ARE ATHEISTS IMMORAL? PATTERNS OF VALUES OF
ATHEISTS, DEISTS, AND THEISTS ON
MORAL FOUNDATIONS

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Brittany Elizabeth Page

Thesis Committee Approval:

Douglas J. Navarick, Department of Psychology, Chair
Kristin P. Beals, Department of Psychology
Jessie J. Peissig, Department of Psychology

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ABSTRACT

The present study sought to determine the level of accuracy in the public perception of atheists as immoral. Moral profiles of atheists, deists, and theists were evaluated and compared within the Moral Foundations Theory framework. Data were analyzed from 492 respondents to an online survey who completed the Moral Foundations Questionnaire (MFQ) and responded to several moral scenarios and religious identity questions. Using moral scenarios in concert with the MFQ provided insight into how the belief groups applied their moral priorities when making moral judgments. In contrast to atheist stereotypes, atheists had moral profiles similar to those of theists and deists, with all groups giving much more priority to the "individualizing" foundations than to the "binding" foundations. However, in between-groups comparisons, theists gave the highest priority to the binding foundations of purity, in-group loyalty, and authority/respect, whereas atheists gave the highest priority to the individualizing foundation of fairness/reciprocity. The MFQ did not predict moral judgment in a scenario where killing one person would save many others. Theists rated this action as more wrong than right, whereas atheists and deists rated it as equally wrong and right (maximum moral ambivalence). Moral judgment appears to result from an interaction between moral dispositions measured by the MFQ and situational details that potentially activate one or more of an individual's higher priority dispositions, e.g., purity/sanctity in theists, which may have increased their aversion to violating a basic moral prohibition.

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CHAPTER 1

LITERATURE REVIEW

Public Perception of Atheists

The religiously unaffiliated are one of the fastest growing groups in America

(Pew Research Center, 2015). The term "unaffiliated" refers to atheists, agnostics, and

individuals who indicate they don't believe in anything in particular (Pew Research

Center, 2015). The unaffiliated account for roughly 23% of the adult population in the

United States (Pew Research Center, 2015). Atheists and agnostics represent roughly 7%

of the American adult population (Pew Research Center, 2015). Despite increasing

prevalence, atheists remain one of the most stigmatized groups in America. In a recent

survey, 49% of American respondents indicated they would be unhappy if a member of

their immediate family married an individual who identified as atheist (Pew Research

Center, 2014). Additionally, a recent "feeling thermometer" poll found that atheists

(41%) were rated negatively when compared to other religious groups, including

Muslims, who were rated similarly to atheists (40%) (Pew Research Center, 2014).

Finally, another poll found 40% of American respondents stated they would not vote for

an otherwise well-qualified presidential candidate if he were an atheist (Gallup, 2015).

The majority of Americans (53%) indicate a belief in God is necessary to be moral (Pew

Research Center, 2014).

Various findings from the aforementioned polling data have been experimentally tested. In one study, researchers compared the prejudice against atheists to the prejudice against gays and blacks in politics (Franks & Scherr, 2014). Researchers measured participants' probability of supporting political candidates who were described in detail through a vignette, which described a candidate who was a member of only one disadvantaged group. The candidate was either a white heterosexual atheist, a black heterosexual Christian, a white gay Christian (thus a member of only one disadvantaged group) or as a white, heterosexual Christian which is representative of the majority. After reading the vignette, participants were asked to indicate the likelihood they would support the candidate in an election on a scale of 1 (no chance) to 9 (100%). Additionally, participants were asked to rate the candidate on scales measuring untrustworthy vs trustworthy, threatening vs comforting, and disgusting vs appealing. Results demonstrated Christians are significantly more likely to support a white, heterosexual Christian candidate than a gay or atheist candidate (Franks & Scherr, 2014). Results also indicated Christians rated atheist candidates as significantly less trustworthy than all other disadvantaged candidates. Additionally, Christians indicated atheist, gay, and black candidates were more threatening than the white, heterosexual Christian candidate. The candidate described as atheist in the vignette was the only type of candidate to receive negative prejudicial responses consistently across each of the three scales measuring untrustworthy vs trustworthy, threatening vs comforting, and disgusting vs appealing.

Edgell, Gerteis, & Hartmann (2006) analyzed data from the American Mosaic Project, which included 2,081 respondents across multiple years in a nationally representative sample, to determine public perceptions of various ethnic and religious

groups. Results demonstrated atheists were the least accepted group, scoring below Muslims, gays and lesbians, and immigrants, who are often identified as other types of marginalized groups (Edgell et al., 2006). Results indicated atheists were most likely to be selected as the group that does not agree with respondents' vision of American society (39.6%) and the group respondents would most disapprove of their child marrying (47.6%). Additionally, religious affiliation and involvement (e.g., church attendance) correlated with poor perceptions of atheists. The researchers concluded that there is a large disparity between the acceptance of atheists and the acceptance of other commonly marginalized groups, suggesting the negative evaluations of atheists are more common than those of other marginalized groups.

The Role of Distrust in Anti-Atheist Prejudice

Several studies have sought to understand the motivation behind the prejudice directed toward individuals affiliated with atheism. In a series of studies, researchers used a sociofunctional approach to prejudice. The sociofunctional approach posits that reactions evoked by various groups depend upon the type of threat a group is perceived to pose toward others (Franks & Scherr, 2014). According to the sociofunctional approach, different types of perceived threats can result in different forms of discrimination toward groups. As it relates to atheists, distrust is the primary motivating factor in anti-atheist prejudice (Gervais, Shariff, & Norensayan, 2011). The sociofunctional approach to prejudice indicates anti-atheist prejudice is different than other types of prejudice experienced by other marginalized groups because anti-atheist prejudice is motivated by distrust (Franks & Scherr, 2014). In a seminal article containing a series of six studies using a nationally representative sample, Gervais and colleagues (2011) explored the

various components of anti-atheist stereotypes, namely the distrust upon which stereotypes are based, the relationship between distrust and belief in a God that watches over human activities, and the various contexts in which anti-atheist prejudice is more prominent.

Participants rated atheists, gay men, and people overall on a feeling thermometer from 0 to 100, with 0 being the most negative one can feel and 100 being the most positive one can feel toward each group (Gervais et al., 2011). This initial rating created a general prejudice rating for each of the three groups. Although both atheists and gay men are consistently less accepted by society as a whole, results from the general prejudice measure indicated that gay men and people in general were both rated more favorably than atheists.

Additionally, participants rated these three groups on both a distrust and disgust thermometer. For the distrust thermometer, participants were asked to rate each group on their level of trustworthiness from 0 to 100 with 0 being least trustworthy and 100 being most trustworthy. This score was then subtracted from 100 to reverse score the value in order to obtain a rating of distrust. Then, researchers subtracted participants' distrust rating of people overall from the rating of distrust for atheists and gay men to create atheist distrust and gay men distrust scores (Gervais et al., 2011). The purpose of this subtraction was to measure distrust as it relates specifically to atheists and gay men, but not to people in general. Results for the distrust thermometer analysis indicated that atheists are more distrusted than gay men. An analogous comparison for the disgust thermometer indicated that atheists were less associated with disgust in comparison to gay men. Overall, results demonstrated distrust is primarily involved in anti-atheist

prejudice. Additionally, distrust mediated the relationship between negative attitudes towards those who are atheist and religious beliefs (Gervais et al., 2011).

The power of distrust as a mediator of negative attitudes towards atheists was further explored by Gervais and colleagues (2011). In another study, participants were presented with a vignette of an untrustworthy male who exhibited selfish and criminal behavior. In this vignette, participants read that other individuals would remain unaware of the selfish and criminal behavior. After reading the vignette, participants were then instructed to select a description that would be most probable based on behavior illustrated in the vignette. The descriptions included a teacher, or a teacher and a Christian, a teacher and a Muslim, a teacher and a rapist, or a teacher and an atheist. In this study, atheists were defined parenthetically as someone who does not believe in God. Results indicated that participants rated the vignette containing a description of a selfish, criminal individual as more representative of atheists and rapists, as opposed to Christians (Gervais et al., 2011). Additionally, results indicated participants did not significantly differentiate between atheists and rapists.

Building on these findings, the researchers altered the vignette by making the untrustworthy individual female to determine whether atheist distrust would generalize to females. Just as before, participants were then instructed to select a description that would be most probable based on the behavior illustrated in the vignette. However, for this study, the descriptions were altered to be a teacher, or a teacher and a feminist, or a teacher and an atheist, or a teacher and a Jewish person. Researchers used feminists and Jewish persons as additional groups due to previous research indicating these groups are rated similarly to atheists on competence and warmth. The characteristic of warmth is

often associated with morality, and the researchers indicate it is possible that atheist mistrust is due to a perception of atheists as low on warmth and high on competence.

The study also sought to determine whether belief in supernatural monitoring, specifically, belief in a watchful, behavior-monitoring God, would predict atheist distrust. Participants were instructed to rate their belief in God from 0 to 100 as well as their degree of agreement with the idea that "people behave better when they feel that God is monitoring their behavior" (Gervais et al., 2011, p. 1198). Results indicated atheists were rated as more untrustworthy than feminists or Jewish people, despite their similarities atheists as it relates to warmth and competence. Additionally, results indicated that belief in God was related to a greater amount of distrust of atheists and that belief in a God that monitors behavior mediated the relationship between belief in God and distrust of atheists (Gervais et al., 2011).

Tan & Vogel (2006) used a computerized trust game to experimentally test whether trust in one's game partner increases as the game partner's religiosity increased. In the computerized game, participants take turns in different roles where they have the ability to pass or keep points, or send and receive points. During certain segments of the game, some participants received information regarding the level of religiosity their partner in the game had reported (Tan & Vogel, 2006). For control, there were rounds that contained no information about game partners. Additionally, participants involved in the game were unable to see their own religiosity score, as the score was computed by the researchers based on responses to various questions (Tan & Vogel, 2006). This eliminated the possibility of participants comparing their own religiosity with that of their partner and thus sharing less points based on intergroup rivalry (Tan & Vogel, 2006).

Results indicated that trust in game partners increased with the increase of the game partner's religiosity (Tan & Vogel, 2006). Participants who had higher religiosity relied more heavily upon information regarding the religiosity of their partner during the computerized game. This builds on previous research indicating that atheists are viewed as less trustworthy, given their lack of religiosity, than those who believe in God and are viewed as religious.

Perception vs. Reality: Do Atheists Have Moral Values?

Research exploring stereotypes of atheists is prevalent, but research on the moral values of atheists is nonexistent. The main objective of the present study is to explore the moral values of atheists to determine whether there is validity in the ways in which atheists are perceived. Research consistently finds that atheists are trusted less than other similarly disliked groups in society, such as gay men. Not only are atheists less trusted, but descriptions of criminal acts are more likely to be considered representative of atheists. In one study, participants did not significantly differentiate between atheists and rapists when deciding which group was most representative of a description of a criminal (Gervais et al., 2011). As previously mentioned, 53% of Americans support the idea that a belief in God is necessary to be moral (Pew Research Center, 2014). Atheists are not well-liked, nor are they trusted. Taken cumulatively, the aforementioned research indicates that the general public's perception of atheists is tied to the belief that they tend toward immorality.

Building upon research focused on the relationship between atheist prejudice and distrust, researchers have turned their focus to the relationship between perceived morality of atheists and atheist prejudice. Gervais (2014) conducted research to explore

the relationship between intuitions about morality and religion, namely, the perceptions of atheists' moral values. The researchers focused on perceptions of atheists as lacking an important characteristic of morality due to their lack of religious belief, but did not evaluate atheists' actual moral values. In the study, participants were provided with various vignettes describing individuals who were engaged in immoral behavior (Gervais, 2014). These behaviors included cheating at cards, incestuous relations, and more serious moral violations, including murder (Gervais, 2014). The first in the series of experiments asked participants to read a vignette about a man who harms animals and dismembered bodies, and then, like before, to choose the most appropriate description for this individual. Participants were asked to determine if the most probable description is a teacher, a teacher and a person who does not believe in God, or a teacher and a Buddhist, or a teacher and a Christian, or a teacher and a Hindu, or a teacher and a Jew, or a teacher and a Muslim (Gervais, 2014). Participants were significantly more likely to assume the most probable description for the vignette involving immoral behavior was a teacher and a person who does not believe in God (Gervais, 2014).

The phrase "person who does not believe in God" was used instead of atheist to avoid the negative connotation associated with the word atheist (Gervais, 2014). Despite the removal of the word atheist and the associated negative connotation, participants were still more likely to rate the vignette containing immoral behavior as representative of someone who does not believe in God. In the subsequent studies contained in this article, participants intuitively judged vignettes of incestuous acts and a man having sex with a chicken and then eating it to be more representative of atheists than the aforementioned groups.

Moral Foundations Theory

Moral Foundations Theory (Graham & Haidt, 2010; Graham, Haidt, & Nosek, 2009; Haidt, Graham, & Joseph, 2009; Haidt, Koller, & Dias, 1993) was created to assess variations in moral intuitions across cultures and to evaluate the similarities and differences among various groups (Graham et al., 2009). Moral Foundations Theory (MFT) is used to measure the degree to which individuals endorse moral positions that have been culturally constructed (Haidt et al., 2009). The creators of the theory maintain that assessment of the moral foundations allows for an explanatory framework, which can be used to understand the enduring moral debates that occur in culture wars (Haidt et al., 2009). There are five Moral Foundations corresponding to the themes of harm, fairness, loyalty, authority, and purity.

The various moral positions individuals prioritize have been found to be a predictor of ideological identification as it relates to political identity (Weber & Federico, 2013). MFT builds on the premise that morality centers around justice, harm, and care concerns for members of society (Weber & Federico, 2013). MFT includes these basic moral concerns in the individualizing foundations such as harm/care and fairness/equality, as well additional moral concerns like those in the binding foundations of authority/respect, in-group/loyalty, and purity/sanctity. The individualizing foundations focus on concerns for individuals in society, while the binding foundations represent extensive concerns about group formation and maintenance (Weber & Federico, 2013).

The harm/care foundation represents concerns centered on kindness to others and protection from harm or suffering (Haidt et al., 2009). The fairness/reciprocity foundation

represents concerns related to equality, justice, and fair treatment of others. The in-group/loyalty foundation focuses on concerns involving self-sacrifice for the good of others, protection from betrayal, and responsibilities to the group of which one is a member. The authority/respect foundation represents concerns related to respect for traditions and authority, obedience to authority figures, and respect for societal roles. Finally, the purity/sanctity foundation focuses on moral concerns related to spiritual purity, as the foundation was shaped by influences of psychological research on disgust (Haidt et al., 2009).

Binding Foundations Distinguish Liberals and Conservatives

Most of the research involving MFT has evaluated the different moral concerns between liberals and conservatives, as well as various cultures. Across multiple studies, researchers have found that conservatives tend to rate all five foundations as equally important, while liberals tend to value the individualizing foundations of harm/care and fairness/reciprocity over the others (Graham et al., 2009; Haidt et al., 2009; Frimer, Biesanz, Walker, & MacKinlay, 2013; Weber & Federico, 2013). In one study, researchers asked undergraduate participants to complete the Moral Foundations Questionnaire (MFQ), as well as questions regarding policy preferences and political orientation (Weber & Federico, 2013). Based on a sample of 745 undergraduates, results indicated that correlations between self-selected political orientation and moral foundation endorsements were nonsignificant between liberals and conservatives on the individualizing foundations (Weber & Federico, 2013). However, the binding foundations showed a correlation with political affiliation, with conservatives prioritizing the binding foundations more so than liberals (Weber & Federico, 2013).

This research provides insight into the ways in which groups differ on moral priorities and how these different moral concerns impact the values (e.g. political orientation) they hold. As it relates to the present research, political orientation appears to have a relationship with religious affiliation. For example, the religiously unaffiliated are one of the most consistently liberal segments of the population in their political affiliation (Pew Research Center, 2012). Atheists (56%) identify as liberal, whereas certain religious groups like evangelical Protestants (55%) and Mormons (61%) identify as politically conservative (Pew Research Center, 2015). According to recent surveys, the unaffiliated are more than twice as likely to identify as politically liberal (38%) than politically conservative (20%) (Pew Research Center, 2015). Given these trends, there is some evidence that those who identify as unaffiliated tend to be more liberal while believers in God tend to be more conservative.

Weber & Federico (2013) built on previous research from Graham et al. (2009) which tested whether differences between liberals' and conservatives' moral priorities would remain during a series of experiments. In one experiment, researchers provided participants with vignettes of moral violations for each foundation (Graham et al., 2009). Participants were provided possible trade-off scenarios in an attempt to determine how liberals and conservatives would differ in perceptions of what was acceptable as a moral violation (Graham et al., 2009). In one scenario, participants were asked how much money someone would have to pay them in order to kick a dog in the head, which represented a violation of harm/care (Graham et al., 2009). Although conservatives demonstrated a more even distribution across moral values, results indicated that liberals were more likely than conservatives to express a willingness to accept money in

exchange for engaging in behavior that violated the binding foundations of in-group/loyalty, authority/respect, and purity/sanctity (Graham et al., 2009).

Gervais (2014) utilized MFT in creating some of the moral violations used to evaluate the perceptions of atheists' moral values. In the study, Gervais (2014) presented participants with vignettes describing individuals engaged in behaviors that violated each of the five Moral Foundations. In the vignette used to illustrate a harm violation, participants read a description involving an obese woman who was ridiculed, while the fairness vignette described a situation involving cheating during a card game (Gervais, 2014). Results from this study suggested that participants perceived vignettes of all types of Moral Foundations violations to be representative of atheists, rather than other groups. Overall, this study indicated participants perceived descriptions of individuals committing immoral acts to be more representative of those who do not believe in God (Gervais, 2014). Given the results of this research, there appears to be a relationship between negative evaluation of atheists and the perception of atheists as immoral. It is important to note that while Gervais (2014) used MFT to evaluate the perception of atheists, he did not explore atheists' actual moral values using either the MFT or alternative frameworks.

Although research using MFT has primarily focused on cultural and political differences, there has been some discussion on how MFT relates to religion. Graham & Haidt (2010) emphasize a social-functionalist approach, which describes an understanding that creation of moral communities occurs through aspects of religious practices including rituals and beliefs. The relationship between religion and morality is also a prominent feature of the social-functionalist approach. The researchers argue that

religion is tied to the moral foundations, specifically in-group/loyalty, authority/respect, and purity/sanctity. These foundations are said to be group-focused and binding foundations because their focus is on the promotion of individuals into teams, families, tribes, and other cohesive social units (Graham & Haidt, 2010).

Binding Foundations and Religious Belief

The in-group/loyalty foundation is tied to religion in that religious teachings promote loyalty and connection to congregants (Graham & Haidt, 2010). The authority/respect foundation is related to religion in that religious teachings often contain messages regarding following rules or doctrine, respecting traditions, as well as authority (Graham & Haidt, 2010). The final binding foundation purity/sanctity is related to religion in that religious teachings often promote spiritual cleanliness and the importance of remaining sexually pure (Graham & Haidt, 2010). Although all five Foundations are related to social aspects of morality, including cooperation, the three binding foundations are particularly related to the needs of a community, and thus more connected to religious identity. Although speculative, these views suggest that, compared to atheists, believers in a theistic God may give higher priority to the binding foundations but may not differ from atheists on the individualizing foundations, a pattern paralleling that in the comparison between conservatives and liberals.

This work leads to the question of whether or not various religious identities also predict differences on the Moral Foundations, specifically, whether atheists, deists, and theists significantly differ in the emphasis they give to the binding Foundations. The distinction between the types of belief is influenced by Gervais (2011), who found that belief in a watchful, behavioral-monitoring God mediated the relationship between

atheist prejudice and a belief in God. Atheists reject the notion of God altogether, while deists differ from theists in that the former reject notions of a personal God, including monitoring and intervention in human affairs. As it stands, the idea that atheists cannot be trusted because they are perceived as immoral is widespread (Gervais, 2014), especially among believers. The question of whether there are differences on Moral Foundations among various religious identities is important in addressing atheist prejudice and discrimination based on the perception that atheists are immoral.

The Current Study

The current study was conducted to examine patterns of moral values of atheists, deists, and theists on the Moral Foundations to determine the accuracy of the public perception of atheists. Atheists are individuals who do not believe in any form of God or gods. Deists are individuals who profess a belief in God or god(s) but maintain that this God or gods created the universe without becoming involved with it after the creation. Theists are individuals who profess a belief in God or god(s) that created the universe and continue to interact with it.

The study sought to determine whether the public perception of atheists as being immoral is supported. The moral profiles of atheists, deists, and theists are described and compared within the MFT framework. This research fills a gap in the literature on the MFT on possible correlations between religious identities and patterns of moral values.

Assessment of Moral Values Using the Moral Foundations Questionnaire (MFQ)

The MFT led to the development of a questionnaire that measures the priority that individuals give to values associated with the five Moral Foundations (Graham, Haidt, & Nosek, 2008). The MFQ is described under Procedure. In this section two hypotheses are

stated that were derived from studies showing that liberals and conservatives are not distinguishable on the individualizing foundations but that liberals place less weight on the binding foundations than do conservatives (Haidt et al., 2009; Frimer, Biesanz, Walker, & MacKinlay, 2013; Weber & Federico, 2013). Based on Graham and Haidt's (2010) theory that binding foundations are tied to religious beliefs, it follows that theists would have a moral profile similar to that of conservatives and would give more weight to the binding foundations than would atheists and deists, who would not differ from one another because they lack a religious identity that requires binding values. In contrast, atheists, deists, and theists should give the same weight to the individualizing foundations.

Application of MFT to Moral Judgment

The MFQ asks participants to rate the priority they think they would give to various values if they were called upon to make a moral judgment and it probes their views on a variety of social and economic issues. However, the MFQ does not ask participants to make moral judgments on specific actions. To fill this gap, the present study also investigated participants' moral judgments on actions described in several scenarios (*cf.* Clifford, Iyengar, Cabezza, & Sinnott-Armstrong, 2015). Before a hypothesis is stated, background is provided on these scenarios and the methods used to measure moral judgment.

Three moral scenarios were selected from a study by Koenigs et al. (2007). Additionally, the bivariate scale was used to determine differences between groups on ratings of right separately from ratings of wrong. Bivariate measurement was utilized with these moral scenarios to account for the possibility of moral ambivalence (Navarick,

2013; 2017). Bivariate measurement enables respondents to give separate ratings for right and wrong on scales ranging from 0 to 5. Research exploring moral intuitions indicates contradictory feelings of right and wrong can occur due to the non-logical nature of affective intuitions (Navarick, 2013). Using a separate rating scale for wrong and right provided the opportunity for respondents to present these contradictory feelings, which is not typical in other rating scales such as those used by the MFQ.

One benefit of the bivariate measurement is the ability to distinguish between moral ambivalence and moral neutrality (Navarick, 2013; 2017). Moral ambivalence would be indicated by non-zero ratings on scales of both right and wrong, while moral neutrality would be indicated by a zero rating on both scales. Through the use of specific moral scenarios and bivariate measurement, further insight was gained into the differences between atheists, deists, and theists on moral concerns.

Hypotheses

Hypothesis 1: It is predicted that atheists, deists, and theists will not significantly differ on the individualizing foundations of harm/care and fairness/reciprocity.

Hypothesis 2: It is predicted that atheists and deists will give less weight than theists to the binding foundations of in-group/loyalty, authority/respect, and purity/sanctity, as measured both by (a) lower ratings within those categories, and (b) lower ratings of binding foundations than of individualizing foundations in contrast to basically equal ratings by theists across all five categories. Hypotheses 1 and 2 are illustrated below in Figure 1.
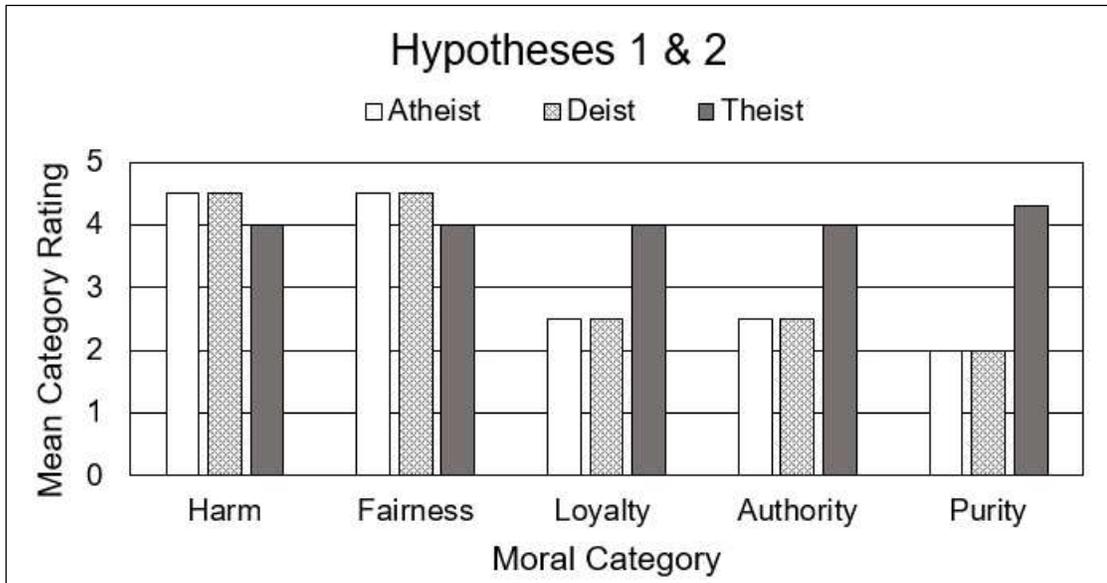
Figure 1. The three groups are expected to give similar ratings on the harm/care and fairness/reciprocity moral categories. Theists are expected to give higher ratings than both atheists and diests on the loyalty/fairness, authority/respect, and purity/sanctity moral cateogries, and to show basically equal ratings across all five foundations.

Hypothesis 3: For bivariate ratings of right and wrong on the moral scenarios, the three groups will give the same ratings for the simple cases that involve a violation in the harm/care category (high ratings of wrong, low ratings of right). For the complex scenario in which one person is harmed to save the lives of the group, theists should give higher ratings of right than the other groups (because the action affirms binding values) but the three groups should give equal ratings of wrong (because the action violates individualizing values). Hypothesis 3 is illustrated in Figure 2 below.
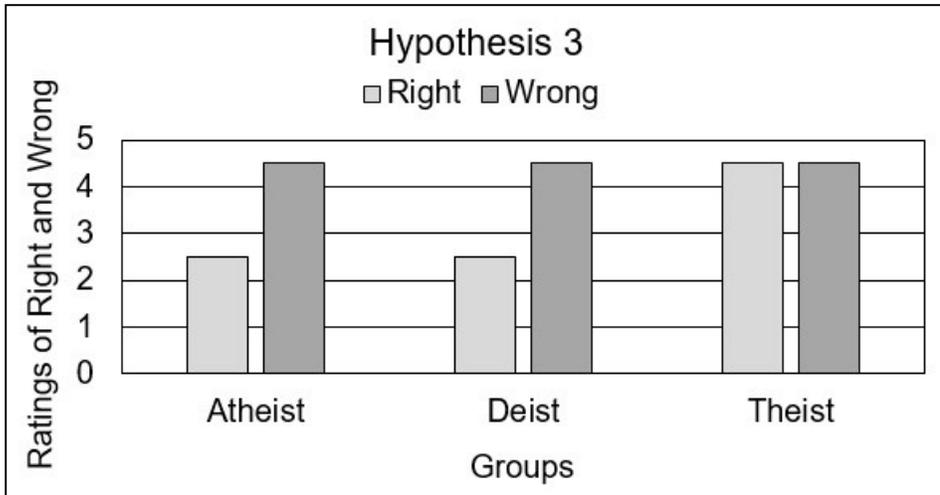
Figure 2. Participants in all three groups are expected to give the same ratings of wrong for the complex scenario, while theists are expected to give higher ratings of right than atheists or deists.

CHAPTER 2

METHOD

Participants

Participants were recruited from social media, including Facebook and Twitter, to maximize access to atheist respondents. Links to the survey were distributed to various notable individuals in the secular community. These individuals were encouraged to share the link using their public social media profiles, granting survey access to their followers, friends, and fans. A total of 666 participants took the survey. Although this symbolic number may seem intentional, it was a coincidental result of leaving the survey link survey open for three months with no further participation.

Demographic Characteristics of the Sample

Based on a question asking for religious affiliation, most participants identified as "None – Atheist" (34.9%) and "None – Agnostic" (16.2%), with the remainder distributed as follows: Other (9.4%), Christian-Other (6.7%), Christian-Protestant (5.5%), Christian-Catholic (3.4%), Seventh-Day Adventist (2.8%), Buddhist (1.8%), Jewish (1%), Mormon (.7%) and Muslim (0.1%). Gender characteristics were female, 49.4%; male, 32.8%; and "other," 1.6%. Most respondents (60%) were between 24 and 46 years of age. The ethnic background of the participants was mostly European American (34%), with the other participants self-selected as follows: American (30.1%), Other (10%),

Multi-Ethnic (3.6%), Latino/a (1.8%), Asian-American (1.3%), African-American

(1.2%), Native/Indigenous Peoples (1.2%), and Middle-Eastern American (0.1%).

Participants described their political orientation on a scale of 1 to 7, with one

being very conservative and seven being very liberal. Less than six percent of

respondents selected some variation of conservative, including, very conservative (.6%),

conservative (1.9%), or moderately conservative (2.8%). Some participants were

moderate (9.3%). Most respondents were very liberal (22.8%), moderately liberal

(16.8%), or liberal (28.7%), or very liberal (22.8%) in political orientation.

Exclusion of Participants

Belief profile questions, MFQ and outliers. The sample size was reduced to 492

following the exclusion of participants with contradicting responses on the belief profile

questions, outliers, and missing data (as itemized below). An example of a contradicting

response on the belief profile questions would include a "Yes" response to, "Do you

believe in a God that created the universe and interacts with it (alters plans for

universe/interferes with human affairs)?" and a "Yes" response to, "Do you believe in a

God that created the universe, but refrains from interacting with it?" Further, criteria for

exclusion included any response that deviated from the operationally-defined categories

for atheist, deist, and theist. For example, if a participant answered "No" to most of the

belief profile questions, but failed to provide a response on the remainder of belief profile

questions, they were excluded based on their deviation from the operationally-defined

atheist category which required a "No" response to each question. Univariate outliers

were defined by a z-score plus or minus three, while multivariate outliers were evaluated

based on Mahalanobis distance. A total of 15 univariate outliers were identified and

removed from analysis for Hypotheses 1 and 2. In evaluating the presence of multivariate outliers for Hypotheses 1 and 2, none was detected using five variables and a criterion $a = .001$ with critical $\chi^2 = 20.52$.

Moral scenarios. Additional participants were excluded in the part of the study that examined moral judgment on actions described in three fictitious scenarios. For each of the three moral scenarios, the samples were treated separately. Participants were excluded if they failed to give a valid response (a positive integer from 0 to 5) to both "Right" and "Wrong." For example, on the rapist scenario, if participants gave a rating between 0 and 5 on the "Right" scale, but failed to provide a response on the "Wrong" scale, they were excluded from analysis on only that scenario with the responses to the other scenarios treated separately. For the lifeboat scenario, $n = 492$, with 361 atheists, 99 theists, and 32 deists. For the hired rapist scenario, $n = 485$, with 356 atheists, 100 theists, and 29 deists. For the smothering for money scenario, $n = 470$, with 341 atheists, 99 theists, and 30 deists. These sample sizes resulted from the exclusion of 25 outliers on the smothering for money scenario and 10 outliers on the hired rapist scenario, based on z-scores above plus or minus three. There were no outliers on the lifeboat scenario.

Measures

Moral Foundations Questionnaire

The MFQ (Graham, Haidt, & Nosek, 2008) is a 32-item survey, with six questions corresponding to each of the five foundations (harm/care, fairness/reciprocity, in-group/loyalty, authority/respect, and purity/sanctity). The questionnaire includes two filler items to identify participants who are not engaged. The co-creator of the MFQ, Jesse Graham, indicated in an email to me that these filler items have not been successful

in improving the quality of data. Thus, they were not used in exclusion criteria. The questionnaire consists of two parts. In the first part, participants were asked to rate a series of statements based on how relevant the message contained within the statement was when deciding whether something was right or wrong. On a scale from 0 (not at all relevant) to 5 (extremely relevant), participants indicated the extent to which the statements aligned with their decisions on what is right or wrong. For example, "Whether or not someone suffered emotionally" corresponds to the harm/care foundation, while "Whether or not someone acted in a way that God would approve of" corresponds with the purity/sanctity foundation.

In the second part, participants were asked to read a series of statements and indicate their level of agreement or disagreement on a 6-point scale from 0 (strongly disagree) to 5 (agree). For example, "Men and women have different roles to play in society" corresponds to the authority/respect foundation, while "I think it's morally wrong that rich children inherit a lot of money while poor children inherit nothing" corresponds with the fairness/reciprocity foundation.

Moral Scenarios and Bivariate Measurement

There were three moral scenarios, two involving presumably simple decisions—hired rapist and smothering for money—and one involving a complex decision—the lifeboat dilemma (Koenigs et al., 2007). For example, the hired rapist scenario included a description of a husband who is disappointed in his marriage. The husband devises a plan to hire a rapist to rape his wife in order to increase her need for comfort, which he would then provide, so she would appreciate him more. A bivariate scale was used to measure moral sentiments (Navarick, 2013). Participants were asked to rate on a scale of 0 to 5

how morally right they felt it would be to have the wife raped so she would appreciate her husband more after he took care of her. Participants were also asked to rate how morally wrong they felt this action would be on a scale of 0 to 5. This allowed participants who may have had conflicting feelings of right and wrong to indicate both.

The more complex scenario involved a sinking lifeboat, filled with people. The decision was whether or not to throw overboard an injured person who would not survive, allowing the lifeboat to stay afloat and save the remaining passengers on the boat. This scenario relates to the trade-off between a deontological principle—the prohibition against killing—and a utilitarian principle—maximizing the number of lives saved. Participants were asked to rate on separate scales ranging from 0 to 5 how morally right and how morally wrong they felt it would be to throw the injured person overboard. All of the moral scenarios are provided in Appendix 1.

Assessment of Theological Beliefs and Religious Affiliation

The present study utilized a series of questions to determine god belief, type of god belief, and religious affiliation. These questions are presented below in Table 1. First, participants were asked to indicate whether or not they believed in God via a "yes," "no," or "I don't know response." Following this question, all participants were then directed to a series of belief profile questions designed to group respondents into one of the three groups (e.g., atheist, deist, and theist) based on criteria designed for this study. An atheist was operationally defined as an individual who responded "no" to the six questions in the belief profile section that asked if respondents believed in a god with a particular trait. A theist was operationally defined as an individual who responded "yes" to at least one of the five questions that indicated belief in God's involvement in the world and "no" to the

question that stated "created the universe but refrains from interacting with it." A deist

was operationally defined as an individual who responded "yes" to the above question

and "no" to the others. Participants were then divided into these three groups based on

research indicating belief in supernatural monitoring mediates the relationship between

distrust of atheists and belief in God (Gervais et. al, 2011). Finally, all participants were

asked to self-select themselves into a religious affiliation, if any. If participants selected

atheist during this final step, only these participants were directed to an additional open-

ended text question inquiring about how they distinguish between the terms atheist and

agnostic and why they chose atheist over agnostic. Only the belief profile questions were

used for the thesis. The religious affiliation and open-ended text questions were included

for additional exploratory analyses, which have been completed and are reported in a

study by Page and Navarick (2017, in press).

Table 1. Belief Profile and Religious Affiliation Questions

	Belief Profile Questions: 1) Do you believe in a God that monitors your behavior? Y/N 2) Do you believe in a God that intervenes in human affairs? Y/N 3) Do you believe in the trinity, the Father, the Son, and the Holy Ghost? Y/N 4) Do you believe in a God that requires worship, punishes sinners, or answer prayers? Y/N 5) Do you believe in a God that created the universe and interacts with it (alters plans for universe/interferes with human affairs)? Y/N 6) Do you believe in a God that created the universe, but refrains from interacting with it? Y/N (Deist)	Please indicate your religious affiliation, if any: Buddhist Christian -- Catholic Christian -- Other Christian -- Protestant Hindu Jehovah's Witness Jewish Mormon Muslim None -- Agnostic None -- Atheist Other (Fill In The Blank) Seventh Day Adventist If Atheist: Please elaborate on what your lack of belief in God means.
Do you believe in God? Y/N/I Don't Know		

Table 2. Operational Definitions of Belief Categories

Belief Category	Belief Profile Question Numbers with "Yes" Responses
Atheist	None (No on all six questions)
Deist	6 (and No on the other five questions)
Theist	1, 2, 3, 4, or 5 (and No on Question 6)

Procedure

The survey was created using SurveyMonkey and was distributed through social media, including Facebook and Twitter. Participants were provided with an informed consent form that allowed them to determine whether they would like to proceed with

participation in the survey. This informed consent form included a description of the purpose of the study. Participants had to accept informed consent prior to entering the survey, to ensure that they understood that they had the ability to withdraw from the survey at any time without consequence. The first two pages of the survey contained Part 1 of the MFQ, with questions for each page presented in random order. On the next two pages, Part 2 of the MFQ was provided, with each question presented in random order. Following the MFQ, participants were directed to the moral scenarios, which were also presented in random order. Participants were then asked to indicate whether they believed in God and then they were provided the belief profile questions. Once these were complete, participants then selected their religious affiliation. If they selected atheist, they were directed to another question inquiring about the method they use to distinguish between atheism and agnosticism. Finally, all participants were shown a demographics page that asked for their gender, age, ethnic background, and political orientation. Following completion of the survey, participants were presented with a debriefing page where the study's goals were described in detail, and then shown a page with a message of thanks for participating in this important research.

CHAPTER 3

RESULTS

Relationship Between Belief Category and MFQ

A MANOVA (multivariate analysis of variance) was conducted to determine the differences between atheists, deists, and theists on the five Foundations. The moral categories (harm/care, fairness/reciprocity, in-group/loyalty, authority/respect, and purity/sanctity) represented the within-subjects variable, while the belief category (atheists, deists, and theists) represented the between-subjects variable. Following the guidelines prescribed for MANOVA in Tabachnick & Fidell (2013), evaluations were conducted for assumptions related to normality, homogeneity of variance-covariance matrices, linearity, and multicollinearity, and all assumptions were supported.

Results are reported using the Pillai's Trace criterion because it is the most robust and appropriate test for unequal sample sizes (Tabachnick & Fidell, 2013). A visual representation of these results is illustrated in Figure 3.
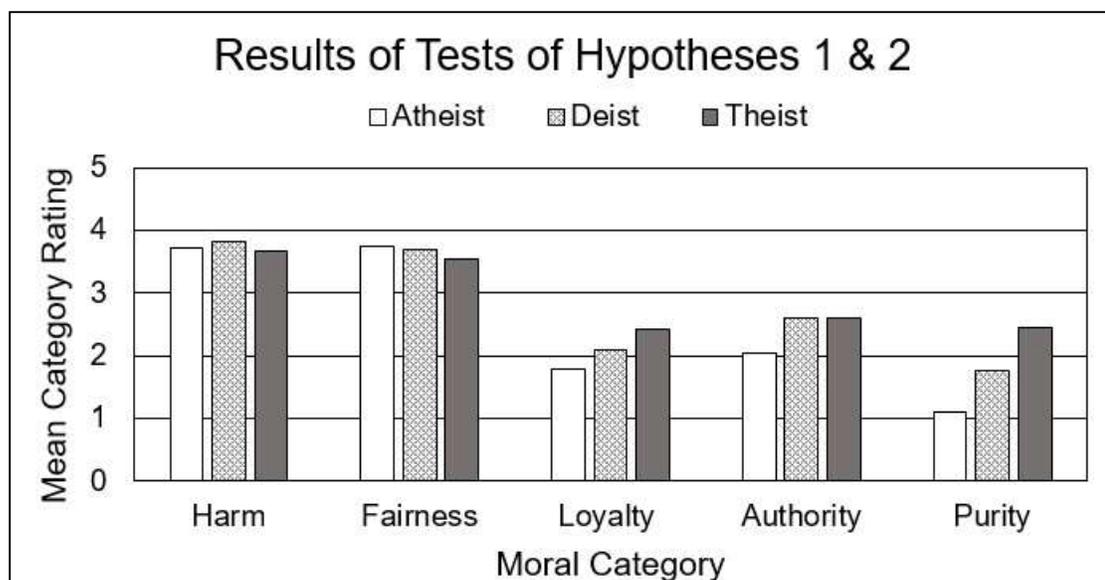
Figure 3. Groups significantly differed in their ratings on the fairness/reciprocity, in-group/loyalty, authority/respect, and purity sanctity moral categories. As predicted, atheists and deists generally gave less priority to the binding foundations than theists. However, contrary to Hypothesis 2, theists resembled atheists and deists in giving individualizing foundations higher priority ratings than binding foundations (*cf*. Figure 1).

There was a statistically significant main effect for belief groups on the combined moral categories, $F(10, 972) = 21.93$, $p = .000$; Pillai's Trace = .37; partial $\eta^2 = .184$. Significant variation among groups was found within most moral categories, with harm/care being the sole exception: fairness/reciprocity, $F(2, 489) = 4.82$, $p = .008$; partial $\eta^2 = .019$; in-group/loyalty, $F(2, 489) = 27.29$, $p < .001$; partial $\eta^2 = .100$; authority/respect, $F(2, 489) = 22.85$, $p < .001$; partial $\eta^2 = .085$; purity/sanctity, $F(2, 489) = 116.81$, $p < .001$; partial $\eta^2 = .323$.

To evaluate these effects, simple effects testing was conducted to determine which mean comparisons among belief groups were significant. On the fairness/reciprocity moral category, atheists scored significantly higher ($M = 3.74$, 95% CI [.05, .38], $p < .01$; $d = .33$) than theists ($M = 3.53$, $SD = .66$), but not deists ($M = 3.69$,

SD = .51). These findings are somewhat consistent with what was predicted for

Hypothesis 1. Although the groups did not significantly differ on harm/care, as expected,

atheists scored significantly higher than theists on fairness/reciprocity, which was

unexpected. Deists and atheists did not significantly differ from one another, placing

similar emphasis on this foundation, as predicted.

Most comparisons between belief groups within the binding foundations were

consistent with Hypothesis 2 in showing that the theists gave these foundations the

highest priority ratings. Within the in-group/loyalty foundation, theists scored

significantly higher ($M = 2.43$, 95% CI [.42, .83], $p < .001$; $d = .81$) than atheists

($M = 1.80$, $SD = .74$), but not deists ($M = 2.08$, $SD = .72$). Similarly, in the

authority/respect moral category, theists scored significantly higher ($M = 2.61$, 95% CI

[.35, .80], $p < .001$; $d = .66$) than atheists ($M = 2.03$, $SD = .80$). While theists and deists

were not significantly different, deists ($M = 2.60$, 95% CI [.20, .93], $p < .01$; $d = .69$)

scored significantly higher than atheists, as hypothesized. Finally, all three groups

differed significantly on the purity/sanctity moral category. Theists scored significantly

higher ($M = 2.46$, 95% CI [1.14, 1.57], $p < .001$) than both deists ($d = .73$) and atheists

($d = 1.57$), while deists scored significantly higher ($M = 1.76$, 95% CI [.30, 1.00], $p < .01$;

$d = .78$) than atheists ($M = 1.11$, $SD = .71$) as well. Of the three binding foundations,

purity/sanctity showed the most prominent differences between groups, with a significant

ordering of priorities that was consistent with Hypothesis 2: theists > deists > atheists.

Figure 3 shows that all three belief groups gave higher ratings to the

individualizing foundations than to the binding foundations. The expectation from

Hypothesis 2 (Figure 1) was that atheists and deists would show such a decrease but

theists would give virtually equal ratings across all five categories. To evaluate within-group differences, for each participant an average score was calculated for the two individualizing foundations and separately for the three binding foundations, and the significance of the difference within each group was calculated using a paired-t test with a Bonferroni correction applied to the significance level (.05/3). All groups scored significantly higher ($p < .001$) on the individualizing foundations than on the binding foundations (atheists: $M = 3.73$, $SD = .55$ *vs.* $M = 1.65$, $SD = .62$), mean difference of 2.08, 95% CI [2.00, 2.16], $t(359) = 48.27$; $d = .93$; deists: $M = 3.76$, $SD = .46$ *vs.* M = 2.15, SD = .71, mean difference of 1.61, 95% CI [1.32, 1.91], $t(31) = 11.18$; $d = .90$; theists $M = 3.60$, $SD = .63$ *vs.* $M = 2.50$, $SD = .77$, mean difference of 1.1, 95% % CI [.89, 1.31], $t(99) = 10.47$; $d = .72$).

Differences Among Belief Groups in Moral Scenarios

For each of the two simple scenarios, hired rapist and smothering for dollars, a separate 3 x 2 mixed ANOVA was conducted on a single dependent variable, participants' rating of their moral feelings, with belief category as the between-subjects variable (atheists, deists, theists) and moral judgment as the within-subjects variable (right, wrong). For the smothering for dollars scenario, support for assumptions for normality and homogeneity of variance was satisfactory. Following the exclusion of 10 univariate outliers, assumptions for outliers were met. Although the assumption for sphericity was violated, the Greenhouse-Geisser correction was used in evaluation of significance tests to correct for this violation. For the hired rapist scenario, assumptions for normality and outliers were met following the exclusion of 25 univariate outliers. The assumption for homogeneity of variance and sphericity were violated. However, the

Greenhouse-Geisser correction was also used in evaluation of significance tests for this scenario. As predicted in Hypothesis 3, results for the hired rapist scenario, using the Greenhouse-Geisser correction, indicated no statistically significant interaction between belief group membership and moral judgment, $F(2, 482) = 2.51$, $p = .08$. Similarly, as predicted in Hypothesis 3, results for the smothering for dollars simple scenario, using the Greenhouse-Geisser correction, indicated no statistically significant interaction between belief group membership and moral judgment, $F(2, 467) = 1.45$, $p = .24$.

To evaluate within-group differences, for each participant an average score was calculated for the both the ratings of right and ratings for wrong for each scenario, and the significance of the difference within each group was calculated using a paired-t test with a Bonferroni correction applied to the significance level (.05/3). For the hired rapist scenario all groups scored significantly higher ($p < .001$) on the ratings of wrong than the ratings of right (atheists: $M = 5.00$, $SD = .05$ $vs.$ $M = .01$, $SD = .09$, mean difference of -4.99, 95% CI [-5.00, -4.98], $t(355) = -891.78$; $d = 1.00$; deists: $M = 4.97$, $SD = .19$ $vs.$ $M = .03$, $SD = .19$, mean difference of -4.93, 95% CI [-5.07, -4.79], $t(28) = -71.50$; $d = 1.00$; theists $M = 5.00$, $SD = .00$ $vs.$ $M = .01$, $SD = .10$, mean difference of -5.00, 95% % CI [-5.01, -4.97], $t(99) = -499.00$; $d = 1.00$. Similarly, for the smothering for dollars scenario, all groups scored significantly higher ($p < .001$) on ratings of wrong than ratings of right (atheists: $M = 4.67$, $SD = .71$ $vs.$ $M = .39$, $SD = .85$, mean difference of -4.25, 95% CI [-4.40, -4.09], $t(340) = -53.91$; $d = .95$; deists: $M = 4.53$, $SD = .40$ $vs.$ $M = 40$, $SD = .89$, mean difference of -4.13, 95% CI [-4.72, -3.54], $t(29) = -14.42$, $d = .94$; theists $M = 4.79$, $SD = .63$ $vs.$ $M = .28$, $SD = .77$, mean difference of -4.51, 95% % CI [-4.77, -4.24], $t(98) = -34.16$; $d = .96$).

For analysis of the complex lifeboat scenario, a separate MANOVA was conducted to determine the differences between atheists, deists, and theists on the ratings of right and wrong. The moral judgments (right or wrong) represented the within-subjects variable, while the belief category (atheists, deists, and theists) represented the between-subjects variable. Following the guidelines prescribed for MANOVA in Tabachnick and Fidell (2013), evaluations were conducted for assumptions related to normality, homogeneity of variance-covariance matrices, linearity, and multicollinearity, and all assumptions were supported.

Results are reported using the Pillai's Trace criterion because it is most robust and most appropriate for unequal sample sizes (Tabachnick & Fidell, 2013). A visual representation of these results is illustrated in Figure 4.
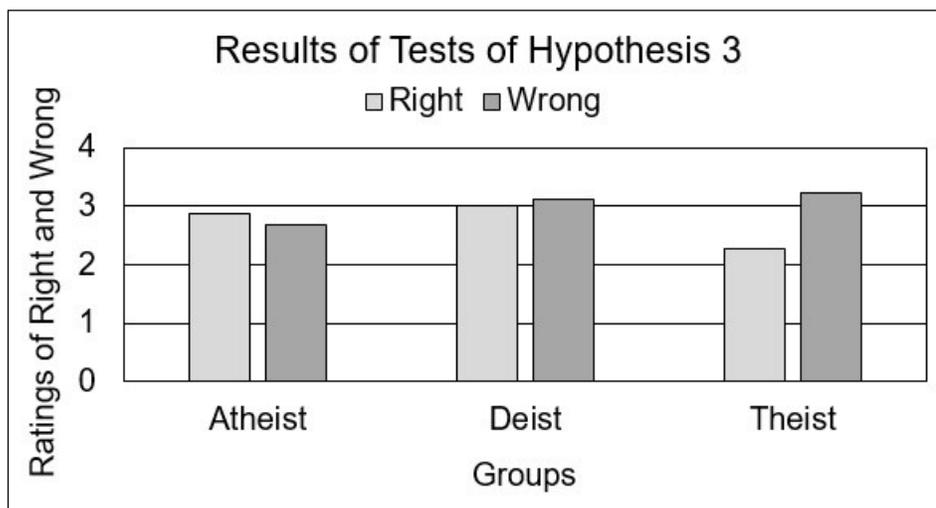
Figure 4. Atheists and deists were largely morally ambivalent in their ratings for the complex scenario involving harm to one person to save the lives of the group, while theists rated this action much more wrong than right.

There was a significant main effect for belief groups on the combined moral judgment categories, $F(4, 978) = 4.73$, $p = .001$; Pillai's Trace = .04; partial $\eta^2 = .019$. Significant variation among groups was also found in both ratings of right and ratings of

wrong: for ratings of right, $F(2, 489) = 6.02$, $p < .01$; partial $\eta^2 = .024$, and for ratings of wrong, $F(2, 489) = 5.78$, $p < .01$; partial $\eta^2 = .023$.

To evaluate these effects, simple effects testing was conducted to determine which mean comparisons among belief groups were significant. Contrary to what was expected in Hypothesis 3, atheists gave significantly higher ratings of right ($M = 2.89$, $SD = 1.60$, 95% CI [2.71, 3.05], $p < .01$; $d = .37$) than theists ($M = 2.26$, $SD = 1.71$) for sacrificing one person to save a group of people. Correspondingly, for ratings of wrong, theists were significantly higher ($M = 3.23$, $SD = 1.47$) than atheists ($M = 2.69$, $SD = 1.51$, 95% CI [2.54, 2.85], $p < .01$; $d = .47$). Deists did not significantly differ from atheists or theists for ratings of both right and wrong ($p > .05$).

Figure 4 shows that each non-theistic belief category, atheists and deists, gave virtually equal ratings of right and wrong, indicating maximum moral ambivalence on the question of killing of one person to save the lives of a larger number of people. In contrast, theists showed much less ambivalence, giving higher ratings of wrong than right. The expectation from Hypothesis 3 (Figure 2) was that theists would be most ambivalent because they would place equal weight on all foundations, whereas atheists and deists would show little ambivalence in judging this action as more wrong than right.

To evaluate within-group differences, for each participant an average score was calculated for ratings of right and separately for ratings of wrong, and the significance of the difference within each group was calculated using a paired-t test with a Bonferroni correction applied to the significance level (.05/3). Only theists scored significantly higher on ratings of wrong than right ($M = 3.23$, $SD = .1.47$ vs. $M = 2.26$, $SD = 1.71$, mean difference of -.97, 95% CI [-1.55, -.39], $t(98) = -3.31$, p < .01; $d = .33$. Atheists and

deists did not significantly differ in their ratings of right and their ratings of wrong

($p > .05$).

CHAPTER 4

DISCUSSION

Patterns of Moral Values

One of the main purposes of this study was to determine the accuracy of the

public perception of atheists as immoral. Although morality can be difficult to define, the

Moral Foundations framework provided a useful guide for comparisons among groups

that differed in their theological perspectives. Contrary to the widely-held stereotypes,

atheists showed basically the same overall pattern of moral values on the MFQ as did

theists, giving significantly higher priority to the individualizing foundations related to

harm and fairness than to the binding foundations related to in-group loyalty, respect for

to authority, and spiritual purity (Figure 3). Differences in moral values occurred within

this broader context of concurrence, with atheists exhibiting somewhat greater emphasis

on fairness, and somewhat less emphasis on in-group loyalty, respect for authority and

spiritual purity, in comparison to theists. These themes will now be elaborated upon in

relation to Hypotheses 1 and 2.

Hypothesis 1 was partially supported due to lack of significant differences

between groups on the harm/care moral category. This suggests that the public perception

of atheists as immoral may be inaccurate as defined by the harm/care moral category

given the fact atheists did not significantly differ from deists or theists on issues related to

harming others. Although recent studies have found that individuals perceive criminal

behavior or behavior that violates moral standards, including violent behavior such as rape, as more likely to be representative of atheists than other groups (Gervais et al., 2011; Gervais, 2014), the present study did not find significant differences between atheists and believers on issues of harm/care. Unexpectedly, there were significant differences between groups on the fairness/reciprocity moral category, with atheists scoring significantly higher than theists, while atheists and deists did not significantly differ. It was predicted that all groups would score roughly the same on the individualizing categories, but this was only true for the harm/care moral category.

Similarl to Hypothesis 1, Hypothesis 2 was also partially supported. As predicted, theists scored significantly higher than atheists on issues of in-group/loyalty. However, deists did not significantly differ from theists, which was not predicted. Further, theists scored significantly higher than atheists on authority/respect, as predicted. Although theists and deists did not differ on their moral priorities related to authority/respect, deists scored significantly higher than atheists, which was an unexpected result. It was predicted that deists and atheists would be more similar in their ratings when compared to theists. However, deists and theists were indistinguishable in their ratings on authority/respect. Finally, the most consistent significant differences between groups was found in ratings on purity/sanctity, with all groups significantly differing from each other. Consistent with what was expected in Hypothesis 2, theists scored significantly higher than both atheists and deists. Unexpectedly, deists scored significantly higher than atheists on purity/sanctity as well.

As predicted, atheists and deists gave less priority to the binding foundations than did theists. However, theists also prioritized the individualizing foundations over the

binding foundations, scoring significantly higher on harm/care and fairness/reciprocity combined when compared to the binding foundations combined. It was expected that theists would give equal ratings across all moral categories. Instead, they showed similar moral profiles to that of the atheists and deists in their emphasis on the individualizing foundations over the binding foundations. The three groups presented similar patterns of moral priorities with the main exception being purity/sanctity. This exception reinforces the idea that purity is closely tied to religiosity. The general pattern of values indicates that all three groups prioritized the individualizing foundations over the binding foundations, with atheists giving the least weight to the binding foundations and theists giving the most weight to the binding foundations.

Moral Scenarios: How Well Does the MFQ Predict Moral Judgment?

The MFQ asks participants to anticipate what moral values they would prioritize when making moral judgments but it does not explicitly ask for judgments to assess the predictive value of its measurements. The present study is the first to investigate how well measurements of moral priorities on the MFQ translate into moral judgment on standard scenarios that are already in the literature (Koenigs et al., 2007), with emphasis on a dilemma where killing one person saves the lives of several others, and not designed specifically to test violations of the moral foundations (*cf.* Clifford, Iyengar, Cabezza, & Sinnott-Armstrong, 2015) or to focus on milder, everyday moral violations (Piazza & Landy, 2013, p. 648). The moral scenarios in the present study differed from the moral scenarios in Clifford et al. (2015) in that the former used bivariate measurement (ratings of both right and wrong) with multi-sentence scenarios, one of which involved choice between opposing moral principles. Clifford et al. (2015) utilized single-sentence

scenarios, each targeted on a single moral principle, and allowed only for ratings of wrong, which precluded assessment of moral ambivalence.

For the simple scenarios in which an individual was harmed for purely selfish reasons (Hired Rapist, Smothering for Dollars), the MFQ was highly predictive. The three belief groups gave equally high ratings in the harm/care foundation and they also gave equally high ratings of wrong, and equally low ratings of right, for harming the individual. However, in the Lifeboat scenario where an individual would be killed to save a group of people (including the actor), the MFQ was not predictive. Despite showing similar moral profiles, atheists rated the action as significantly more-right and significantly less-wrong than did theists.

In evaluating differences within each group on the complex moral scenario, the present study found that atheists and deists gave equal ratings for wrong and right, indicating that they were maximally ambivalent about whether to kill one person to save a group of people. Theists were not ambivalent in their ratings of right and wrong. Rather than applying binding values, they rated this action as much more wrong than right. This suggests that theists are more decisive in their moral judgment on whether it is wrong to kill one person to save the group (which includes themselves), while atheists and deists are morally ambivalent. The significant differences among groups on the purity/sanctity subscale provide a unique connection to moral judgments that involve a choice between deontological principles and utilitarian principles. In using various moral scenarios that emphasize a conflict between rule-based ethics (deontological principles) and actions that maximize well-being (utilitarian principles), these results suggest that similar outcomes could be predicted.

Piazza and Landy (2013) found a relationship between emphasis on the three binding foundations and the preference for deontological principles, with increased emphasis on the three binding foundations resulting in greater endorsement of deontological principles. The present study found that theists rated all three binding foundations as more relevant to their moral concerns as compared to the atheists. This is consistent with the higher ratings of wrong than right on the complex scenario from the theists, in which it appears that they were emphasizing a deontological principle of not killing over their concern for the group. Although binding foundations promote deontological principles according to the aforementioned research, it is possible that deontological rules against killing would be prioritized less if the group in the complex scenario were the actor's children, or a similarly close in-group, as opposed to strangers. Specifically, it is possible that situational details of a scenario can interact with moral dispositions in the five foundations and may create a conflict between them, for example, between in-group loyalty (favoring the utilitarian choice) and purity/sanctity (favoring the deontological choice).

Sampling Issues

The study was conducted online and distributed to notable figures in secular communities to maximize the number of atheist participants. The study succeeded in achieving this objective, with atheists far out-numbering the theists and deists. The sample size for deists was small with n less than 40 in each of the separate analyses. Only limited conclusions can be drawn from the sample of deists due to a decrease in statistical power and increased standard error based on the small sample size.

While the study succeeded in recruiting a large number of atheist participants, the approach taken to achieve this objective resulted in the sample being mostly liberal in political orientation. The unexpected finding that theists had lower scores on the binding foundations than on the individualizing foundations could be related to this highly liberal sample. The sample was less than 6% conservative (including very conservative, conservative, and moderately conservative). Out of the 100 theists in the sample, 21 identified as some form of conservative and 54 identified as some form of liberal. Out of the 32 deists in the sample, zero identified as some form of conservative, while 32 identified as some form of liberal. It is possible that the assumption made for the hypotheses that most atheists identify as liberal and most believers in God identify as conservative was incorrect. In fact, it appears as though many of the believers in God in the sample identified as some form of liberal rather than conservative. If more theists with conservative leanings had been recruited, it is possible that the binding foundations ratings may have been higher, as predicted.

Atheists are Not a Homogeneous Group

Although atheists are referred to as though they are a homogeneous group throughout this paper, Page and Navarick (2017, in press) evaluated responses to the open-ended text response question following the self-selected religious affiliation question that suggested an alternative view. Following the selection of "None-Atheist," respondents were directed to an open-ended text response question that asked, "Since you selected atheist, would you please elaborate on why 'atheist' is a more appropriate characterization of your beliefs than 'agnostic'? How do you differentiate between the two terms?"

A total of 219 responses were collected and coded based on criteria developed by the authors. These criteria resulted in four distinct categories: gnostic-atheism, agnostic-atheism, ambivalent atheism, and other. Gnostic-atheism was defined as, "any explicit or implied characterization of the participant's position as certain or definite." Agnostic-atheism was defined as, "any effort made to distinguish between a "belief" and a "knowledge" position; or participants who indicate that are open to evidence, or "proof." These two orientations were similar in their likeness to religious faith. Specifically, believers in God can also be dogmatic or skeptical in their approach to belief characterization. This led to the creation of a 5-level bipolar scale, with nonbelief in the center. While results showed that individuals who self-identified as atheists were most likely to be characterized as dogmatic (gnostic-atheists), most atheists in the sample (as defined by belief profile questions) were skeptical.

This distinction between dogmatic and skeptical atheists has important implications for understanding the stigma associated with atheism. In public opinion polls, it is possible that individuals are reminded of dogmatic atheists when they hear or see the word "atheist." However, Gervais (2014) found that, despite the removal of the word "atheist" and replacement with "person who does not believe in God," stigma remained. Gervais' description could have implied a dogmatic rejection of God, so the possibility remains that individuals could vary in their responses to different types of atheist descriptions (i.e., dogmatic vs. skeptical). For example, participants could have a less negative view of a "person who neither believes nor disbelieves in God" than a "person who does not believe in God."

Future Directions

The present study represents the beginning phase of investigation into the actual moral values of atheists, which should have important implications for research on the public perception of atheists as immoral and untrustworthy. The present study showed that the public's stereotype of atheists is unfounded: atheists had similar moral profiles to those of theists and deists. Further, in ratings on simple moral scenarios involving harmful acts toward an individual, atheists rated the harmful acts equally as wrong when compared to deists and theists. Rather than supporting the act in the Hired Rapist scenario, atheists felt this action was wrong. This result directly counters the perception of atheists as having some similarity to rapists (Gervais et al., 2011).

In future studies utilizing Moral Foundations, it would be useful to determine the generality of the current findings across political affiliations. The present sample consisted mostly of self-identified liberals. It would be important for future studies to determine whether or not self-identified conservatives who were also theists would show similar moral profiles to liberal theists across the five foundations. Additionally, research on moral judgment using fictitious scenarios could utilize the belief-in-God questionnaire introduced here to evaluate variations in moral judgments in the three belief categories when situational details of the scenarios are changed. For example, in the Lifeboat scenario, a judgment was made on a harmful action related to throwing one passenger overboard to save everyone else in the boat. However, if the passenger accidentally fell overboard and the issue became a decision on whether or not to let the individual drown to save everyone else in the boat, this situational detail could change the moral judgment.

Specifically, it is possible that harmful action or harmful inaction could interact with the belief variable.

Further, public opinion polls could also make use of the study by Page and Navarick (2017) on open-ended text responses of self-identified atheists who were asked to differentiate between the terms atheist and agnostic. The study indicated that atheists are not a homogeneous group and that three categories of belief could be empirically distinguished. In research on anti-atheist prejudice, atheists are often evaluated as a homogeneous group. It would be useful for future studies to compare levels of stigma produced by various descriptions of an atheist, based on the atheist belief categories, particularly as it relates to dogmatic orientations within atheist identification. For example, researchers could measure the variation in stigma attached to someone described as "neither believing nor disbelieving in God; they're on the fence" when compared to someone described as "certain there is no God and will not consider the possibility that God exists." There appears to be meaningful variation in the population of individuals who identify as atheist that has yet to be explored, particularly as it relates to stigma and anti-atheist prejudice.

Conclusions

The results of the present study showed atheists, deists, and theists had similar moral profiles as assessed by the MFQ. All groups scored significantly higher on the individualizing foundations than the binding foundations, indicating that atheists, deists, and theists all prioritized issues related to harm/care and fairness/reciprocity over issues related to authority/respect, in-group/loyalty, and purity/sanctity. Although atheists are largely perceived as untrustworthy and immoral by the general public, their moral

profiles as compared with deists and theists do not support this view within the Moral Foundations framework. However, the moral profiles were not identical across the belief groups: atheists gave significantly higher priority to fairness, and significantly less priority to in-group/loyalty, authority/respect, and purity/sanctity, when compared to theists.

The greatest disparity in moral priorities was illustrated in the purity/sanctity moral category, with atheists, deists, and theists significantly differing from each other. For this moral category, theists scored higher than deists, and deists scored higher than atheists, reinforcing the idea that purity/sanctity is largely tied to religion. These differences provided an interesting connection to the moral judgments found within the moral scenarios. While the MFQ was predictive in moral judgments in the simple scenarios, the MFQ failed to predict moral judgment for the complex moral scenario where one person would be killed to save the group. Atheists and deists presented maximum moral ambivalence, with equal ratings of wrong and right. However, theists scored much higher in their ratings of wrong than ratings of right. This suggests that moral judgment likely requires attention to both situational and dispositional factors. The strength of prioritization for one moral category may depend on other factors. In reading a description of a statement, an individual may rate the statement as more or less relevant to the moral considerations, while a moral scenario involving a related issue may prompt an individual to emphasize a higher priority disposition, prompting a different reaction altogether. For theists, this activation of emphasis on values related to purity/sanctity may be particularly relevant and may have contributed to higher ratings of wrongness in the complex scenario.

APPENDIX A

MORAL FOUNDATIONS QUESTIONNAIRE

SECTION 1
When you decide whether something is right or wrong, to what extent are the following considerations relevant to your thinking? Please answer on a scale from:
Not At All Relevant (This consideration has nothing to do with my judgments of right and wrong) to
Extremely Relevant (This is one of the most important factors when I judge right and wrong)

The complete scale is:
Not At All Relevant, Not Very Relevant, Slightly Relevant, Somewhat Relevant, Very Relevant, Extremely Relevant

Part 1. When you decide whether something is right or wrong, to what extent are the following considerations relevant to your thinking? Please rate each statement using this scale:

1) Whether or not someone suffered emotionally
2) Whether or not some people were treated differently than others
3) Whether or not someone's action showed love for his or her country
4) Whether or not someone showed a lack of respect for authority
5) Whether or not someone violated standards of purity and decency
6) Whether or not someone was good at math
7) Whether or not someone cared for someone weak or vulnerable
8) Whether or not someone acted unfairly
9) Whether or not someone did something to betray his or her group
10) Whether or not someone conformed to the traditions of society
11) Whether or not someone did something disgusting
12) Whether or not someone was cruel
13) Whether or not someone was denied his or her rights
14) Whether or not someone showed a lack of loyalty
15) Whether or not an action caused chaos or disorder
16) Whether or not someone acted in a way that God would approve of

SECTION 2
Please read the following sentences and indicate your level of agreement or disagreement.

The complete scale is:

Strongly Disagree, Moderately Disagree, Slightly Disagree, Slightly Agree, Moderately Agree, Strongly Agree

1) Compassion for those who are suffering is the most crucial virtue.
2) When the government makes laws, the number one principle should be ensuring that everyone is treated fairly.
3) I am proud of my country's history.
4) Respect for authority is something all children need to learn.
5) People should not do things that are disgusting, even if no one is harmed.
6) It is better to do good than to do bad.
7) One of the worst things a person could do is hurt a defenseless animal.
8) Justice is the most important requirement for a society.
9) People should be loyal to their family members, even when they have done something wrong.
10) Men and women each have different roles to play in society.
11) I would call some acts wrong on the grounds that they are unnatural.
12) It can never be right to kill a human being.
13) I think it's morally wrong that rich children inherit a lot of money while poor children inherit nothing.
14) It is more important to be a team player than to express oneself.
15) If I were a soldier and disagreed with my commanding officer's orders, I would obey anyway because that is my duty.
16) Chastity is an important and valuable virtue.

APPENDIX B

MORAL SCENARIOS

Hired Rapist
You have been dissatisfied with your marriage for several years. It is your distinct
impression that your wife no longer appreciates you. You remember how she appreciated
you years ago when you took care of her after she was mugged. You devise the
following plan to regain your wife's affection.

You will hire a man to break into your house while you are away. This man will tie up
your wife and rape her. You, upon hearing the horrible news, will return swiftly to her
side, to take care of her and comfort her, and she will once again appreciate you.
Would you hire a man to rape your wife so that she will appreciate you as you comfort

In each box, below, please enter a number that represents how you feel about this
situation. You can enter different numbers in the two boxes or the same number in both
boxes (5 = the strongest feeling).

How MORALLY RIGHT do you feel it would be to have your wife raped so she will
appreciate you more after you take care of
her? (from 0 to 5)?

How MORALLY WRONG do you feel it would be to have your wife raped so she will
appreciate you more after you take care of
her? (from 0 to 5)?

Smothering For Dollars

You are in hospital lounge waiting to visit a sick friend. A young man sitting next to you
explains that his father is very ill. The doctors believe that he has a week to live at most.
He explains further that his father has a substantial life insurance policy that expires at
midnight.

If his father dies before midnight, this young man will receive a very large sum of
money. He says that the money would mean a great deal to him and that no good will
come from his father's living a few more days. He offers you half a million dollars to go
up to his father's room and smother his father with a pillow.

In each box, below, please enter a number that represents how you feel about this

situation. You can enter different numbers in the two boxes or the same number in both boxes (5 = the strongest feeling).

How MORALLY RIGHT do you feel it would be to kill this man's father in order to get money for yourself and this young man? (from 0 to 5)?

How MORALLY WRONG do you feel it would be to kill this man's father in order to get money for yourself and this young man? (from 0 to 5)?

Life Boat

You are on a cruise ship when there is a fire on board, and the ship has to be abandoned. The lifeboats are carrying many more people than they were designed to carry. The lifeboat you're in is sitting dangerously low in the water—a few inches lower and it will sink.

The seas start to get rough, and the boat begins to fill with water. If nothing is done it will sink before the rescue boats arrive and everyone on board will die. However, there is an injured person who will not survive in any case. If you throw that person overboard the boat will stay afloat and the remaining passengers will be saved.

In each box, below, please enter a number that represents how you feel about this situation. You can enter different numbers in the two boxes or the same number in both boxes (5 = the strongest feeling).

How MORALLY RIGHT do you feel it would be to throw the fatally injured person overboard to save everyone else in the
boat (from 0 to 5)?

How MORALLY WRONG do you feel it would be to throw the fatally injured person overboard to save everyone else in the
boat (from 0 to 5)?

APPENDIX C

BELIEF PROFILE QUESTIONS AND DEMOGRAPHICS

Participants were provided with the following instructions: Feel free to leave any of these personal questions unanswered.

Do you believe in God/god(s)? Y/N/I Don't Know	Belief Profile Questions:	Please indicate your religious affiliation, if any:
	1) Do you believe in a God that monitors your behavior? Y/N	Buddhist
	2) Do you believe in a God that intervenes in human affairs? Y/N	Christian -- Catholic
	3) Do you believe in the trinity, the Father, the Son, and the Holy Ghost? Y/N	Christian -- Other
	4) Do you believe in a God that requires worship, punishes sinners, or answer prayers? Y/N	Christian -- Protestant
	5) Do you believe in a God that created the universe and interacts with it (alters plans for universe/interferes with human affairs)? Y/N	Hindu
	6) *Do you believe in a God that created the universe, but refrains from interacting with it? Y/N (Deist)*	Jehovah's Witness
		Jewish
		Mormon
		Muslim
		None -- Agnostic
		None -- Atheist
		Other (Fill In The Blank)
		Seventh Day Adventist
		If Atheist:
		Please elaborate on what your lack of belief in God means.

Gender	Ethnic Background
Female Male Trans: F to M Trans: M to F	Latino/a European American Native/indigenous peoples African American Asian American Middle-Eastern American Multi-ethnic Other
What is your age?	**Political Orientation** Overall, including both social and economic issues (Scale 1-7; cons. - liberal)

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