagues have mostly focused on examining moral foundations among political ideology groups (e.g., Graham et al., 2009; Haidt & Graham, 2007). However, because they use self-identified political groups, the results tend to be correlational in nature. As of yet, there has not been a systematic demonstration of how these moral foundations operate within intragroup and intergroup settings. Systematically investigating moral foundations within group settings is an important notion to incorporate into a model of morality because group membership can influence an individual's behavior and judgment. For example, groups tend to behave in uncooperative ways in order to protect or enhance the group compared to individuals who tend to choose to cooperate in the same situation (Wildschut, Pinter, Vevea, Insko, & Schopler, 2003). This effect has been termed the interindividual-intergroup discontinuity effect. Essentially, the finding demonstrates a discontinuity between inter-individual and inter-group interactions in mixed motive situations (i.e., situations in which individuals or groups have both common and competing goals). For example, during a prisoner's dilemma game, two individuals will typically agree to cooperate and follow through

when making their individual choices. However, when two groups play the same game, they tend to agree to cooperate during communication, but in most cases, they choose to defect when making their actual choices. Thus, instead of exaggerating the individual's dominant strategy of cooperation, groups tend to have a dominant strategy of competition (see Wildschut et al., 2003).

This finding is likely a function of evolutionary adaptations related to the propensity for humans to live within group contexts (Brewer & Caporael, 2006). Because survival depended on individuals banding together in groups for strength and safety, individuals that could come together in order to successfully enhance and protect each other were more likely to survive. These tendencies are still present and are beneficial in many contexts. For example, there are groups that work to assist children in need in areas where there is not enough money for proper nutrition, medicine, or other basic needs (e.g., Save the Children). Such groups aim to provide children with a healthy start and to protect them from harm in order to help change the children's future as well as society's. On the other hand, there are other situations in which what is good for the group is not good for those outside of the group. For instance, joining a gang that is involved in criminal activity may provide one with a sense of belonging and even be somewhat financially prosperous for those lacking legitimate means to do so, but the criminal activities (e.g., graffiti, theft, violence) are often a significant financial, physical, and psychological drain on the surrounding communities. Furthermore, social identity theory states group identification directly leads to ingroup favoritism as well as other behaviors that differentiate one's group from others (Hogg & Abrams, 1988). Work on the role of groups in evolutionary adaptation of the species argues that living and hunting in groups

had survival implications and being rejected by the group could lead to starvation and death (Levine & Kerr, 2007). Thus, the tendency for a group to enhance and protect itself is likely present and deeply embedded in most group settings. Once group members begin to think of themselves as a group, they will begin to favor options that protect or enhance the group welfare (Tindale, Talbot, & Martinez, 2013).

However, protecting the group from harm can only be possible if the group can readily identify what it needs to be protected from. Not only does the group need to be able to identify a threat, they must also be able to do this quickly. Thus, categorization of social units (i.e., stereotypes) serves a very important function for groups. Specifically, perceivers must use a limited cognitive processing system to cope with the rich and complex social stimulus environment they live in and they need to understand as well as anticipate interactions within that environment (Hamilton & Sherman, 1994). Due to the limitations of the human cognition system, grouping objects and people into categories on the basis of their similarities or differences becomes functionally adaptive.

Additionally, a fundamental basis for social categorization is the distinction between a group to which one belongs (i.e., ingroup) and to those that one does not belong (i.e., outgroup). For example, Tajfel established what is known as the “minimal group paradigm” (see Diehl, 1990) to study the influence of social categorization processes independent of intergroup conflict. In the paradigm, participants are first asked to make individual judgments about certain stimuli (e.g., evaluate paintings, estimate the number of dots on a display) and are then given feedback that identifies them as similar to some of the other participants and as different from the remaining participants (e.g., similar preference of paintings or over estimating the number of dots). In actuality,

participants are randomly assigned to one of the two groups without knowing what group the other participants are assigned to. Participants are then asked to rate members of their own and the other group or are asked to allocate resources to these respective groups. Based on various studies using this paradigm, the primary finding is that participants favorably evaluate and allocate more resources to members of their own group, even though they do not know the specific identities of those in their group (i.e., ingroup bias). Thus, the mere perception of belonging to different groups triggers ingroup favoritism and relative outgroup discrimination. This corroborates Allport's (1954) argument that one of the most basic categorization processes consists of people categorizing each other into ingroups and outgroups. Because of this categorization process, information is tagged by physical and social distinctions (e.g., race and gender), within-group differences are minimized, between-group differences are exaggerated, and group members' behaviors are interpreted stereotypically (Taylor, 1981; Wilder, 1981).

However, not all stereotypes are alike. For instance, some stereotyped groups are deemed inept (e.g., elderly people) whereas others are revered for their intellect (e.g., Asians). Hence, the stereotype content model (Fiske, Cuddy, Glick, & Xu, 2002) argues two dimensions can capture the content of stereotypes: warmth and competence. These particular dimensions result from interpersonal and intergroup interactions. When meeting others as individuals or group members, people typically want to know what the others' goals will be in relation to the self or ingroup and how effectively the others will pursue their goals. That is, perceivers want to know the others' intent and capability. Respectively, these characteristics correspond to perceptions of warmth and competence (Fiske et al., 2002).

Stereotype content tends to result from shared public views of groups. Fiske and colleagues (2002) argue that such cultural stereotypes result from social structural relations in two primary ways. First, outgroups are perceived as more competent to the extent they are seen as powerful and high in status or are perceived as less competent to the extent they are seen as less powerful and low in status. The link between a group's societal outcomes and its perceived competence may represent a form of correspondence bias (i.e., peoples' behavior reflects their traits) or reflect just-world thinking (i.e., people get what they deserve). At the group level, it justifies the system and legitimizes power-prestige rankings. Fiske and colleagues (2002) also argue intergroup stereotypes function to justify the status quo. The second way cultural stereotypes result from social structural relations is outgroups are seen as relatively warm and nice to the extent they do not compete with others. Competitive outgroups, in contrast, tend to frustrate and annoy. Thus, they are viewed as having negative intent. Outgroup goals are assumed to interfere with ingroup goals, so outgroups are not warm. This incompatibility of intergroup goals is a primary source of negative affect toward outgroups (Fiske et al., 2002). Outgroups that are low in both warmth and competence also compete with other groups, primarily for resources instead of status. These groups are often viewed as parasites in the system and supposedly compete in a zero-sum game of resource allocation. Since their goals are also incompatible with others (i.e., competitive) they are not considered to be warm. This is in stark contrast to the ingroup. Since the ingroup does not compete with itself, it is perceived as warm. Hence, the cultural default group (e.g., middle class, heterosexual, Christian) is not often seen as competitive because they possess cultural authority (Fiske et al., 2002).

Returning to the topic of morality, Janoff-Bulman and Carnes (2013) have proposed an extended model of the moral landscape that includes a group component; however, this model has received some criticism (e.g., Graham, 2013). The Model of Moral Motives (MMM) proposed by Janoff-Bulman and Carnes (2013) includes an approach-avoidance component as well. One can visualize the MMM by thinking of a 2 x 3 matrix, in which the rows are divided by motives to protect (i.e., avoidance) and motives to provide (i.e., approach). Each of the columns of the matrix represents a different focus of moral concern: the self, others, and the group. However, as Graham (2013) notes, the model contains some ambiguity about how these distinctions are made. For example, it is unclear whether these distinctions are the targets of moral judgment or if they represent the locus of moral concern. The former involves the person or thing that did some moral action whereas the latter involves the thing one is motivated to protect or provide for. Additionally, the model falls short by excluding the intergroup context. In the MMM, intergroup conditions are assumed to be a consequence of intragroup conditions. However, this is not necessarily always true, just as interpersonal conditions are not simply a consequence of intrapersonal conditions. Moreover, the model posits that all of the moral foundations, save the harm foundation, are exclusively proscriptive (avoid) or prescriptive (approach). However, past research has shown the types of moral concerns covered by the foundations involve both motivations to inhibit the bad and activate the good (see Graham, 2013).

Following in the fashion of those who have proposed the MMM, the current study seeks to examine how moral foundations operate from a group perspective. However, given the approach/avoidance motivation component as well as the criticisms the model

has received, this study begins at a more fundamental level and focuses purely on the moral foundations component. Given the propensity for groups to protect themselves and enhance their own welfare, it is likely that they will be sensitive to threats from outgroups and thus focus on fairness, reciprocity, and justice. This sensitivity to outgroup threat means groups would be sensitive to concerns relating to the individualizing foundations of harm and fairness (i.e., hypothesis 1). However, when judging the ingroup, virtues of loyalty, patriotism, and self-sacrifice for the group should surface. These virtues would have made it possible for groups to initially band together for strength and safety. Thus, when judging their ingroup (as opposed to outgroups), individuals will be more likely to utilize the binding foundations (i.e., loyalty, authority, and purity), as these foundations emphasize group-binding loyalty, duty, and self-control (i.e., hypothesis 2).

However, the stereotype content model argues that different outgroups can promote different reactions and expectations. Thus, differing types of outgroups may moderate the moral foundations that are utilized by group members (i.e., hypothesis 3). For example, outgroups that are low in warmth and high in competence tend to be viewed as competitive and invoke negative intent. In this case, such outgroups are expected to be harmful and unfair; thus, concerns about the harm and fairness foundations may not be as relevant because this outgroup is not violating expectations of harm and fairness (i.e., hypothesis 3a). Using a similar rationale, an outgroup that is viewed as low in warmth and low in competence might invoke disgust. Since this particular outgroup is expected to be disgusting, concerns about the purity foundation may not be as relevant because the outgroup is not violating any expectations of purity (i.e., hypothesis 3b). While it is still unclear how exactly differing outgroups may moderate the group's utilization of moral

foundations, it appears it is a likely possibility that they do. Thus, six prototypic target outgroups were chosen based on past research of the stereotype content model for participants to judge (i.e., two low warmth, high competent outgroups; two low warmth, low competent outgroups; and two high warmth, low competent outgroups). Moral judgments of these three outgroup types will be compared to moral judgments of ingroup members, assuming ingroup members will be seen as high in both warm and competence. Thus, in the present research, participants made judgments of moral concerns for four different groups: a high warmth, high competent (HwHc) ingroup; a low warmth, high competent (LwHc) outgroup (i.e., the rich or business professionals); a high warmth, low competent (HwLc) outgroup (i.e., the elderly or housewives); and a low warmth, low competent (LwLc) outgroup (i.e., the homeless or welfare recipients) based on a modified version of the Moral Foundations Questionnaire.

CHAPTER II

METHODS

Preliminary analysis

Power analyses were conducted using G*Power, a general power analysis program. Power analyses were conducted for both an independent means t-test and one-way repeated measures, within factors MANCOVA with medium effect sizes and standard power of .80. With these requirements, a sample size of at least 128 participants was needed to provide adequate power for detecting effects for the independent means t-test and a sample size of at least 76 participants (38 participants per condition) was needed to provide adequate power for detecting effects for the one-way repeated measures, within factors MANCOVA. Thus, it was determined that approximately 64 participants were needed per condition, yielding a total sample of 128 for this study. Since initial pilot tests revealed approximately 30% of the data could not be used due to some participants potentially belonging to a group that was designed to be an outgroup, 77 additional participants were needed to ensure an adequate sample. This number was derived by rounding up the average percent of data lost in the two within participant conditions of the pilot study (i.e., 54%) to 60% and multiplying it by the sample of 128.

Pilot study

Prior to this experiment, a pilot study was conducted to insure the ratings across the two instances of each outgroup (e.g., the rich and business professionals are both

LwHc outgroups) did not substantially differ. The pilot test design used a total sample of 148 participants and was comprised of nine conditions. Two of the nine conditions included within-subject designs that asked participants to rate one ingroup and three outgroups. The other seven conditions consisted of between-subject designs that asked participants to rate just one group (i.e., one ingroup condition and six outgroup conditions).

Results of the pilot test indicated groups tended to not be significantly different between the within-participant conditions and between-participant conditions. Specifically, a series of t-tests were conducted between each within-participant condition and the corresponding between-participant condition on the five moral foundations (e.g., within-participant “the rich” target outgroup and between-participant “the rich” target outgroup). All results were not significant except three outcomes (see appendix A). These were the harm foundation for one of the within-participant intragroup manipulations, $t(33) = -2.32, p < .05$, the harm foundation for the rich, $t(22) = -2.90, p < .01$, and the loyalty foundation for the rich, $t(22) = -2.16, p < .05$. However, these significant results yielded small effects. In the intragroup manipulations, participants in the within-participant condition scored lower on the harm foundation ($M = 3.09, SD = .90$) than those in the between-participant condition ($M = 3.67, SD = .57$). In the rich manipulations, participants in the within-participant condition scored lower on the harm foundation ($M = 2.56, SD = .76$) and lower on the loyalty foundation ($M = 2.42, SD = .50$) than those in the between-participant condition ($M = 3.49, SD = .77$ and $M = 2.95, SD = .66$, respectively). Therefore, the pilot study demonstrated a within-participant design could be utilized.

Participants

Four hundred five undergraduates at Loyola University Chicago voluntarily participated for course credit in their introductory psychology class. Participants were at least 18 years of age and were recruited from the Loyola University Chicago psychology participant pool. The total sample size was 410 participants, and the mean age of the participants was 18.93 years ($SD = 1.13$). However, 24 participants did not include their age. Participant ethnicity was as follows: 217 Caucasian, 73 Asian, 61 Hispanic, 15 Black, 11 Middle Eastern, and 33 either gave an invalid response or did not respond at all. Participant sex consisted of 299 females and 88 males, while 23 either gave an invalid respond or did not respond at all.

Key variables

This study contained two notable independent variables: outgroup sets and type of group. Specifically, the target outgroup set participants were asked to judge was varied in two conditions. An outgroup set was comprised of an ingroup target and three outgroup targets based on the stereotype content model. At one level of the outgroup set, participants rated an ingroup target (i.e., group the participant most identified with) and three outgroup targets (i.e., the rich, housewives, and the homeless). At the second level of the outgroup set, participants rated an ingroup target (i.e., a group the participant most identified with) and three different outgroup targets (i.e., business professionals, the elderly, and welfare recipients). Thus, in both levels, participants rated four different groups. This manipulation was done to generalize beyond one group particular for each social category of the stereotype content model.

The second independent variable (i.e., type of group) included four levels of group identification derived from the stereotype content model: (1) a HwHc ingroup, (2) a LwHc outgroup, (3) a HwLc outgroup, and (4) a LwLc outgroup. These four levels of group type were then crossed with the two levels of the outgroup set. Thus, participants rated one HwHc ingroup (i.e., a group the participant most identified with), one LwHc outgroup (i.e., either the rich or business professionals), one HwLc outgroup (i.e., either housewives or the elderly), and one LwLc outgroup (i.e., either the homeless or welfare recipients).

These particular outgroup exemplars were chosen based on past research conducted on the stereotype content model. Specifically, these outgroups have been the most frequently used across a number of studies that have investigated the stereotype content model (e.g., Caprariello, Cuddy, & Fiske, 2009; Cuddy et al., 2009; Fiske et al., 2002; Harris & Fiske, 2006; Lee & Fiske, 2006; Rogers, Schroder, & Scholl, 2013). Using six distinctly different outgroups that have been shown to vary on in stereotype content provides converging evidence of the moral foundations used when judging a target outgroup.

To measure participants various moral concerns and judgments of these particular groups, a modified version of the Moral Foundations Questionnaire was used (Graham et al., 2009). For this variable, participants filled out a 32-item questionnaire that has been validated multiple times in previous research on moral foundations (Graham et al., 2011). This measure is comprised of two subscales: 16 moral relevance items and 16 moral judgment items. The moral relevance items entail rating various concerns (e.g., whether or not someone was harmed) on a 6-point scale anchored by the labels *never relevant* and

always relevant. For each moral foundation there are three items. An additional item serves as a check for whether participants paid attention, understood the scale, and responded meaningfully. High rating on this item is assumed to indicate careless or otherwise not interpretable performance on this subscale and these data were excluded from analysis. The moral judgment items add more contextualized, concrete items that more strongly trigger the type of moral intuitions that are said to play an important role in moral judgment. Similar to the moral relevance items, there are three items per moral foundation that are rated on a 6-point scale (from *strongly disagree* to *strongly agree*), and there is additional item that serves as a check for attention, understandability of the scale, and meaningful responses. For each foundation, moral relevance and moral judgment items were combined to produce participants' moral foundation scores (MFS).

As mentioned, a modified version of the Moral Foundations Questionnaire was used in the present study. The only modifications made to the questionnaire involved minor grammatical changes due to the manipulation of group membership. Specifically, in the original questionnaire, moral relevance items asked respondents if an act committed by "someone" was relevant or not to their decision of whether something was right or wrong. In the present study, these items were prefaced by asking participants to think about a particular group (i.e., HwHc, LwHc, HwLc, and LwLc groups). Additionally, wherever the original items mentioned "someone", this was replaced with the previously mentioned group or the word "they". In terms of the moral judgment items, in the original questionnaire, respondents were asked to indicate the degree to which they agreed or disagreed with various statements. In the modified version, participants were asked to complete this same task while keeping in mind the typical

member of the same group. Since many of these statements did not suggest a single person or persons were involved, pronouns were added so the target of the judgment became the group the respondent was thinking about. For example, “Justice is the most important requirement for a society” was changed to “Justice for them is the most important requirement for a society”. Moreover, in a couple of cases, the original moral judgment items contained a reference to the single individual, so these items were also modified. For example, “I am proud of my country’s history” was changed to “I believe they are proud of their country’s history”. Since participants rated four groups in each replication conditions, there were a total of four sets of MFS for each participant.

Lastly, political orientation was measured and controlled for in the present analyses because previous research has shown that MFS are highly correlated with political orientation. For example, Graham and colleagues (2009) found that conservatives and liberals rely on different sets of moral foundations. Specifically, they found that liberals utilize the harm and foundations more than the loyalty, authority, and purity foundations; however, conservatives tend to use all five of the foundations more equally. Moreover, other research has shown that when disgust is prompted, social conservatives tend to be more prejudicial against certain groups. Specifically, Terrizzi, Shook, and Ventis (2010) demonstrated that when disgust is experimentally manipulated, conservatives showed increased prejudicial attitudes toward contact with homosexuals whereas liberals showed reduced prejudice. Based on prior research (e.g., Cottrell & Neuberg, 2005; Fiske et al., 2002), it was apparent some of the target outgroups used in the current study could elicit disgust (e.g., the homeless and welfare recipients). Thus,

political orientation was controlled for in order to examine if the effects of group type influence participants' MFS above and beyond political orientation.

Design

This study utilized a 2 (outgroup set 1 vs. outgroup set 2) by 4 (type of group: one ingroup and three outgroups) design. The type of group is a within-participant factor while the outgroup sets were manipulated between participants. In one condition, participants rated a group they most identified with, the rich, housewives, and the homeless. In the second condition, participants rated a group they most identified with, business professionals, the elderly, and welfare recipients. Across conditions, the target outgroups were matched on the two dimensions of the stereotype content model (i.e., warmth and competence) to control for target outgroup content. Specifically, target outgroups perceived as incompetent and cold were the homeless and welfare recipients. Target outgroups perceived as incompetent and warm consisted of the elderly and housewives. Target outgroups perceived as competent and cold were the rich and business professionals. Lastly, target groups perceived as competent and warm were considered ingroup members. Thus, the ingroup manipulation serves as both one level of the independent variable and the control, thereby increasing statistical power. The primary outcome variable was participants' MFS derived from a modified version of the Moral Foundations Questionnaire.

Procedure

Participants were randomly assigned to one of two replication conditions (i.e., outgroup set 1 or 2). After completing the informed consent form and agreeing to

participate, participants were asked to fill out an online survey. This survey was a modified version of the Moral Foundations Questionnaire

In each condition, participants filled out the modified Moral Foundations Survey four times, each with a different target group. The order the groups were presented was based on a Latin square design. Once completing the survey, participants were asked to fill out a final questionnaire that included demographic questions and manipulation checks imbedded within those questions.

Lastly, participants filled out a demographics questionnaire that asked for their political orientation, age, sex, and ethnicity. Imbedded in this demographic questionnaire were questions related to the various group manipulations participants were randomly assigned to. These questions included a rating of socioeconomic status and asked if the participant or the participant's family has ever held a profession in business, been homeless, received welfare, been a housewife, and been a caretaker for the elderly. If a participant was assigned to a particular condition in which they indicated he or she was a potential ingroup member of one of these assumed outgroups (e.g., if a person was assigned to a business professional manipulation and answered "yes" to the question "have you or anyone in your family ever held a profession in the business field"), they were excluded from the analyses.

CHAPTER III

RESULTS

To ensure the accuracy of the group manipulation, a series of manipulation checks was embedded in the final questionnaire. Specifically, a conservative one-item measure was used to examine the potential possibility that a participant perceived one of the target outgroups as an ingroup instead. For example, socioeconomic status was asked to gauge if participants associated themselves with “The rich” as an ingroup. Other items included checks for business professionals (i.e., “Have you or anyone in your family held a profession in business?”), the homeless (i.e., “Have you or anyone in your family been homeless for an extended period?”), welfare recipients (i.e., “Have you or anyone in your family received welfare?”), housewives (i.e., “Have you or anyone in your family held an occupation that consisted of caring for one’s family, managing household affairs, and doing housework?”), and the elderly (i.e., “Have you or anyone in your family been a caretaker for the elderly?”) outgroups. If any participant answered yes to these manipulation checks and judged the corresponding outgroup (e.g., answered yes to receiving welfare and judged welfare recipients in one of the outgroup sets), then this participant’s data was excluded from further analyses.

After using the exclusionary data procedures, the sample dropped to 121 participants. Thus, the mean age of the participants used in the final data analysis was 18.9 years ($SD = 1.27$). Participant ethnicity for this sample was as follows: 60

Caucasian, 25 Asian, 24 Hispanic, five Black, four Middle Eastern, and three either gave an invalid response or did not respond at all. Participant gender for this sample consisted of 88 females and 31 males, while two participants did not indicate their gender. Demographics of this sample did not significantly change from the initial sample (see appendix B).

Hotelling's T^2 was conducted to compare the two outgroup sets on the five MFS for each target group (e.g., "the rich" in outgroup set 1 and "business professionals" in outgroup set 2). The results showed a significant overall difference between the outgroup sets on MFS $F(1, 119) = 41.42, p < .05$. However, only four comparisons reached significance (see appendix C). These four that reached significance were the harm foundation for HwHc ingroups, $F(1, 119) = 4.85, p < .05, R^2_{\text{Adjusted}} = .031$, the fairness foundation for LwHc outgroups, $F(1, 119) = 9.31, p < .01, R^2_{\text{Adjusted}} = .065$, the harm foundation for HwLc outgroups, $F(1, 119) = 6.87, p = .01, R^2_{\text{Adjusted}} = .047$, and the fairness foundation for HwLc outgroups, $F(1, 119) = 12.27, p = .001, R^2_{\text{Adjusted}} = .086$. Specifically, HwHc ingroups scored significantly higher on the harm foundation in the second outgroup set compared to the first outgroup set ($M = 3.6, SD = .65; M = 3.9, SD = .44$, respectively), LwHc outgroups scored higher on the fairness foundation in the second outgroup set compared to the first outgroup set ($M = 3.06, SD = .66; M = 2.55, SD = .79$, respectively), and HwLc outgroups scored significantly higher on the harm foundation in the second outgroup set compared to the first outgroup set ($M = 3.84, SD = .62; M = 3.43, SD = .74$, respectively). HwLc outgroups also scored significantly higher on the fairness foundation in the second outgroup set compared to the first outgroup set ($M = 3.65, SD = .61; M = 3.08, SD = .78$, respectively). Since these results produced

small effects and the order of means over the outgroup types remained consistent even though there were some magnitude differences, reported results were collapsed across this variable. For example, participants' MFS for LwHc outgroups were a composite score of those who judged the rich and of those who judged business professionals.

MFS for target outgroups were averaged into a composite outgroup score, and a repeated-measures MANCOVA was conducted to compare the effect of group identity (ingroup vs. outgroup) on MFS while controlling for political orientation. Results showed a significant effect of group membership on the harm, $F(1, 114) = 12.59, p = .001, \eta_p^2 = .1$, fairness, $F(1, 114) = 14.10, p < .001, \eta_p^2 = .11$, and loyalty $F(1, 114) = 12.96, p < .001, \eta_p^2 = .1$, foundations. Specifically, when rating an ingroup, participants scored higher on the harm, fairness, and loyalty foundations compared to rating an outgroup (see figure 1). When participants rated an ingroup, they scored lower on the authority foundation but higher on the purity foundation compared to when they rated an outgroup (see figure 1). However, results for the authority and purity foundations were not significant.

Based on these results, hypothesis 1 was not supported by the data. It was predicted participants would score higher on the harm and fairness foundations when rating an outgroup compared to an ingroup. However, these data do provide partial support to hypothesis 2. It was predicted participants would score higher on the loyalty, authority, and purity foundations when rating an ingroup compared to an outgroup. Participants did in fact score higher on the loyalty foundation when rating an ingroup; however, results for authority and purity foundations did not reach significance.

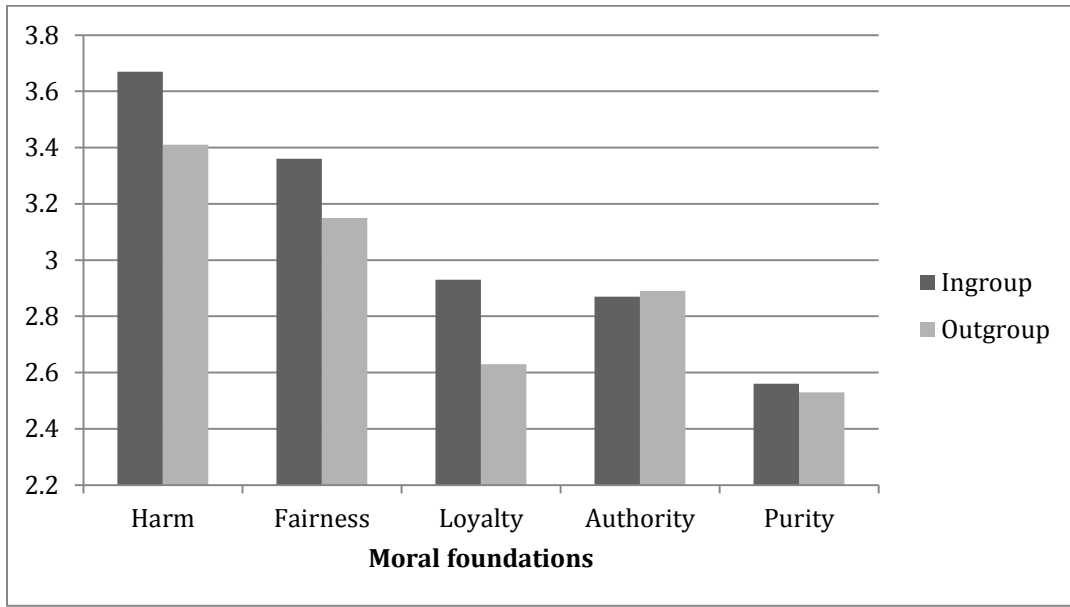


Figure 1. Differences between ingroup and outgroup moral foundation scores

To further tease apart this relationship and examine if the type of outgroup moderated the relationship between group membership and MFS, a second repeated-measures MANCOVA was conducted to compare the effect of group on MFS while controlling for political orientation. Results showed the type of outgroup, based on the stereotype content model, significantly influenced MFS on harm, $F(3, 113) = 12.94, p < .001, \eta_p^2 = .1$, fairness, $F(3, 113) = 32.47, p < .001, \eta_p^2 = .22$, loyalty, $F(3, 113) = 8.49, p < .001, \eta_p^2 = .07$, and authority, $F(3, 113) = 8.57, p < .001, \eta_p^2 = .07$, foundations. Although there was not a significant effect of group membership on the purity foundation, the results were trending towards significance $F(3, 113) = 2.53, p = .057, \eta_p^2 = .02$.

Pairwise comparisons showed that ratings of LwHc outgroups were significantly lower on harm and fairness foundations as compared to any other type of group. Moreover, ratings of LwHc outgroups showed significantly higher MFS scores for

authority and purity foundations, whereas LwLc outgroups exhibited significantly lower MFS scores for authority and purity foundations, as compared to other groups. Ratings of HwHc ingroups were shown to have the significantly highest MFS for the loyalty foundation, whereas ratings of LwLc outgroups exhibited the significantly lowest scores for the loyalty foundation. See figure 2 for reported results.

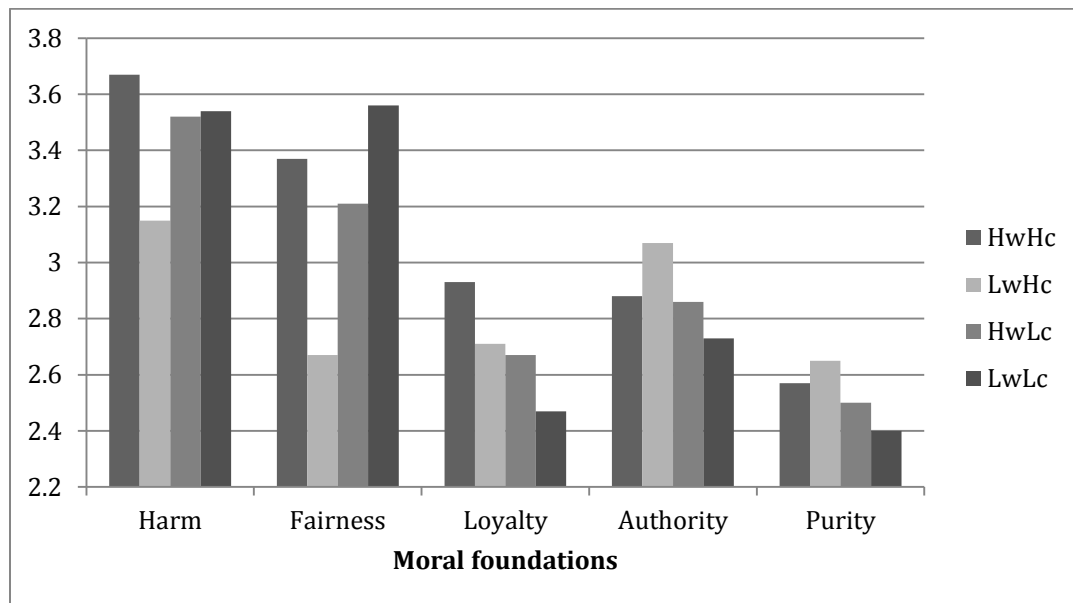


Figure 2. Moral foundation score differences among group type

Based on these results, different types of groups did moderate the effect between group identity and MFS, providing empirical support for hypothesis 3. For the harm and fairness foundations, differences between ingroups and outgroups is mainly a function of the LwHc outgroup. However, HwLc and LwLc outgroups were significantly different from each other on the fairness foundation as well. For the loyalty foundation, the effect seems to be consistent across all groups. Specifically, the HwHc ingroup scored the highest on this foundation. For the authority foundation, differences between ingroups and outgroups was again mainly a function of the LwHc outgroup, with this group

scoring the highest on this foundation. Although the LwHc outgroup did not significantly differ from the HwHc ingroup on the authority foundation, the effect was approaching significance ($p = .054$). Lastly, the effect for the purity foundation appears to be driven by the LwHc outgroup as well (see figure 2); however, the only significant difference on this foundation was between the LwHc and LwLc outgroups.

CHAPTER IV

DISCUSSION

The results from the current experiment suggest that how people judge others in terms of moral foundations depends on how they categorize them. Whether the target is framed as an ingroup or outgroup member influences the perceiver's utilization of moral foundations. However, the moral foundations used when judging these groups do not exactly fall in line with the study's hypotheses. Specifically, given the propensity for groups to protect themselves and enhance their own welfare, hypothesis 1 predicted participants would be sensitive to threats from outgroups and focus harm and fairness foundations when judging outgroup members. However, the results demonstrated that participants actually scored significantly lower on these foundations when rating outgroup members compared to ingroup members. However, these low scores may still align with the notion that ingroups are more sensitive to threats from outgroups. That is, if one feels that an outgroup poses a threat, that individual may not consider harm and fairness foundations to be particularly relevant to the outgroup's perspective. Since the outgroup can invoke negative intent (e.g., consuming resources, inflicting physical harm, etc.), they are judged to be lower on harm and fairness foundations. In other words, people may perceive certain outgroups as caring less about fairness and harm because they see them as a threat.

Moreover, based on the binding foundations derived from moral foundations theory, hypothesis 2 predicted when judging the ingroup (as opposed to the outgroup), participants would likely focus on the loyalty, authority, and purity foundations. The results demonstrated that participants did in fact score significantly higher on the loyalty foundation when judging ingroups compared to outgroups, lending partial support to hypothesis 2. This makes sense given that loyalty, patriotism, and self-sacrifice to one's ingroup are significant parts of a cohesive social identity and that those who go against the ingroup are often treated with disdain (Hogg & Abrams, 1988). However, the results showed no significant differences between the type of group and the authority and purity foundations. On the surface, this appears to be a surprising finding. However, ingroups and outgroups are salient entities (e.g., us versus them). In order for these groups to retain their entitativity, both groups must show obedience and respect for authority albeit for their respective identities. Moreover, these groups have their own leaders and afford their own protection. Thus, they are likely to show similar levels of the authority foundation. Moreover, practices related to purity serve social functions such as marking off the group's cultural boundaries (Soler, 1973/1979). Given the often salient difference of ingroup and outgroup cultures, it seems likely ingroups and outgroups would not significantly differ in their MFS on the purity foundation.

The results of this experiment also have implications for moderators of moral foundations at the group level. The stereotype content model suggests that different types of outgroups promote different expectations. Thus, hypothesis 3 predicted that differing types of outgroups would moderate the moral foundations utilized by participants. The results did indeed support this prediction. Specifically, for the harm and fairness

foundations, differences between ingroups and outgroups appears to mainly a function of the LwHc outgroup. Compared to any other type of group, LwHc groups scored the lowest on these foundations. While the LwHc group were seen as less concerned with harm and fairness foundations than that of the ingroup, this was not true for other types of outgroups. Thus, how the ingroup perceives the outgroup will affect how they rate them in terms of moral foundations.

This finding also supports hypothesis 3a: LwHc outgroups were expected to be perceived as harmful and unfair, making concerns about the harm and fairness foundations less relevant. This is likely due to the fact that these outgroups tend to be viewed as competitive and invoke negative intent from the ingroup's perspective (Fiske et al., 2002). Thus, this type of outgroup is expected to be harmful and unfair, and is not seen as violating expectations of harm and fairness. However, HwLc and LwLc outgroups were significantly different from each other on the fairness foundation as well, such that LwLc outgroups scored lower than HwLc outgroups. This is likely because LwLc outgroups are thought to compete with the ingroup as well. However, instead of competing for status, they are primarily viewed as competing for resources (Fiske et al., 2002). In other words, these outgroups are often viewed as parasites in the system and are seen as competing in a zero-sum game of resource allocation.

For the loyalty foundation, the effect seems to be consistent across all groups. Specifically, the HwHc ingroup scored the highest on this foundation. Similar to the explanation for hypothesis 2, this finding makes sense given that loyalty, patriotism, and self-sacrifice to one's ingroup are significant parts of a cohesive social identity. Moreover, if an ingroup does not perceive its group members to be loyal, those who go

against the ingroup are often treated with disdain. To the extent ingroup members are not loyal, they may be ostracized or even exiled from the group in order to protect the ingroup's welfare. Evolutionarily speaking, individuals that could come together in order to successfully enhance and protect each other were more likely to survive. Furthermore, social identity theory states group identification directly leads to ingroup favoritism as well as other behaviors that differentiate one's group from others (Hogg & Abrams, 1988). Thus, the tendency for a group to enhance and protect itself, perhaps through loyalty, is likely present and deeply embedded in most group settings.

For the authority foundation, differences between ingroups and outgroups was mainly a function of the LwHc outgroup, with this group scoring the highest on this foundation. This may be due to the hierarchical structure in many business settings. In order for such a hierarchy to effectively function, those working within the structure must show obedience and respect for those above them in the hierarchy. It could also be true that business professionals and the rich are often thought of as powerful leaders. Although the LwHc outgroup did not significantly differ from the HwHc ingroup on the authority foundation, the effect was approaching significance ($p = .054$).

Lastly, the effect for the purity foundation appears to be driven by the LwHc outgroup as well; however, the only significant difference on this foundation was between the LwHc and LwLc outgroups, with LwLc outgroups scoring lower than LwHc outgroups. Moreover, LwLc outgroups scored the lowest on the foundation compared to any other group. This finding supports hypothesis 3b: since LwLc outgroups invoke disgust, concerns about the purity foundation would be less relevant compared to any other outgroup. In this case, these outgroups may be associated with moral overtones of

injustice, indignation, and bitterness toward illegitimate behavior. Given these groups are often perceived to detract from others resources (Fiske et al., 2002), they might be perceived to have hostile intent that impacts others in society. It might also be the case that the particular target groups used in this study (i.e., welfare recipients and the homeless) might simply be perceived to be or are associated with being physically disgusting to others (e.g., smelly, greasy, dirty, etc.).

It might be the case that moral foundation use at the group level is driven less by moral standards and more by stereotypic expectations. That is, when individuals have stereotypic expectations of a particular group, the moral foundations related to those specific expectations might not be as relevant. For example, if the ingroup perceives an outgroup as potentially causing harm to the ingroup, the ingroup will rate the outgroup lower on the moral foundation of harm. However, if a particular group violates its stereotypic expectation, the moral foundation associated with that expectation becomes more relevant.

Taken together, these findings help explain why differing groups disagree on so many moral issues and often find it hard to understand how an ethical person could hold the beliefs of the other side: not only do people base their moral values, judgments, and arguments on different configurations of the five foundations depending on whether someone is an ingroup member or an outgroup member, they also have different configurations of moral foundations depending on the type of outgroup someone is a member of.

While the present study provides initial evidence for the effect of group membership on the use of moral foundations, it nevertheless has a number of limitations.

First, participants were individuals who only imagined other groups when making their ratings of target groups. Given the results indicated various stereotypic expectations might be driving the utilization of moral foundations, it may be the case that when actually interacting with another group, different moral foundations may be implemented to differing degrees. This may especially be the case when interacting with groups whose membership may not particularly salient (e.g., housewives, welfare recipients, business professionals). Future research might utilize a minimal group paradigm to address this issue.

Second, the MMM proposes an approach-avoidance component of moral foundations. In order to provide initial evidence for moral foundations at the group level, the present study took a more straightforward approach and did not investigate how motivation may influence the relationship between group membership and moral foundation configuration. Although moral foundations theory incorporates both proscriptive and prescriptive (c.f., approach and avoidance) components into their foundations, it may be the case that approach-avoidance motivations influence the use of moral foundations in certain contexts. Given the current results, future research should attempt to examine how differing forms of motivation might moderate the relationships between group membership and moral foundations.

Third, the critiques of the MMM raise a concern about the locus of moral concern versus the target of moral judgment. The MMM does not explicitly consider how each of these may influence one's utilization of moral foundations. Keeping in line with the literature on moral foundation theory, the present study examined group-level moral foundations as targets of moral judgment. That is, the current research framed the targets

of moral judgment as particular groups (i.e., ingroups and outgroups). However, it may be the case that individuals also used a locus of moral concern to derive their judgments. For example, when individuals were asked to consider LwHc outgroups, they judged these groups to be less concerned with harm and fairness concerns in the present study. The target of their moral judgment was the LwHc outgroup (i.e., the rich or business professionals) but their locus of moral concern may have been their own ingroup (i.e., group-protect). Moreover, Graham (2013) suggested moral foundation use might differ if judgments are based on the locus of moral concern or targets of moral judgment. Thus, future research should attempt to tease apart these concerns.

Lastly, the present study relied on self-report ratings. Although political identity was measured and controlled for, an investigation of whether or not differences in moral foundations at the group level exist implicitly as well as explicitly was not conducted. Haidt's (2001) social-intuitionist model, as well as recent studies of moral issues (Greene, Morelli, Lowenberg, Nystrom, & Cohen, 2008; Inbar, Pizarro, Knobe, & Bloom, 2009), indicates moral judgment heavily relies on automatic processes. Future research using implicit measurement method will be essential for understanding the ways in which various groups make moral judgments.

As globalization continues to unfold, societies are becoming more diverse. With such diversity come differing notions about how to regulate selfishness and how we ought to live together. Many of the ideas on how best to solve these issues are rooted in moral convictions. Moral foundations theory offers a useful way to conceptualize and measure such convictions. As research on moral psychology advances, perhaps it will clarify the role that morality plays in group thought and behavior.

APPENDIX A
PILOT TEST RESULTS

	N	Mean	Std. Dev.	Std. Err. Mean	t	Sig.
Harm score*						
MFQ1	11	3.09	.90	.27	-2.32	.021
Intragroup	24	3.67	.57	.12		
Fairness score						
MFQ1	11	3.08	.62	.19	-.83	.411
Intragroup	24	3.28	.67	.14		
Ingroup score						
MFQ1	11	2.88	.96	.29	.18	.861
Intragroup	24	2.83	.71	.15		
Authority score						
MFQ1	11	3.17	.75	.23	1.60	.120
Intragroup	24	2.72	.79	.16		
Purity score						
MFQ1	11	2.33	1.08	.33	.34	.739
Intragroup	24	2.22	.91	.19		

Table 1. Intragroup conditions (one multiple group (MFQ1) and intragroup)

	N	Mean	Std. Dev.	Std. Err. Mean	t	Sig.
Harm score						
MFQ2	5	3.13	.93	.42	-1.72	.097
Intragroup	24	3.67	.57	.12		
Fairness score						
MFQ2	5	3.00	1.03	.46	-.76	.453
Intragroup	24	3.28	.67	.14		
Ingroup score						
MFQ2	5	2.80	.49	.22	-.08	.935
Intragroup	24	2.83	.71	.15		
Authority score						
MFQ2	5	2.87	.59	.27	.40	.689
Intragroup	24	2.72	.79	.16		
Purity score						
MFQ2	5	2.30	.94	.42	.19	.852
Intragroup	24	2.22	.91	.19		

Table 2. Intragroup conditions (one multiple group (MFQ2) and single intragroup)

	N	Mean	Std. Dev.	Std. Err. Mean	t	Sig.
Harm score*						
MFQ1	11	2.56	.76	.23	-2.90	.008
The rich	13	3.49	.77	.21		
Fairness score						
MFQ1	11	2.67	.39	.12	-.69	.495
The rich	13	2.87	.91	.25		
Ingroup score*						
MFQ1	11	2.42	.50	.15	-2.16	.042
The rich	13	2.95	.66	.18		
Authority score						
MFQ1	11	2.77	.63	.19	-1.20	.245
The rich	13	3.09	.66	.18		
Purity score						
MFQ1	11	2.56	.90	.27	-.46	.652
The rich	13	2.69	.52	.14		

Table 3. The rich conditions (MFQ1 and single rich)

	N	Mean	Std. Dev.	Std. Err. Mean	t	Sig.
Harm score						
MFQ2	5	3.17	.31	.14	-.98	.355
Bus. Prof.	6	3.61	.97	.40		
Fairness score						
MFQ2	5	3.63	.46	.21	1.84	.100
Bus. Prof.	6	2.78	.95	.39		
Ingroup score						
MFQ2	5	3.00	.85	.38	-.17	.867
Bus. Prof.	6	3.08	.76	.31		
Authority score						
MFQ2	5	2.90	.64	.29	-.21	.835
Bus. Prof.	6	3.00	.86	.35		
Purity score						
MFQ2	5	2.63	.74	.33	.49	.633
Bus. Prof.	6	2.39	.87	.36		

Table 4. Business professionals conditions (MFQ2 and single business professionals)

	N	Mean	Std. Dev.	Std. Err. Mean	t	Sig.
Harm score						
MFQ1	11	3.24	.85	.26	.30	.768
Housewives	6	3.11	.87	.36		
Fairness score						
MFQ1	11	3.00	.87	.26	-.32	.755
Housewives	6	3.14	.85	.35		
Ingroup score						
MFQ1	11	2.65	.65	.20	.32	.754
Housewives	6	2.56	.29	.12		
Authority score						
MFQ1	11	2.91	.88	.26	-.05	.958
Housewives	6	2.93	.57	.23		
Purity score						
MFQ1	11	2.34	1.10	.33	-.14	.888
Housewives	6	2.42	.83	.34		

Table 5. Housewives conditions (MFQ1 and single housewives)

	N	Mean	Std. Dev.	Std. Err. Mean	t	Sig.
Harm score						
MFQ2	5	3.73	.38	.17	1.43	.175
The elderly	10	3.09	.95	.30		
Fairness score						
MFQ2	5	3.63	.46	.21	1.88	.083
The elderly	10	2.98	.69	.22		
Ingroup score						
MFQ2	5	2.67	.77	.35	-.84	.414
The elderly	10	2.95	.53	.17		
Authority score						
MFQ2	5	3.10	.48	.21	1.24	.239
The elderly	10	2.77	.50	.16		
Purity score						
MFQ2	5	3.00	.72	.32	1.64	.125
The elderly	10	2.33	.75	.24		

Table 6. The elderly conditions (MFQ2 and single elderly)

	N	Mean	Std. Dev.	Std. Err. Mean	t	Sig.
Harm score					-1.08	.289
MFQ1	11	3.32	.79	.24		
The homeless	15	3.66	.78	.20		
Fairness score					.36	.722
MFQ1	11	3.60	.91	.29		
The homeless	15	3.47	.90	.23		
Ingroup score					.50	.625
MFQ1	11	2.70	.68	.22		
The homeless	15	2.55	.75	.19		
Authority score					-.22	.825
MFQ1	11	2.69	.66	.21		
The homeless	15	2.76	.78	.20		
Purity score					-.58	.565
MFQ1	11	2.48	1.08	.34		
The homeless	15	2.72	.91	.24		

Table 7. The homeless conditions (MFQ1 and single homeless)

	N	Mean	Std. Dev.	Std. Err. Mean	t	Sig.
Harm score					.31	.760
MFQ2	5	3.43	.57	.26		
Welfare recipients	13	3.31	.84	.23		
Fairness score					.90	.380
MFQ2	5	3.50	.61	.27		
Welfare recipients	13	3.17	.73	.20		
Ingroup score					-.12	.906
MFQ2	5	2.40	1.09	.49		
Welfare recipients	13	2.45	.63	.17		
Authority score					.78	.444
MFQ2	5	3.13	.46	.21		
Welfare recipients	13	2.86	.72	.20		
Purity score					.18	.860
MFQ2	5	2.57	1.08	.48		
Welfare recipients	1	2.46	1.12	.31		

Table 8. Welfare recipients conditions (MFQ2 and single welfare recipients)

APPENDIX B
SAMPLE CHANGE

	Initial n	Initial proportion to n	After data exclusion n	After data exclusion proportion to n
Age	--	18.9% (SD 1.13)	--	18.9% (SD 1.27)
Male	88	21.5%	31	25.6%
Female	299	72.9%	88	72.7%
Caucasian	217	52.9%	60	50%
Asian	73	17.8%	25	20.7%
Hispanic	61	14.9%	24	19.8%
Black	15	.04%	5	.04%
Middle Eastern	11	.03%	4	.03%

Table 9. Proportion of sample change after exclusionary data method

APPENDIX C

DIFFERENCES BETWEEN OUTGROUP SETS

Independent Var.	Dependent Variable	F	Sig.
Outgroup Set	HwHc Harm*	4.846	.030
	HwHc Fairness	3.240	.074
	HwHc Loyalty	.298	.586
	HwHc Authority	1.268	.262
	HwHc Purity	.063	.802
	LwHc Harm	1.843	.177
	LwHc Fairness*	9.313	.003
	LwHc Loyalty	2.029	.157
	LwHc Authority	.031	.861
	LwHc Purity	.544	.462
	HwLc Harm*	6.873	.010
	HwLc Fairness*	12.267	.001
	HwLc Loyalty	3.214	.076
	HwLc Authority	.081	.777
	HwLc Purity	.663	.417
	LwLc Harm	1.689	.196
	LwLc Fairness	2.311	.131
	LwLc Loyalty	3.677	.058
	LwLc Authority	3.772	.055
	LwLc Purity	.320	.573

Table 10. Hotelling's T^2 results for outgroup sets on MFS

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VITA

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