

PERSONAL ACCOUNTS FOR
RELIGIOUS PREJUDICE IN
CHRISTIANS

by

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A DISSERTATION

Submitted in partial fulfillment of the requirements
for the degree of Doctor of Philosophy
in the Department of Psychology
in the Graduate School of
The University of Alabama

TUSCALOOSA, ALBAMA

2018

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ABSTRACT

Despite the long history of research on prejudice, investigation into religious prejudice, defined as the derogation of individuals from religions other than one's own, is limited. Grounded in the justification-suppression model of prejudice, the present study attempted to identify personal justifications (i.e., rationales facilitating the experience and/or expression of prejudice) underlying religious prejudice and examine their ability to predict expressions of prejudice. The aim of Study 1 was to describe the domain of such accounts, by asking participants, specifically Mechanical Turk workers and college students, to provide personal accounts explaining their own level of self-reported religious prejudice. Analyzed through thematic analyses, these accounts revealed five themes: 1) *I lack information about this religion*, 2) *I have a problem with their beliefs*, 3) *I have interpersonal concerns*, 4) *They provoke unpleasant emotions*, and 5) *They are terrible people*. In Study 2, exemplars from each of the themes were provided as statements to participants, who rated their agreement on a rating scale before completing a measure of religious prejudice/bias. The ratings of the exemplars were entered into an exploratory factor analysis, which resulted in three factors: 1) Negative Evaluation, 2) Belief Differences, 3) Personal Ignorance. Although all three factors were predictive of religious prejudice when examined via bivariate correlations, only Negative Evaluation and Belief Differences were significant when examined via multiple regression, with Belief Differences outperforming Negative Evaluation. Such a result provides support for one component of the justification-suppression model of prejudice and poses implications for social efforts directed towards reducing prejudice.

DEDICATION

This dissertation is dedicated to those who provided support. I want to thank my parents, Cindy and Scott Gemberling, for their encouragement throughout my time in graduate school, from the beginning to end, application to graduation. Without their care and advice, I am certain I would not have accomplished this goal. You have always accepted who I am, as a full person, even when I did not know who that was or when others would not do so. You would make Carl Rogers proud with your ability to provide unconditional positive regard. I also want to thank the friends I have made through the years, whose empathy has provided the validation I needed to push through obstacles. Lastly, I want to thank those who have forced me to examine my own biases. The confrontation of our prejudices is a necessary, although unpleasant, experience to improve as individuals and as a society. Because we all hold biases, no matter our ingroups or outgroups, I hope this work helps others to do the same. Prejudice can be eliminated, but only when we are humble enough to be honest with ourselves. We are all part of the problem; we are all part of the solution.

LIST OF ABBREVIATIONS AND SYMBOLS

α	Cronbach's alpha, index of internal consistency
b	regression coefficient, gradient of straight line
β	standardized regression coefficient, gradient of straight line
F	F -ratio, comparison of systematic to unsystematic variance (multivariate)
KMO	Kaiser-Meyer-Olkin, measure of sampling adequacy
λ	lambda, product of unexplained variance on each of variates (Wilks' λ)
MTurk	Amazon's Mechanical Turk
N	overall sample size
n	subgroup sample size
p	probability-value, probability for a test statistic being the same or greater than the provided value when the null hypothesis is true
PY101	psychology 101 subject pool
r	Pearson's correlation coefficient, measure of a relationship between two variables
R^2	Amount of variance in outcome explained by predictors
$SE\ b$	standard error of b
SD	standard deviation
t	t -test, comparison of systematic to unsystematic variance (univariate)
χ^2	chi-squared value (Bartlett's Test of Sphericity)
°	degrees
=	equal to

< less than

% percent

ACKNOWLEDGMENTS

I would like to acknowledge the individuals who provided guidance on this project, although such acknowledgements fall short of the gratitude I feel. Foremost, I want to thank my advisor, Debra McCallum, for her expertise and willingness to adopt me as a mentee. Thank you for not hesitating to provide your support and supervision of this project. Also, I want to thank my committee mentors, Joan Barth, Will Hart, Ed Merrill, and Alexa Tullett, who held me to a high standard of researcher quality, ensuring this project would result in interesting and relevant results. To acknowledge all her efforts in making this project come to fruition, I want to thank the research assistant for the hours she contributed to ensure the reliability of the Study 1 analysis. I also want to thank all other individuals who have acted as mentors over my years in graduate school; there have been many who deserve acknowledgement. I have learned so much through my experiences in research, classes, and teaching. I have grown significantly within my knowledge and skills in the field of psychology, but, even more, I have grown as a person. I thank you all for all the support, advice, and encouragement. I hope to do the same for my students in the future.

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INTRODUCTION

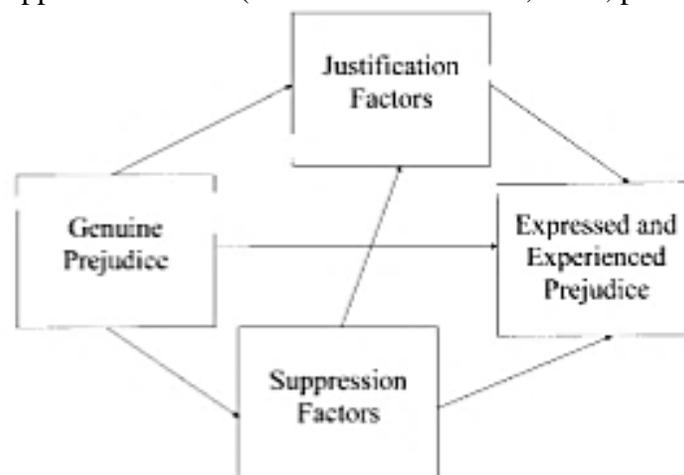
Religious prejudice, defined as prejudice towards those of religions other than one's own, is common. Private and public demonstrations of religious prejudice abound, either forthright or veiled (FBI, 2016; Pew Research Center, 2014). Indeed, certain religious identifications (e.g., Atheists) have the unenviable status of being some of the least accepted groups in America (Edgell, Gerteis, & Hartmann, 2006). This social derision has negative consequences. Given its moderate correlation with sexism, racism, classism, ageism, and homophobia (suggesting a universal mechanism; Aosved & Long, 2006; Zink, Wolf, Küpper, Davidov, & Schmidt, 2008), being the target of religious prejudice is likely subject to the same consequences traditionally associated with being the target of other expressions of prejudice, such as limited social opportunities (e.g., Riach & Rich, 2004) as well as poor physical and psychological health (e.g., Williams, 1999; Williams & Williams-Morris, 2000). Yet, despite the lengthy history of investigation into many forms of prejudice, relatively little is known about religious prejudice.

The Justification-Suppression Model of Prejudice

Although many theories could explicate the expression of religious prejudice, the justification-suppression model may be especially suited (Crandall & Eshleman, 2003). According to the model, internal experiences and external expressions of prejudice are subject to the dual processes of suppression (i.e., factors that decrease experience/expression) and justification (i.e., factors that increase experience/expression). The model (see Figure 1) describes a sequential course, with four interlocking steps: 1) Genuine prejudice, learned from family practices, group contact, and social categorization, serves as motivational force,

characterized by negative affect. 2)Suppressions, enforced by social norms, empathy, and personal values, act as a cognitive or affective minimizer of prejudice, consuming mental resources. 3)Justifications, excused through attributions, ambiguity, and stereotypes, function as a cognitive release of prejudice, freeing mental resources. 4) By combining the three previous factors in order, experienced or expressed prejudice is the sum of genuine prejudice subtracting the effect of suppressions and adding the effect of justifications. Unlike other theories, the model proposes these processes work the same for the internal experience of prejudicial feelings and the external expression of prejudicial behavior – how we protect against viewing ourselves as prejudiced and how we protect against others viewing us as prejudiced are broadly equivalent processes.

Figure 1. The four interlocking steps of the justification-suppression model (Crandall & Eshleman, 2003, p. 417).



Justifications for Prejudice

According to the justification-suppression model, prejudice is only observable to oneself and others when sufficient justifications are present. Otherwise, individuals are vulnerable to personal and social sanction, which minimize its experience or expression. Indeed, being

prejudiced, at least overtly, is largely unbecoming when viewed within the egalitarian norms of the United States. Although voicing prejudice is not as inflammatory as often assumed (Kawakami, Dunn, Karmali, & Dovidio, 2009), those labeled as prejudiced are, typically, strongly condemned (Crandall, Eshleman, & O'Brien, 2002), prompting a desire to avoid such a classification (Sommers & Norton, 2006; Winslow, 2004). When these humanitarian values have been internalized, violating them by engaging in, or even witnessing, prejudice may lead to feelings of guilt, agitation, and a host of other negative emotions (Fazio & Hilden, 2001; Monteith, Devine, & Zuwerink, 1993; Schmader, Croft, Scarnier, Lickel, & Mendes, 2012).

In the justification-suppression model, Crandall & Eshleman (2003) present six categories of justifications: 1) naturalistic fallacy (i.e., “what is, is good”) and the preservation of the status quo (e.g., belief in a just world), 2) celebration of social hierarchy (e.g., social Darwinism: prejudice towards minority groups serves to promote cultural evolution and, accordingly, improve the human species), 3) attributions and responsibility (e.g., victim blaming), 4) covering (e.g., using situation ambiguity to conceal discrimination by asserting a different reason is the cause of the decision), 5) beliefs, values, religion, and stereotypes, and 6) intergroup processes (e.g., intergroup conflict). As would be expected, all six types of justifications reflect various empirical theories (e.g., situational ambiguity) or empirical interpretation of perceived lay theories (e.g., victim blaming).

Empirical cataloging of lay justifications of prejudice is limited. No located literature investigated lay justifications for one’s own prejudice in any form, let alone religious prejudice. There is, however, minimal work on lay accounts¹ for others’ ethnic prejudice. When asked in a

¹ In this case, the term “account” is used to apply to any explanation provided by participants that describes the origin of prejudice. The term “justification” refers to one subtype of explanations that participants use in attempt to describe, but also legitimize, the origin of prejudice, in line with the justification-suppression model. Acknowledging that the term “justification” may be imprecise or misleading in the context of the present study (e.g.,

free-response format, undergraduates most frequently attribute ethnic prejudice to ignorance, close-mindedness, and parental influence (Hodson & Esses, 2005). When participants rated a list of potential causes, three explanatory factors emerged – ignorance (e.g., fear of unknown, limited group contact), intergroup processes (e.g., group competition, negative experiences), and human society (e.g., culture, worldviews; Hodson & Esses, 2005). Further, undergraduates endorsed medium-low levels of inevitability and justifiability for ethnic prejudice (i.e., a 3.0 and 2.6, respectively, on a 1 [not at all] – 7 [very much so] scale; Esses & Hodson, 2006). Nevertheless, despite the possible commonality, it cannot be assumed that these explanations for others’ ethnic prejudice transfer to justifications for one’s own religious prejudice, as explanations applied to oneself (as opposed to others) and explanations applied to religious prejudice (as opposed to ethnic prejudice) could be vastly different. Instead, insight for this circumstance may be better extrapolated from the vast literature on attribution, where explanations of causality flavored with a self-serving bias have been observed in a wide variety of circumstances across a wide variety of people (Mezulis, Abramson, Hyde, & Hankin, 2004).

Attribution. Attributions protect the self-esteem of individuals and groups in numerous situations. They sustain the morality of favoring oneself in task assignment by disregarding the fairness of using random chance for the determination (Batson, Thompson, Seufferling, Whitney, & Strongman, 1999). They inoculate stigmatized groups by deflecting negative feedback to the bigotry of others (Crocker & Major, 1989). They can even attempt to excuse or justify the perpetration of rape: Although an extreme example, positive attributions have been thoroughly documented in the literature on the cognitive distortions of rapists, named so because, from an outside perspective, offenders’ explanations for their behavior are wildly illegitimate (Milner &

not differentiating between justifications and excuses), the term “account” will be used when discussing any explanation provided by participants. However, the term “justification” will be used only when referring specifically to concepts within the justification-suppression model.

Webster, 2005; Polaschek, & Gannon, 2004; Scully & Marolla, 1984). Because the same mechanism exists for other wrongdoings, both criminal offenses and norm violations, even the cognitive distortions of rapists may reflect a ubiquitous process – the tendency to offer an attribution that maintains a positive sense of self (Maruna & Mann, 2006).

As a potential example of a lay account, one that would protect a positive sense of self when explaining personal expressions of religious prejudice, rationales may reflect a constellation of specific religious beliefs. Followers often consider their own religion to be the only one to reveal the truth of the universe (Jacobs, 2004). By extension, all other religions may be discounted as false. This belief, in itself, can be grounds for prejudice (Jacobs, 2004). However, often coupled with this exclusivism is an assortment of negative consequences (e.g., painful afterlife, diminished happiness) for those who do not meet certain requirements (e.g., endorsing certain ideas, engaging in certain practices). Therefore, through a desire to save the unaffiliated (or save the world from the unaffiliated), compassion may be evoked as a protective shroud to justify religious prejudice. Moreover, individuals utilizing a compassion account are permitted to consider themselves loving, instead of hateful.

However, there is additional reason to doubt the causal nature of attributions one uses to explain his or her own prejudice. In other words, people may be inaccurate in their accounts. They may believe the reasons they identify in their accounts to be causal in nature (e.g., believing that compassion underlies their prejudice); but, in reality, such reasons may lack causal function (e.g., compassion does not underlie their prejudice). Instead, people may be entirely unaware of the causes of their prejudice, but, nonetheless, provide an account that they may believe to be true (but is actually false). Similarly, the accuracy of other cognitive processes have

been questioned in separate realms of literature applicable to the study of prejudice, such as in moral psychology.

Morality. Although separate sets of literature, prejudice and morality have apparent ties. Each includes both a cognitive and affective component. And both are fundamentally connected in common discourse (e.g., gay individuals are often the target of prejudice because their sexual orientations are considered “immoral”; Herek, 1984). The psychology of morality may provide an adapted framework for understanding prejudice, specifically in reference to lay accounts.

After the calming of the psychodynamic and behavioral movements in the 1950s, which minimized or dismissed the impact of conscious thought in all human functioning, cognitive explanations for human behavior surged, inclusive of the rationalist models of morality. While acknowledging the variation among the theories, rationalist models generally assert that moral judgments are determined by moral reasoning. Moral reasoning takes many forms, such as developmental stages that increase in cognitive complexity (e.g., for children, morality equates to avoiding punishment, but adhering to social norms is central for adolescents; Kohlberg, 1963) or differentiation based on predicted consequences (e.g., morality applies to actions that harm individuals; Turiel, Hildebrandt, & Wainryb, 1991). However, the overarching theme of rationalist models remains consistent: Moral reasoning leads to moral judgments.

Yet, not all moral theorists agree. While acknowledging that moral reasons are cognitively available, the social intuitionist model rejects the causal mechanism of moral reasoning (Haidt, 2001). To support its skepticism, the social intuitionist model points to the stability of moral judgements when moral reasoning has been undermined. For example, people continue to deem consensual, protected, enjoyable sex between two siblings as immoral even when their rationales for their judgment have been dismissed (e.g., citing the dangers of

inbreeding is not applicable as the siblings used protection; Haidt, Bjorklund, & Murphy, 2000). Accordingly, moral decisions continue even without moral reasoning, indicating it may not be necessary, or even sufficient, to reach a moral judgment.

Instead of the algorithmic reasoning of rationalist models, the social intuitionist model proposes moral decisions are grounded in a heuristic intuition. Morality is not decided upon through a conscious, effortful, controllable, slow system of reasoning, but instead through an unconscious, effortless, automatic, quick system of intuition. Indeed, when exposed to stories involving acts that lack any obvious harm (e.g., eating a dead pet), individual reactions about whether an act would be bothersome to observe (i.e., an intuition) outperform thoughts about the possible consequences of such actions (i.e., a reason) in their predictive power (Haidt, Koller, & Dias, 1993).

Yet, again, the social intuitionist model does not question the existence of moral reasoning, but instead suggests intuition serves as a cause and reasoning exists as an effect. In the social intuitionist model, for most people most of the time, reasoning is used as post-hoc support for a decision that has already been made via intuition. Accordingly, the pathway of moral judgments is rearranged. The rationalist model places reasoning before moral judgement (Figure 2a); yet, the social intuitionist model moves it after moral judgement (Figure 2b).

Figure 2a. The rationalist model of moral judgment (Haidt, 2001).

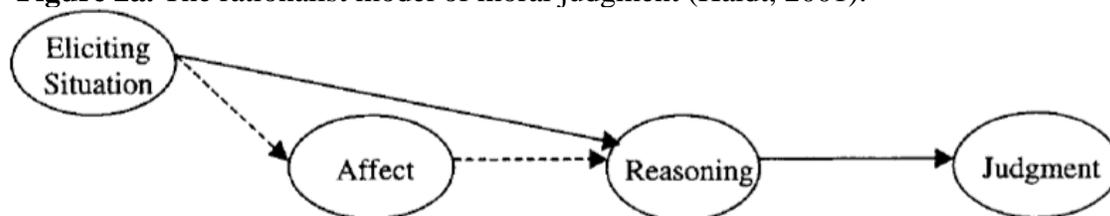
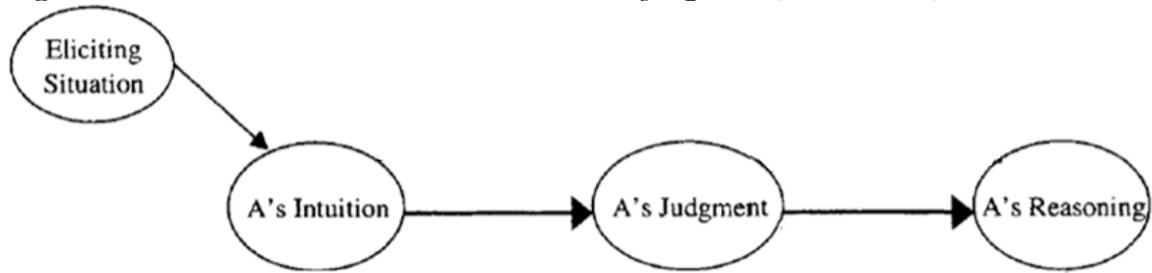


Figure 2b. The social intuitionist model of moral judgment (Haidt, 2001).



If applied to the research on prejudice, the existence of an intuitive system and a reasoning system further destabilizes the potential legitimacy of attributions produced by individuals to explain themselves when faced with accusations of prejudice. In this circumstance, personal accounts produced by the individual may only exist as post-hoc reasoning, devoid of causal insight, used to maintain a positive sense of self.

However, such a concern does not necessarily apply to all accounts, as defined by the justification-suppression model, only those produced by individuals reasoning in their own defense. Accounts that operate intuitively, unable or unwilling to be used as a release of prejudice in a manner known to the person, may not operate along the same pathway. As interpreted by the justification-suppression model, alternative theories of prejudice may be applicable to such a circumstance.

Alternative Theories of Prejudice

In addition to the justification-suppression model, many theories have been proposed to explain the source or expressions of prejudice. As a few examples, theories have been based in personality (e.g., the right-wing authoritarianism trait characterized by submission to authority, aggression towards outsiders, and adherence to conventionality; Altemeyer, 1981), cognition (e.g., cues triggering an automatic connection with stereotypical thoughts and prejudicial emotions; Devine, 1989), and learning (e.g., engraining prejudice through the observation and

imitation of parents and peers [and the media]; Allport, 1954). Serendipitously, these empirical theories of personality, cognition, and learning correspond loosely with the previously described lay theories for ethnic prejudice of close-mindedness, ignorance, and parental influence (Hodson & Esses, 2005). Within social psychology, theories have centered primarily on group processes and social identity, many sharing the common themes of threat and/or superiority.

Threat. Two intertwined social theories based in threat do particularly well when explaining religious prejudice. First, intergroup threat theory proposes the tribal mentality from prior millennia is still fully engrained in the modern mind (Stephan & Stephan, 2000; Stephan & Renfro, 2002). As the importance of ingroups and outgroups has yet to wane, humans are naturally attuned to threats from outgroups toward their ingroup, as the consequences of intergroup interactions are customarily detrimental, whether it be physical harm, resource loss, or moral invalidation (Stephan, Ybarra, & Morrison, 2009). However, it is the perception of threat, regardless of its accuracy, that carries consequential weight, as nonexistent or misconstrued threats, such as negative stereotypes, can result in a number of negative responses, including prejudice (Haselton & Buss, 2003; Stephan et al., 2009).

Second, terror management theory suggests people have an evolutionarily engrained fear of death, both the physical decay of the body and the psychological decay of meaning (Greenberg, 1986). To placate the terror, people cling to promises of immortality, whether they be literal (e.g., having a soul that transcends this world) or symbolic (e.g., making lasting contributions to society; Greenberg, Landau, Kosloff, & Solomon, 2009). However, such views are not universal. The cultures in which people live dictate their paths to permanence (Greenberg et al., 2009). No matter the specifics, when exposed to differences, whether implicit or explicit, personal beliefs are challenged, spiking defenses, such as prejudice (Greenberg et al., 2009).

The lengthy investigation into these two theories has included application to religious prejudice. Indeed, in one of the first studies of terror management theory, Christian students demonstrated increased disliking of a Jewish student following a death prime (Greenberg et al., 1990). Continued research has expanded these effects to other religions: When exposed to reminders of death, Christians and Muslims increased their belief in their deity (i.e., God or Allah, respectively) and their denial of other deities (i.e., Allah and Buddha, God and Buddha, respectively; Vail, Arndt, & Abdollahi, 2012). Further, Agnostics showed increases in belief for all deities, while no effect was observed for Atheists (Vail et al., 2012).

Outside of theory testing, an underlying mechanism drawn from research on errors in group evaluation provides additional support for a mechanism based in threat. Among other biases, differences in opinion dividing the ingroup and the outgroup are overestimated, turning small discrepancies into large disparities (Robinson, Keltner, Ward, & Ross, 1995). Such an overestimation has been replicated with religious and nonreligious individuals, with each group thinking the other minimizes their prized values (McDiarmid & Tullett, 2016). For example, the religious may believe the nonreligious are devoid of life purpose; the nonreligious may believe the religious are dismissive of scientific evidence (McDiarmid & Tullett, 2016). Given the implications of these judgments (e.g., “lack of life purpose equals worthless lives,” “rejection of scientific evidence equals wasted resources”) coupled with the increased perception of threat from those who are identified as different in values (Rohman, Florack, & Piontkowshi, 2006), unfounded threat may underlie religious prejudice.

Superiority. Entwined with intergroup threat theory and terror management theory, esteem has been implicated as an important prompt or buffer of prejudice, depending on the interpretation and circumstance. In intergroup threat theory, those of high group-esteem are more

perceptive and reactive to threat, increasing the likelihood of prejudice (Crocker & Luhtanen, 1990). Contrarily, in terror management theory, those of high personal self-esteem are less likely to endorse prejudice, as such individuals are more likely to believe they are meeting social standards, achieving immortality (Greenberg & Kosloff, 2008). In theory testing, both of the hypothesized relationships between esteem and prejudice have been upheld (Greenberg et al., 2009; Stephan et al., 2009).

Outside of these theories, group superiority, an inflated form of high group-esteem, has been implicated as a source of prejudice in a variety of related literatures (e.g., social Darwinism, social dominance orientation, prosperity theology, Protestant work ethic; Crandall & Eshleman, 2003). Within each theory, privileged groups are identified as evolutionarily-superior (i.e., social Darwinism), divinely-favored (i.e., prosperity theology), or hard-working and self-disciplined (i.e., Protestant work ethic), whereas stigmatized groups are judged as the direct opposite of, or at least lacking in, these positive qualities (Cantril & Sherif, 1938; Hadden & Shupe, 1987; Hawkins, 1997; Kluegel, 1990; Mariano, 1996; Pratto, Sidanius, Stallworth, & Malle, 1994). Despite differences in rationales, all of these theories interpret social hierarchy as inevitable, natural, and/or healthy, sheltering high-status groups and deprecating low-status groups.

In accordance with these theories, group superiority, measured in a smorgasbord of manners, has been associated with prejudice (e.g., Hodson, Hogg, & MacInnis, 2009; Jonason, 2015; Lyons, Kenworthy, & Popan, 2010). Group superiority as a basis for prejudice has even been studied in relation to religious prejudice, with national narcissism associated with anti-Semitism in Poland (Golec de Zavala & Cichocka, 2011).

Moreover, group superiority appears to mirror personal superiority: In addition to being more aggressive overall (Baumeister, Smart, & Boden, 1996; Bushman, Baumeister, Phillips, &

Gilligan, 1999, as cited in Baumeister, Bushman, & Campbell, 2000), narcissists are overwhelmingly reactive to a perceived threat to an inflated self-view (Bushman & Baumeister, 1998). Similarly, the combination of group superiority and threat are particularly conducive to prejudice (Hodson et al., 2009; Jonason, 2015). Therefore, feelings and thoughts of religious superiority may underlie religious prejudice. Considering one's own religion to be better than others, which may be indirectly endorsed by a variety of religions (Jacobs, 2004), can prompt prejudice towards those of other religions. Furthermore, those engaging in religious superiority may regard the existence of other religions as a threat and, therefore, respond with prejudice to minimize any peril.

Social Identity Theory. Another theory that may inform lay accounts of religious prejudice is social identity theory. Social identity theory argues that people not only define themselves in terms of who they are as individuals (e.g., their traits, such as being high in openness), but they also define themselves in regards to the groups to which they belong (e.g., their demographics, such as being Atheist). Because individuals define themselves, in part, by their social categories (e.g., Hindu, African American, psychology major), when they seek to maintain a positive sense of self, they do so on the group level by also ensuring a positive sense of their group. Therefore, their group is considered to be high on socially-desirable characteristics, such as being moral or compassionate (e.g., "Christians are kind"), which corresponds to favoritism of their ingroups when compared to outgroups. Ingroup favoritism is not entirely ensured, however, as it does depend on different personal and interpersonal variables (e.g., the degree to which the individual identifies with the ingroup, the amount of comparison between the ingroup and outgroups). Although prejudice towards outgroups is not ensured (favoritism towards the ingroup does not equate to prejudice towards the outgroup, although it

may result in the same acts of discrimination), it is common, as outgroups are negatively evaluated to bolster the positive evaluation for the ingroup.

Across the three theories identified above (i.e., intergroup threat theory, terror management theory, social identity theory), each is differentiated by the proposed mechanism of prejudice. However, a similarity within all three is present as well, as each was proposed by researchers based on their interpretations of prejudice. Although there is empirical work to support each theory, the perspective of the general population, or lay accounts of prejudice are significantly lacking. Ergo, the present study addresses this dearth in the literature by focusing on the lay perspective, while addressing other limitations of the field as well.

The Present Study

To build on the rich literature on prejudice and contribute to the lack of literature on religious prejudice, the present study used the framework of the justification-suppression model. The present study focused on the description of different lay accounts (which may include justifications along with excuses) and on their ability to predict subsequently the expression of religious prejudice. The research was composed of two segments, Study 1 and Study 2.

Study 1 identified lay accounts for one's own religious prejudice. These accounts were expected to deviate somewhat from lay explanations found in previous research for others' ethnic prejudice (e.g., ignorance, close-mindedness) as explanations applied to oneself, as opposed to others, and explanations applied to religious prejudice, as opposed to ethnic prejudice, could be vastly different. Further, Study 1 also shifted perspective to the lay person instead of focusing on psychological theorists who interpret lay beliefs. Accordingly, Study 1 offered three different aspects of novel exploration: the focus on 1) religious, instead of ethnic or racial,

prejudice, 2) accounts of prejudice in oneself, instead of in others, and 3) lay, instead of academic, accounts.

Based on the justification-suppression model of prejudice and attribution literature, it was expected that lay accounts would be limited to explanations that prevent “external or social sanction” (Crandall & Eshleman, 2003, p. 425). For instance, a compassion account would permit individuals to engage in religious prejudice while viewing themselves as loving, whereas an ignorance or close-mindedness attribution would reflect poorly on the self. It was also expected that accounts would take various forms, as would be suggested by the six types of justifications listed by the justification-suppression model. Accordingly, diversity in responses was expected. The aim of Study 1 was to identify common themes in the lay accounts through a qualitative analysis (i.e., thematic analysis; Braun & Clarke, 2008).

Study 2 was composed of two parts. Part one examined if the common themes identified in the lay accounts could be replicated using a different method. The method of analysis in Study 1 was qualitative, while Study 2 tested for themes using a quantitative method (i.e., exploratory factor analysis). If the themes are valid and reliable, they will generalize to this different situation. Identifying consistency across formats is important to establishing if the results will be applicable to a variety of circumstances and, therefore, are truly relevant to the functioning of human society. Replication is critical to the scientific method to ensure psychological findings do not fall prey to the persistence of information founded in type I or type II errors, inaccuracies that hinder the progress of accurate knowledge.

Part two of Study 2 compared the common themes in the lay accounts against each other in their ability to predict religious prejudice. This analysis offers an expansion of Study 1 by reversing the direction of the assessment. In Study 1, the items measuring religious prejudice

were presented to participants first, and the items measuring lay accounts of the prejudice ratings were presented second. However, the justification-suppression model explains expressed prejudice as a function of the justifications and suppressions that precede the expression. Study 2, therefore, constructs the order of measurement to match the justification-suppression model of prejudice, specifically assessing endorsement of lay accounts first and expressed prejudice second. Because this study is correlational, not experimental, cause cannot be determined. However, establishing a relationship between lay accounts and expressed prejudice, in the appropriate order, would be an opportune start in the testing of the justification-suppression model of prejudice.

In addition, there is another aim to Study 2. The justification-suppression model of prejudice does not offer information on the differential effect of justifications. Six general types of justifications (along with several subtypes each) are listed; however, they are not compared in their relative strength in regards to prejudice. Therefore, it is unknown if some justifications have a stronger relationship with expressed prejudice than others. Study 2 addressed this limitation. By comparing the predictive power of several lay accounts, the importance of certain accounts and the unimportance of other accounts can be determined, as least for the realm of religious prejudice. This would be beneficial information to those working to reduce prejudice, as it could direct their attention to the accounts that pose the most concern in justifying or excusing prejudice.

Accordingly, across both parts, Study 2 offers three important aspects of exploration: 1) the replication of themes from Study 1 in a different methodological format in which 2) the order of variables matches the pathway of the justification-suppression model and 3) allows for the differential prediction of religious prejudice by lay accounts.

Across Study 1 and Study 2, the purpose of this project is three-fold: 1) to evaluate a portion of the justification-suppression model, specifically, the connection between justification factors and expressed/experienced prejudice, 2) to catalogue lay accounts of religious prejudice, and 3) to compare lay accounts against each other in their ability to predict religious prejudice. These three objectives, if appropriately accomplished, have a wide array of implications. Theorists will have more evidence on the validity of their hypotheses. Researchers will have more data on attribution within a novel context. But, likely most notably, organizations focused on the reduction of prejudice will have more information to use in the design of their programs. With increased knowledge on how the human race justifies prejudice, constructing reduction or eradication strategies may be more feasible, especially when strengthened with future research.

STUDY 1 METHOD

Research Question: How do people account for their own expressions of religious prejudice?

Participants

Five hundred participants from the psychology 101 (PY101) subject pool at a southern university and 624 participants from Amazon's crowd-sourcing website Mechanical Turk (MTurk) were recruited. Because the endorsement of religious prejudice was expected to be infrequent, a large sample was recruited to compensate. Students were recruited to remain consistent with past literature. Mechanical Turk workers were recruited for diversity, as they are more reflective of the general population when compared against students (Paolacci, Chandler, & Ipeirotis, 2010).

On average, MTurk workers were 37.9 years of age ($SD = 13.1$ years) and the PY101 students were 18.9 years of age ($SD = 1.3$ years). In both samples, more women were recruited, specifically 63.1% ($n = 351$) of participants were women in the MTurk sample and 70.2% ($n = 306$) of participants were women in the PY101 sample. Further, most participants were Caucasian, no matter the sample. In the MTurk sample, 77.4% ($n = 432$) of participants were Caucasian; in the PY101 sample, 81.9% ($n = 358$) of participants were Caucasian. Most participants identified as straight in their sexual identity for both samples (MTurk: 86.7%, $n = 481$; student: 94.5%, $n = 410$). Within the MTurk sample, participants were located across the nation (Northeast: 19.6%, $n = 109$; Midwest: 20.5%, $n = 114$; South: 39.5%, $n = 220$; West: 20.5%, $n = 114$). Within the PY101 sample, although all participants were currently located in

the south, some participants had relocated from other regions (Northeast: 7.9%, $n = 34$; Midwest: 14.8%, $n = 64$; South: 72.1%, $n = 312$; West: 5.3%, $n = 22$). Although the rates differed, Christians were the most common religious group, composing 55.3% ($n = 308$) of the MTurk sample and 85.2% ($n = 369$) of the PY101 sample. Other more common groups included no religion (MTurk: 11.1%, $n = 62$; PY101: 6.5%, $n = 28$), Agnosticism (MTurk: 9.3%, $n = 52$; PY101: 3.9%, $n = 17$), and Atheism (MTurk: 9.5%, $n = 53$; PY101: 2.5%, $n = 11$). For more details on the demographics of each sample, see Table 1.

Table 1. Demographic Characteristics for Both Samples.

Demographic	Mean (Standard Deviation) or Percent (<i>n</i>)		
	MTurk Workers <i>n</i> = 624	PY101 Students <i>n</i> = 500	Both Samples <i>N</i> = 1,124
Age	37.9 (13.1)	18.9 (1.3)	29.6 (13.6)
Gender			
Male	36.9% (205)	29.8% (130)	33.8% (335)
Female	63.1% (351)	70.2% (306)	66.2% (657)
Race/Ethnicity			
White	77.4% (432)	81.9% (358)	79.4% (790)
African American	5.0% (28)	8.2% (36)	6.4% (64)
Latino	4.1% (23)	3.9% (17)	4.0% (40)
Asian	5.6% (31)	0.7% (3)	3.4% (34)
Native American	1.1% (6)	0.7% (3)	0.9% (9)
Pacific Islander, Native Hawaiian	0.0% (0)	0.2% (1)	0.1% (1)
Multiracial	6.8% (39)	4.3% (19)	5.7% (57)
Sexual Identity			
Straight	86.7% (481)	94.5% (410)	90.1% (891)
Gay/Lesbian	3.8% (21)	0.7% (3)	2.4% (24)
Bisexual	4.9% (27)	2.3% (10)	3.7% (37)
Other	4.7% (26)	2.5% (11)	3.7% (37)
Location			
Northeast	19.6% (109)	7.9% (34)	14.4% (143)
Midwest	20.5% (114)	14.8% (64)	18.0% (178)
South	39.5% (220)	72.1% (312)	53.7% (532)
West	20.5% (114)	5.3% (22)	13.8% (137)
Religion			
Christianity	55.3% (308)	85.2% (369)	68.4% (677)
Islam	1.3% (7)	0.5% (2)	0.9% (9)
Judaism	3.8% (21)	0.7% (3)	2.4% (24)
Buddhism	2.3% (13)	0.0% (0)	1.3% (13)
Hinduism	1.8% (10)	0.0% (0)	1.0% (10)
Agnosticism	9.3% (52)	3.9% (17)	7.0% (69)
Atheism	9.5% (53)	2.5% (11)	6.5% (64)
Wicca	0.9% (5)	0.0% (0)	0.5% (5)
Satanism	0.5% (3)	0.2% (1)	0.4% (4)
Other	4.1% (23)	0.5% (2)	2.5% (25)
No Religion	11.1% (62)	6.5% (28)	9.1% (90)

Measures

Religious Prejudice. To measure religious prejudice, participants completed nine feeling thermometers, one feeling thermometer for individuals of nine religions (i.e., Christianity, Judaism, Islam, Buddhism, Hinduism, Agnosticism, Atheism, Wicca, Satanism; see Appendix A). The feeling thermometer asked participants to rate their feelings toward members of the target group by equating their feelings to temperatures (e.g., 0° = very cold/unfavorable feeling towards people of a certain religion, 50° = no feeling towards people of a certain religion, 100° = very warm/favorable feeling towards people of a certain religion) using a scale marker they could slide horizontally. All nine feeling thermometers were presented on the same page, but the order was randomized across participants.

Lay Accounts. To measure lay accounts, immediately following the feeling thermometers, on the next page, participants provided explanations for their responses to each of the feeling thermometers through free-response (see Appendix B). For context, participants were provided the instructions from the previous page along with their past responses. Participants were not able to backtrack to the previous page to change their answers. Again, all prompts for accounts were presented on the same page, but the order was randomized across participants.

Additional Measures. Although not part of the present study, additional measures of religiosity and personality were included for secondary analysis (see Appendix C).

Procedure

The study was conducted entirely online. Each sample was directed to almost identical Qualtrics questionnaires. All participants were required to be at least 18 years of age and located in the United States. Subject pool participants received course credit in compensation; Mechanical Turk participants received 50 cents in compensation.

STUDY 1 RESULTS

Descriptive Statistics

To explore the religious prejudice scores, means and standard deviations for the nine temperature ratings were calculated. Percentages of those endorsing religious prejudice, defined as any score at or under 40° on the feeling thermometer, were also identified. For this study, these descriptive statistics are limited to Christian participants, as few participants identified with other religions. The means, standard deviations, and percentages below 40° for each temperature rating, separated by sample, are provided in Table 2. Because the samples were relatively similar in their scores, the results are discussed together, except where noted otherwise.

Table 2. Feeling Thermometer Scores by Sample – Christian Only.

Prejudice Target	MTurk Workers <i>n</i> = 308		PY101 Students <i>n</i> = 369	
	Means (Standard Deviations)	Percentage under 40° (<i>n</i>)	Means (Standard Deviations)	Percentage under 40° (<i>n</i>)
Christians (in group)	83.14 (18.10)	1.9% (6)	88.15 (16.81)	1.4% (5)
Jews	71.73 (22.14)	8.1% (25)	69.61 (22.49)	5.5% (20)
Buddhists	65.37 (25.82)	14.0% (43)	59.70 (25.71)	18.4% (68)
Hindus	60.90 (26.30)	18.5% (57)	58.32 (25.19)	18.2% (67)
Agnostics	54.32 (27.82)	26.0% (80)	52.35 (27.41)	27.1% (100)
Muslims	50.96 (31.24)	32.8% (101)	52.43 (27.90)	31.4% (116)
Atheists	47.11 (30.35)	38.0% (117)	40.96 (30.72)	51.2% (189)
Wiccans	40.46 (31.33)	48.4% (149)	38.65 (27.27)	44.4% (164)
Satanists	17.56 (26.50)	81.5% (251)	15.78 (23.48)	84.6% (312)

As would be expected, the participants favored their ingroup, with average temperatures revolving around the 85° anchor of “quite warm/quite favorable” towards Christians. However, attitudes towards religious outgroups varied. The highest score, averaging around the 70° anchor

of “fairly warm/fairly favorable,” was for attitudes towards Jewish people. Scoring close to the 60° anchor of “a bit more warm/a bit more favorable” were attitudes toward Buddhists and Hindus. Around the neutral point of 50° and the anchor of “no feeling at all” were attitudes towards Muslim and Agnostic individuals. Officially approaching an average that qualified as religious prejudice, specifically 40° with the anchor “a bit more cold/a bit more unfavorable,” were attitudes towards Atheists and Wiccans. Scoring the lowest, well within the bounds of religious prejudice at the 15° of “quite cold/quite unfavorable,” were average ratings for Satanists.

Logically, these relative averages in temperature rating also reflected the percentage of individuals who reported religious prejudice towards people of certain religions. Under 5% of participants endorsed religious prejudice towards their Christian ingroup. Between 5% and 10% of participants endorsed religious prejudice towards Jewish people. Approximately 15% to 20% of participants endorsed religious prejudice towards Buddhists and Hindus. About 30% of participants reported religious prejudice towards Muslim and Agnostic individuals. With a greater divergence by sample, around 40% of MTurk workers and 50% of PY101 students reported religious prejudice towards Atheists. Lastly, approximately 50% and 80% of participants reported religious prejudice towards Wiccans and Satanists, respectively.

Qualitative Analysis Procedures

A thematic analysis was performed (Braun & Clarke, 2008) first with the MTurk sample. After the initial step of the thematic analysis revealed strong consistency between the MTurk sample and the PY101 sample, the latter sample was analyzed with a simplified procedure in an attempt to identify any accounts present in the PY101 sample that were not present in the MTurk sample. The two samples were initially analyzed separately to avoid combining incompatible

samples, as college students are known to differ from the general population in a range of possibly relevant characteristics (Henrich, Heine, & Norenzayan, 2010). Through the thematic analyses, common themes were located in the lay accounts. All analyses were limited to Christians who endorsed any religious prejudice, defined as any score at or under 40° on the feeling thermometer. In total, 823 accounts were included in the thematic analysis for the MTurk sample and 1,029 accounts were included in the thematic analysis for the PY101 sample. The accordant temperature ratings and target religions for each lay account were removed from sight during the thematic analysis to reduce rater bias.

The MTurk thematic analysis was completed in accordance with the steps outlined by Braun and Clarke (2006). There are six phases to the process, which are executed in a consecutive, but flexible, manner. 1) *Familiarizing yourself with your data*: Data were read (and re-read). General ideas were recorded. 2) *Generating initial codes*: Codes were determined and identified across the entire dataset by grouping responses together (i.e., all responses were printed onto slips of paper then separated into categories based on repeating statements, e.g., “I do not know any Satanists [...]” was grouped with “I’ve never had any interaction with Wiccans [...]). To comprise a code, or category, the idea must have been expressed at least three times by participants. Brief descriptions of each code were also identified by using the target phrases of participants (e.g., “I have not met someone of this religion”). After codes were generated, they were re-assessed twice (i.e., changes were made as the slips of paper were typed into an electronic document and then re-evaluated after all slips of paper were included in the electronic document).

3) *Searching for themes*: Codes were combined and related to larger themes by two individuals, the first author and a research assistant. When provided with a short description and

five examples of each code, codes were rearranged into larger groups by both individuals. The first author completed this step using an electronic word document and the research assistant completed this step using hard copies. Each individual completed this step independently. After arriving at their themes, the two individuals resolved all differences through discussion.

4) *Reviewing themes*: The first author reviewed the organization of the themes. Certain themes, and their applicable codes, were removed due to irrelevance to the study. Because the study aims to identify personal accounts for religious prejudice, codes/themes devoid of such a statement were removed. Thirty-five codes were removed. Examples of removed codes/themes include attribution of positive characteristics to a religious group (e.g., “This group seems very peaceful [...]”) and discussion of personal values (e.g., “[...] I don’t judge anyone without knowing them personally [...]”). Themes were then given a hierarchical organization and a map of the themes was created.

5) *Defining and naming themes*: The research assistant approved the hierarchical organization and themes were named. 6) *Producing the report*: Final examples of themes were selected. The full thematic analysis report was written.

Full Thematic Analysis Results

Through the thematic analysis, codes and their larger themes were identified and mapped to organize a cohesive structure of the data. In total, five primary themes, seven secondary themes, eight tertiary themes, one quaternary theme, and 65 codes were identified. See Appendix D for names of each larger theme and its codes (codes also include descriptions and examples of participant statements). See Figure 3 for the concept map of the themes and codes.

The first primary theme identified was titled *I lack information about this religion*. This theme did not include any secondary, tertiary, or quaternary themes. It included five codes, specifically: 1) *I do not know a lot about this religion*, 1a) *I do not know the people* (a code within *I do not know a lot about this religion*), 1b) *I have not researched this religion* (a code within *I do not know a lot about this religion*), 2) *I do not understand this religion*, and 2a) *Lack of perspective-taking* (a code within *I do not understand this religion*).

The second primary theme identified was titled *I have a problem with their beliefs*. This theme included two secondary themes (i.e., *I have a problem with their beliefs* and *Their beliefs are questionable*), four tertiary themes (i.e., *Their beliefs are incorrect*, *This is not a real religion*, *Their religion is illogical*, and *Questioning legitimacy*), but no quaternary themes. It included 26 codes.

Within the secondary theme *I have a problem with their beliefs*, there were no tertiary themes. The codes were: 1) *Our beliefs are different*, 1a) *Our beliefs are opposites* (a code within *Our beliefs are different*), 2) *They do not accept my beliefs*, 2a) *They do not believe in God* (a code within *They do not accept my beliefs*), 2b) *They do not believe in Jesus* (a code within *They do not accept my beliefs*), 2c) *They do not live by the Bible* (a code within *They do not accept my beliefs*), 3) *I do not accept their beliefs*, 3a) *I do not accept the worship of Satan* (a code within *I do not accept their beliefs*), 3b) *I do not accept the practice of witchcraft* (a code within *I do not accept their beliefs*), 3c) *I do not accept having no religion* (a code within *I do not accept their beliefs*), 3d) *I do not accept being undecided* (a code within *I do not accept their beliefs*), 3e) *I do not accept the worship of false gods* (a code within *I do not accept their beliefs*), and 3f) *I do not accept the worship of nature* (a code within *I do not accept their beliefs*).

Within the secondary theme *I have a problem with their beliefs*, there were four tertiary themes. Within the first tertiary theme *Their beliefs are incorrect*, in addition to a code based on the theme, the codes were: 1) *They are misguided*, 2) *They are ignorant*, and 3) *They are stupid*. Within the second tertiary theme *This is not a real religion*, in addition to a code based on the theme, the codes were: 1) *It is a cult*, 2) *It is a rebellion*, 3) *It is man-made*, and 4) *They just want attention*. Within the third tertiary theme *Their religion is illogical*, there was only one code, the one based on the theme. Within the fourth tertiary theme *Questioning legitimacy*, in addition to a code based on the theme, the codes were: 1) *They'll convert* and 2) *Expression of suspicions*.

The third primary theme identified was titled *They provoke unpleasant emotions*. This theme did not include any secondary, tertiary, or quaternary themes. It included four codes, specifically: 1) *They make me anxious*, 2) *They scare me*, 2a) *They are in danger* (a code within *They scare me*), and 3) *They disgust me*.

The fourth primary theme identified was titled *I have interpersonal concerns*. This theme did not include any secondary, tertiary, or quaternary themes. It included four codes, specifically: 1) *I do not want to associate with them*, 2) *I cannot relate to them*, 3) *I do not respect them*, and 4) *I do not trust them*.

The fifth primary theme identified was titled *They are terrible people*, which was formatted based on a loose interpretation of the big five personality traits and its facets. This theme included five secondary themes (i.e., *They are high in openness*, *They are high in conscientiousness*, *They are low in conscientiousness*, *They are low in agreeableness*, and *They are high in neuroticism*), four tertiary themes (i.e., *They are low in straightforwardness*, *They are low in modesty*, *They are low in altruism*, and *They are low in compliance*), and one quaternary

theme (i.e., *They are harmful to society*). It included 26 codes in all – one based on the primary theme and the rest subsumed by the secondary, tertiary, or quaternary themes.

Within the secondary theme *They are high in openness*, there were no tertiary or quaternary themes. The codes were: 1) *They are weird* and 2) *They are crazy*.

Within the secondary theme *They are high in conscientiousness*, there were no tertiary or quaternary themes. The code was: 1) *They are skeptical*. Within the secondary theme *They are low in conscientiousness*, there were no tertiary or quaternary themes. The code was: 1) *They are not trying*.

Within the secondary theme *They are low in agreeableness*, there were four tertiary themes and one quaternary theme. Within the first tertiary theme *They are low in straightforwardness*, the code was: 1) *They are liars*. Within the second tertiary theme *They are low in modesty*, the code was: 1) *They are arrogant*. Within the third tertiary theme *They are low in altruism*, the codes were: 1) *They are annoying*, 2) *They are immoral*, 3) *They are mean*, 4) *They are intolerant*, 4a) *They are intolerant towards Christians* (a code within *They are intolerant*), 4b) *They are intolerant towards people of other religions* (a code within *They are intolerant*), 4c) *They are intolerant towards Americans* (a code within *They are intolerant*), and 5) *They are self-absorbed*. Within the fourth tertiary theme *They are low in compliance*, the code was: 1) *They are stubborn*. This tertiary theme also included the quaternary theme *They are harmful to society*. In addition to a code based on the theme, the codes were: 1) *They cause chaos*, 2) *They hurt people*, 2a) *They mistreat women* (a code within *They hurt people*), 2b) *They mistreat children* (a code within *They hurt people*), and 3) *They are terrorists*.

Within the secondary theme *They are high in neuroticism*, there were no tertiary or quaternary themes. The codes were: 1) *They are angry*, 2) *They are indulgent*, 3) *They are sad*, and 4) *They are extreme*.

PY 101 sample. The student sample was analyzed with a simplified procedure after it was determined the PY101 sample was quite consistent with the MTurk sample in the first step of the thematic analysis. Responses that did not fit the codes identified through the thematic analysis of the MTurk responses were identified, examined, and added to the existing list of codes. Through this procedure, five new codes were identified. See the italicized codes in Appendix D for the titles, descriptions, and examples of the added codes.

The first new code was *They do not believe in creationism*. It fit into the primary theme *I have a problem with their beliefs* and the secondary theme *There are differences in our beliefs*. It was within the code *They do not accept my beliefs*. Other codes in this area included *They do not believe in God* and *They do not believe in Jesus*. The second new code was *They are disregarding evidence*. It fit into the primary theme *I have a problem with their beliefs*, the secondary theme *Their beliefs are questionable*, and the tertiary theme *Their beliefs are incorrect*. Other codes in this area included *They are ignorant* and *They are stupid*. The third and fourth new codes were *They offend me* and *They make me angry*. They fit into the primary theme *They provoke unpleasant emotions*. Other codes in this area included *They scare me* and *They disgust me*. The fifth new code was *They will try to convert me*. It fit into the primary theme *I have interpersonal concerns*. Other codes in this area included *I cannot relate to them* and *I do not trust them*.

STUDY 1 DISCUSSION

Study 1 addressed the question: How do people account for their own expressions of religious prejudice? This question was answered by identifying lay accounts for one's own religious prejudice, as there is little empirical evidence specifically addressing this topic. Instead, previous literature has focused primarily on the theories of researchers. Therefore, this study shifted the lens from researcher to lay person. However, this study is certainly not the first to investigate the lay perspective, as past studies have focused on the lay interpretation of others' ethnic prejudice. Nevertheless, it was expected that such accounts would differ from those discussed previously in the literature, as past studies focused on others' ethnic prejudice, meaning the existing research and the present study differed based on 1) accounting for prejudice expressed by oneself versus prejudice expressed by others and 2) accounting for religious prejudice versus ethnic prejudice.

The justification-suppression model of prejudice offered a framework. The model suggests that lay accounts for personal expressions of prejudice would favor explanations that avoid sanction from others or from oneself. In addition, as the justification-suppression model offers six different forms of justifications, diversity in the lay accounts was expected.

As determined through qualitative analysis of all responses accompanying prejudicial scores, such expectations were largely upheld. The majority of codes comprising the five themes did favor explanations that would avoid sanction. However, some unforeseen findings did occur. The first theme of the lay accounts was the most surprising. In this theme, participants reported ignorance of the religion they disliked as an account for their prejudice. Participants described

knowing little of the target religion, which could be further explained by noting they had either never met people of the religion or never conducted research on the religion. Or, participants reported, even if they were familiar (or somewhat familiar) with the target religion, they did not understand the religion, which was expressed by some participants in a bewildered manner suggesting a lack of perspective-taking.

Using ignorance as an account for prejudice was not anticipated, as it could reflect poorly on the self, as being uninformed is likely to be considered a negative characteristic to most. Nevertheless, although not well-reflected in the empirical theories of prejudice, such an account does correspond with the existing literature on lay explanations for prejudice. Indeed, ignorance was one of the three explanatory factors identified when participants rated the causes for others' ethnic prejudice (Hodson & Esses, 2005). Therefore, there may be more similarity between the two forms of research (i.e., between accounts of one's religious prejudice versus accounts of others' ethnic prejudice) than was expected. A similarity between the types of prejudice (i.e., religious or ethnic) is less surprising, as correlations between prejudices have been previously identified (Aosved & Long, 2006; Zink et al., 2008). More surprising is the resulting similarity between accounts for oneself versus others, as differences in these attributions have been extensively described by existing literature (e.g., actor-observer discrepancy).

The second theme identified by the thematic analysis was more consistent with expectations. In this lay account, participants focused on the differences between their religious beliefs (or actions) and the beliefs (or actions) of the target religion when explaining their negative feelings. These accounts could be general, with participants simply noting a difference or contradiction between the two sets of beliefs, or these accounts could be specific, with participants focusing on one or more beliefs within the target religion they specifically identify

as problematic. These problematic beliefs could be further categorized as either the people of the target religion rejecting the beliefs of the participant religion (e.g., not believing in God, not honoring Jesus) or the participant rejecting the beliefs of the target religion (e.g., worshipping Satan, being undecided).

Within this same theme, participants criticized the beliefs of the target religion. Participants described the beliefs as factually incorrect or described the people of the religion as misled, ignorant, or stupid. Also, participants rejected the use of the term “religion,” by stating the target religion was not a “real” religion or by using quotations when using the word “religion.” Instead, participants referred to the target religion as a cult, rebellion, man-made system, or hollow mechanism for gaining attention. Further, participants deemed the other religions (or the people of the other religions) to be illogical or questioned adherence to the religion, insisting that beliefs were temporary or suspicious.

Referring to differences in or problems with beliefs as a cause of prejudice is much more consistent with previous literature from the perspective of psychological theorists. Beliefs are even specifically identified as a justification in the justification-suppression model of prejudice. The account is also echoed in the intergroup threat theory and the terror management theory: Both theories describe discrepancies in morals as prompts of fears and, consequentially, sources of prejudice. Further, although not stated outright, superiority can be inferred from many of the statements (e.g., discounting a religion, instead referring to it as a cult or rebellion, implies that it is less legitimate than more socially-accepted religions, such as Christianity), providing a connection to social identity theory. However, this theme was not overtly mentioned in the explanations for others’ ethnic prejudice (Hodson & Esses, 2005). It may be argued that it corresponds to the human society factor identified in that research, which included the item

“groups having different ways of viewing the world;” however, this factor was identified through close-ended questions, meaning the participants did not identify these issues themselves without prompting by researchers.

Whereas the second theme was cognitive in nature, the third was affective. Participants identified a variety of negative emotions they would likely experience when interacting with people of the target religion, such as anxiety, fear, disgust, offense, and anger. This account is well-reflected in the previous literature from theorists. Indeed, fear, albeit of death, is the central component of terror management theory. However, discussion of emotions was absent from the explanations for others’ ethnic prejudice, although this may be purely reflective of the research design, as emotions were not discussed at all as potential causes of prejudice.

The fourth theme was interpersonal, adding another psychological component to the existing cognitive and affective features from the previous two themes. Participants described existing or expected difficulties with engaging with people of the target religion. This manifested as rejection of any interest in associating or worries about problems relating. Other participants described a lack of respect or trust of people from other religions. In addition, some participants were more specific in their explanations, identifying an expectation that the other person will attempt to convert them to their religion (or cause them to doubt Christianity) as the cause of their interpersonal concern. This interpersonal account is prevalent in the psychology literature as well. Intergroup processes are listed as possible causes of prejudice in both the justification-suppression model and the lay accounts for ethnic prejudice (although this was, once again, listed in the close-ended questions and, therefore, not spontaneously provided by participants). Intergroup relations are also involved in the intergroup threat theory, terror management theory, and social identity theory, given their emphasis on ingroups versus outgroups. Because all three

theories emphasize how individuals define themselves as separate from others based on group membership and describe, in various manners, complications that would interfere with positive interactions (e.g., superiority), concerns about association with outgroup members would be expected.

The fifth theme, the last and the most intricate theme, primarily reflected personality characteristics, specifically unfavorable renditions of traits that could be organized within one of the most recognizable frameworks within the field of psychology: the big five personality traits. These traits are: openness (i.e., the tendency to appreciate novel experiences), conscientiousness (i.e., the tendency to actively pursue goals), extraversion (i.e., the tendency to engage socially with others), agreeableness (i.e., the tendency to strive for social harmony), and neuroticism (i.e., the tendency to feel negative emotions; VandenBos, 2015). Further, each of the five traits includes six facets. Openness includes the facets: 1) fantasy, 2) aesthetics, 3) feelings, 4) actions, 5) ideas, and 6) values. Conscientiousness includes the facets: 1) competence, 2) order, 3) dutifulness, 4) achievement-striving, 5) self-discipline, and 6) deliberation. Extraversion includes the facets: 1) warmth, 2) gregariousness, 3) assertiveness, 4) activity, 5) excitement-seeking, and 6) positive emotions. Agreeableness includes the facets: 1) trust, 2) straightforwardness, 3) altruism, 4) compliance, 5) modesty, and 6) tender-mindedness. Neuroticism includes the facets: 1) anxiety, 2) angry hostility, 3) depression, 4) self-consciousness, 5) impulsiveness, and 6) vulnerability.

Codes for the fifth theme of lay accounts were organized based on the traits and/or facets of the big five personality traits, as described by the Revised NEO Personality Inventory (NEO-PI-R; Costa, 1992). While no codes were considered relevant to extraversion, the traits of openness, conscientiousness, neuroticism, and especially agreeableness, all had relevant codes,

although they significantly differed in the number. The codes applied to each were not perfect representations of the trait/facet, but instead they constituted perspectives that were negatively valenced. Therefore, the characteristics attributed would likely be considered inappropriate by personality theorists, as words that are heavily valenced are often not included in descriptions. For instance, the codes applied to openness, specifically high openness, were: 1) *They are weird*, and 2) *They are crazy*. Certainly, such adjectives are not found in those traditionally attributed to openness, at least according to the NEO-PI-R. Nevertheless, the characteristics used by the participants of the present study could be viewed as negative versions of the adjectives “imaginative,” “original,” “adventurous,” or “unconventional,” which all have been attributed to high openness. Unconventionality, as an example, could be viewed as “weirdness” by another with a negative perception. Accordingly, parallels, albeit imperfect ones distorted by negativity, could be found between the characteristics in the codes and the big five personality traits/facets.

Therefore, each characteristic was grouped based on the big five personality traits/facets within the fifth theme of lay accounts. Reflecting high openness, people of other religions were described as weird or crazy (facet: values). Reflecting high conscientiousness, people of other religions were described as skeptical (facet: deliberation); whereas, reflecting low conscientiousness, people of other religions were also described as not trying to better themselves (facet: achievement striving). Reflecting high neuroticism, people of other religions were described as angry (facet: angry hostility), indulgent (facet: impulsiveness), sad (facet: depression), and extreme (facet: vulnerability).

Codes attributed to low agreeableness were numerable. Only one code each was attributed to the facets straightforwardness (i.e., *They are liars*) and modesty (i.e., *They are arrogant*); however, multiple codes were assigned to the altruism and compliance facets. In

regards to low altruism, people of other religions were described as annoying, immoral, mean, intolerant (in general, or specifically towards Christians, other religions, or Americans), and self-absorbed. Concerning low compliance, people of other religions were described as stubborn or harmful, which was defined as causing social chaos, harming people (in general, or specifically harming women or children), or being terrorists.

In sum, across the various characteristics listed by participants, people of target religions were described negatively, albeit in various manners. The tendency to view people of other religions as “bad” corresponds to the existing literature. Indeed, situating the outgroup as problematic protects participants from personal and social sanction, as would be suggested by the justification-suppression model. Prejudice is couched as a justifiable reaction to undesirable traits, meaning participants are not responsible for their negative feelings – the targets of their negative feelings are responsible instead. Therefore, participants are allowed to feel neutral towards themselves, or even positive in comparison, when confronted with those of other religions.

Although there were differences in how people of other religions were described, the tendency of participants to focus on characteristics relevant to low agreeableness matches inferences from intergroup threat theory and terror management theory. Low agreeableness implies a lack of concern for social harmony, indicating people of other religions pose a significant threat to social functioning. However, the use of negative characteristics to describe the outgroup is not well-reflected in the existing research on lay accounts for others’ ethnic prejudice. Instead, when identifying causes of ethnic prejudice in others, participants identified negative characteristics in the person displaying prejudice (e.g., close-mindedness) instead of the target of that prejudice, as would be expected when accounting for the prejudice of others.

In all, outside of the first theme identified (i.e., ignorance), the expectation that participants would favor accounts that avoid personal or social sanction was largely upheld. In addition, there were a variety of responses, meaning there was diversity in participant explanation. Across the five large themes, there were 65 codes, meaning there were 65 general phrases or terms used by participants. Further, there was overlap between the existing literature and the present study; however, correspondence differed between the specific theme in question (e.g., the *I am ignorant* theme corresponded best to the lay accounts of others' ethnic prejudice and the *They are bad people* theme corresponded better to researcher theories).

Additional credence for the structure was identified in the simplified analysis of the PY101 data. Unexpectedly, given the other recorded differences between college and online samples, there was a strong consistency between the two sets of free-responses. Indeed, the vast majority of accounts in the PY101 data were also found in the MTurk data. Only five new codes were identified, yet all five fit into the existing organization determined for the MTurk sample. Therefore, it may be that differences across samples, at least when comparing college students to Mechanical Turk workers, are more continuous, instead of categorical, in nature. It may be that divergence is more pronounced in how often a specific account is used, as opposed to which accounts are used.

Although Study 1 presents a foray into lay accounts for one's own religious prejudice, Study 2 will address several limitations inherent in Study 1. Study 2 will reverse the presentation of items, wherein the measure of lay accounts will be presented first and the measure of religious prejudice will be presented second. This organization is in line with the direction outlined by the justification-suppression model, allowing a correlational test. In addition, Study 2 allows a differential examination of the lay accounts identified in Study 1. Study 1 identified the domains

of personal accounts for religious prejudice. Therefore, Study 2 will explore the extent to which endorsement of accounts is predictive of expressed prejudice. In Study 2, participants will complete items across the five themes of lay accounts and, therefore, allow for an investigation of their relative strength.

STUDY 2 METHOD

Research Question: To what extent do lay accounts for religious prejudice predict expressed religious prejudice? Hypothesis: It was hypothesized that endorsements of the lay accounts identified through Study 1 would positively predict expressed religious prejudice in a separate sample, as suggested by the justification-suppression model of prejudice. As the justification-suppression model does not address comparative predictive power of justifications, no hypotheses were declared in regards to this matter.

Participants

In total, 700 participants were recruited from Amazon's crowd-sourcing website Mechanical Turk. Only MTurk workers were recruited for Study 2 because of the high similarity between the two samples in Study 1. As in Study 1, analysis was limited to participants who identified as Christian. Of the total 700 participants, 405 identified as Christian. Further, 378 participants of the 405 correctly answered the attention check given, resulting in a final sample of 378 participants. The sample had a majority of women (63.1%, $n = 238$), Caucasians (74.6%, $n = 282$), and straight individuals (93.4%, $n = 353$)². Although more were from the south, the participants were located across the nation (Northeast: 14.6%, $n = 55$; Midwest: 21.7%, $n = 82$; South: 42.6%, $n = 161$; West: 20.9%, $n = 79$). For more details on the demographics, see Table 3

² During the planning of Study 2, it was originally proposed that significant demographic predictors would be included in regressions examining the correlations between lay accounts and religious prejudice. However, race and sexual orientation could not be included due to the lack of diversity in the sample. Further, age and gender displayed only very weak associations with feeling thermometers; therefore, no demographics were included in the regressions.

Table 3. Demographic Characteristics – Christians Only.

Demographic	Mean (Standard Deviation) or Percent (<i>n</i>)
Age	38.9 (13.3)
Gender	
Male	36.9% (139)
Female	63.1% (238)
Race/Ethnicity	
White	74.6% (282)
African American	10.1% (38)
Latino	4.2% (16)
Asian	5.8% (22)
Native American	0.8% (3)
Pacific Islander, Native Hawaiian	0.3% (1)
Multiracial	4.2% (16)
Sexual Identity	
Straight	93.4% (353)
Gay/Lesbian	1.1% (4)
Bisexual	3.2% (12)
Other	2.4% (9)
Location	
Northeast	14.6% (55)
Midwest	21.7% (82)
South	42.6% (161)
West	20.9% (79)

Measures

Lay Accounts. Exemplars from the thematic analysis of Study 1 were selected to serve as items for Study 2. For example, for the primary theme of *I lack information about this religion* and the included code *I do not know a lot about this religion*, the statement “I don’t know much about this” (a lay account provided by one participant) served as the basis of an item. However, small changes were made to the exemplars to 1) correct grammar or spelling issues, 2) clarify meaning, and 3) ensure the statement applied to religions in general instead of one specific religion. Therefore, the applicable item was “I don’t know a lot about other religions.”

Five exemplars were selected for each of the primary themes 1) *I lack information about this religion*, 2) *They provoke unpleasant emotions* and, 3) *I have interpersonal concerns*. Five exemplars each were also selected for the secondary themes: 1) *There are differences in our beliefs* (the primary theme being *I have a problem with their beliefs*), 2) *Their beliefs are questionable* (the primary theme being *I have a problem with their beliefs*), and 3) *They are low in agreeableness* (the primary theme being *They are terrible people*). These primary and secondary themes were selected because they met two criteria: They included enough codes to constitute an adequate number of items each and they could apply to all religions. Therefore, in total, there were 30 items, representing six primary or secondary themes with five items per theme.

Items were written for different codes included in each theme. If the theme only included four codes, the fifth item was based on the most common code with enough diversity to constitute two different items (e.g., for the code *They make me anxious*, the items were “I feel uncomfortable around people from other religions” and “People from other religions make me nervous.”). If the theme included more than five codes, the items were based on the most common codes, assuming the most common codes could apply to all religions (e.g., although the code *I do not accept the worship of Satan* was provided many times, it could not apply to religions in general and, therefore, was not converted into an item). See Table 4 for the items included in the questionnaire for Study 2.

Table 4. Lay Account Items.

Items	Accordant Code
Primary Theme: “I lack information about this religion.”	
1. I don’t know a lot about other religions.	“I do not know a lot about this religion.”
2. I’ve had little to no experiences with people of other religions.	“I do not know the people.”
3. I find other religions to be confusing or hard to understand.	“I do not understand this religion.”
4. It’s hard for me to grasp why people of other religions believe and act the way they do.	[Lack of perspective-taking.]
5. I haven’t done a lot of research on other religions.	“I have not researched this religion.”
Primary Theme: “I have a problem with their beliefs.”	
<i>Secondary Theme: “There are differences in our beliefs.”</i>	
1. There is a big difference between my beliefs and those of other religions.	“Our beliefs are different.”
2. The beliefs of other religions are opposite to the beliefs of my religion.	“Our belief are opposites.”
3. I can’t support the views or practices of other religions.	“I do not accept their beliefs.”
4. People from other religions do not believe in God and that is wrong.	“They do not believe in God.”
5. I have a hard time accepting a person who is not Christian.	“They do not accept my beliefs.”
<i>Secondary Theme: “Their beliefs are questionable.”</i>	
1. The beliefs of other religions are factually incorrect.	“Their beliefs are incorrect.”
2. People from other religions are religiously misguided.	“They are misguided.”
3. The logic is flawed in other religions.	“Their religion is illogical.”
4. “Religion” is an inappropriate term for these other religions.	“This is not a real religion.”
5. People from other religions do not truly believe what they practice.	[Questioning legitimacy.]
Primary Theme: “They provoke unpleasant emotions.”	
1. I feel uncomfortable around people from other religions.	“They make me anxious.”
2. People from other religions make me nervous.	“They make me anxious.”
3. People from other religions scare me.	“They scare me.”
4. People from other religions engage in dangerous practices.	“They are in danger.”
5. I’m disgusted by the beliefs or actions of other religions.	“They disgust me.”

Primary Theme: “I have interpersonal concerns.”

- | | |
|--|---|
| 1. It’s difficult for me to trust people of other religions. | “I do not trust them.” |
| 2. I don’t want to be around people of other religions. | “I do not want to associate with them.” |
| 3. I’m not interested in people of other religions. | “I do not want to associate with them.” |
| 4. It’s difficult for me to respect people of other religions. | “I do not respect them.” |
| 5. I have a hard time relating to people of other religions. | “I cannot relate to them.” |
-

Primary Theme: “They are terrible people.”

Secondary Theme: “They are low in agreeableness.”

- | | |
|--|--------------------------------|
| 1. People of other religions cause nothing but problems for society. | “They are harmful to society.” |
| 2. People from other religions mistreat people. | “They hurt people.” |
| 3. People from other religions are immoral. | “They are immoral.” |
| 4. People from other religions are mean. | “They are mean.” |
| 5. People from other religions are intolerant. | “They are intolerant.” |
-

Before completing the items, participants read the following prompt: “Please answer the following questions about your thoughts and feelings towards people of other religions. In this case “people of other religions” are people who are Jewish, Muslim, Buddhist, Hindu, Agnostic, Atheistic, Wiccan, or Satanist. To the best of your ability, respond to each of the statements in regards to these groups collectively, instead of focusing on one religious group in particular.”

Participants rated their agreement with each item on a 1 (strongly disagree) to 7 (strongly agree) scale. The order of items was randomized across participants.

Religious Prejudice. To measure religious prejudice, participants completed the same measure as in Study 1. Participants completed nine feeling thermometers, one feeling thermometer for individuals of nine religions (i.e., Christianity, Judaism, Islam, Buddhism, Hinduism, Agnosticism, Atheism, Wicca, Satanism; see Appendix B). The feeling thermometer asked participants to rate their feelings toward each target group by equating their feelings to

temperatures (e.g., 0° = very cold/unfavorable feeling towards people of a certain religion, 50° = no feeling towards people of a certain religion, 100° = very warm/favorable feeling towards people of a certain religion) using a scale they could slide horizontally. Because the scale included the ability to attribute both neutral and positive feelings to the target religion, the following discussion will use the term “feeling thermometer” instead of “religious prejudice” to remain consistent with the measure. All nine feeling thermometers were presented on the same page, but the order was randomized across participants.

Additional Measures. Although not part of the present study, additional measures of religiosity and personality were included for secondary analysis (see Appendix B).

Procedure

Mirroring Study 1, the study was conducted entirely online. Each participant was directed to the same Qualtrics questionnaire. The lay account exemplars were presented first and the religious prejudice thermometers were presented second. All participants were required to be at least 18 years of age and located in the United States. Participants received 50 cents in compensation for their time.

STUDY 2 RESULTS

Descriptive Statistics

Feeling thermometer scores, means, and standard deviations for the nine temperature ratings were calculated. Ratings were extremely similar to Study 1, as the means on the feeling thermometers from Study 1 to Study 2 did not differ by more than 3 degrees for any of the nine thermometers. The means and standard deviations for each feeling thermometer are provided in Table 5. Means and standard deviations for the 30 lay account items are provided in Table 7.

Table 5. Feeling Thermometer Scores.

Prejudice Target	Means (Standard Deviations)
Christians (ingroup)	84.07 (17.99)
Jews	71.91 (22.65)
Buddhists	64.10 (27.51)
Hindus	60.23 (27.51)
Agnostics	53.60 (29.56)
Muslims	50.89 (31.68)
Atheists	44.53 (32.36)
Wiccans	41.14 (30.45)
Satanists	19.08 (27.06)
Average	50.68 (22.48)

Exploratory Factor Analysis

The 30 items measuring endorsement of the lay accounts were judged to be suitable for exploratory factor analysis ($KMO = .97$; Bartlett's Test of Sphericity $\chi^2 = 6,942.50$, $p < .001$).

Therefore, the items were entered into an exploratory factor analysis to test for underlying latent

constructs. Principal axis factoring with a promax (oblique) rotation was used, as the factors were expected to be naturally correlated. The point of inflexion in the scree plot and the eigenvalues at Kaiser’s criterion (i.e., 1.00) identified three factors to retain. The factors collectively explained 55.7% of the variance. See Table 6 for the eigenvalues and variance explained beyond those retained.

Table 6. Eigenvalues and Variance Explained.

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	14.25	47.51	47.51	13.83	46.08	46.08
2	2.11	7.02	54.52	1.65	5.49	51.57
3	1.70	5.68	60.20	1.25	4.15	55.72
4	0.83	2.77	62.98			
5	0.79	2.64	65.62			
6	0.70	2.33	67.95			
7	0.68	2.26	70.20			
8	0.67	2.23	72.43			
9	0.60	2.00	74.43			
10	0.59	1.95	76.38			
11	0.55	1.85	78.22			
12	0.53	1.75	79.98			
13	0.48	1.60	81.58			
14	0.47	1.58	83.15			
15	0.45	1.50	84.66			
16	0.43	1.44	86.10			
17	0.40	1.33	87.43			
18	0.39	1.30	88.73			
19	0.38	1.25	89.98			
20	0.37	1.22	91.21			
21	0.33	1.09	92.29			
22	0.31	1.05	93.34			
23	0.30	1.01	94.35			
24	0.29	0.98	95.33			
25	0.27	0.91	96.24			
26	0.26	0.86	97.11			
27	0.25	0.84	97.94			
28	0.22	0.74	98.68			
29	0.21	0.68	99.37			
30	0.19	0.63	100.00			

As determined by highest factor loading, eighteen of the 30 items loaded most strongly on the first factor. This group was composed of all the items from the *They provoke unpleasant emotions, I have interpersonal concerns, and They are low in agreeableness* themes. It also included one item from the theme *There are differences in our beliefs* (i.e., I have a hard time accepting a person who is not Christian) and two items from the theme *Their beliefs are questionable* (i.e., “Religion” is an inappropriate term for these other religions; People from other religions do not truly believe what they practice). Because of the emphasis on the *They provoke unpleasant emotions, I have interpersonal concerns, and They are low in agreeableness* themes, which all include negative evaluation (i.e., of emotions, interpersonal contact, or traits), this factor was titled *Negative Evaluation*.

Eight of the 30 items loaded most heavily on the second factor. This group was composed of all the items from the *There are differences in our beliefs* and *Their beliefs are questionable*, minus the three items listed above that loaded onto the first factor. It also included one item from the theme *I lack information about this religion* (It’s hard for me to grasp why people of other religions believe and act the way they do). Because of the emphasis on the *There are differences in our beliefs* and *Their beliefs are questionable* themes, this factor was titled *Belief Differences*.

Four of the 30 items loaded most heavily on the third factor. This group was composed of all the items from the *I lack information about this religion*, minus the item listed above that loaded onto the second factor. Because of the emphasis on the *I lack information about this religion* theme, this factor was titled *Personal Ignorance*. See Table 7 for factor loadings.

Table 7. Factor Loadings for the Lay Account Items.

Item	Mean (Standard Deviation)*	Factor 1 <i>Negative Evaluation</i>	Factor 2 <i>Belief Differences</i>	Factor 3 <i>Personal Ignorance</i>
TP/LA: People from other religions are mean.	2.79 (1.95)	.96	-.13	-.09
IC: It's difficult for me to respect people of other religions.	2.97 (2.72)	.84	-.04	-.02
PB/DB: I have a hard time accepting a person who is not Christian.	2.67 (2.03)	.82	-.04	-.06
UE: People from other religions make me nervous.	2.89 (2.10)	.82	-.10	.11
TP/LA: People of other religions cause nothing but problems for society.	2.97 (2.24)	.79	.03	.02
UE: People from other religions scare me.	2.80 (2.15)	.78	-.08	.12
UE: I feel uncomfortable around people from other religions.	3.03 (2.25)	.78	-.10	.10
IC: I don't want to be around people of other religions.	2.78 (2.04)	.77	.03	-.04
PB/BQ: "Religion" is an inappropriate term for these other religions.	2.90 (2.04)	.74	-.02	-.01
PB/BQ: People from other religions do not truly believe what they practice.	2.99 (2.07)	.73	.04	.01
TP/LA: People from other religions mistreat people.	3.33 (2.06)	.67	.13	-.10
IC: It's difficult for me to trust people of other religions.	3.16 (2.18)	.66	.10	.07
UE: I'm disgusted by the beliefs or actions of other religions.	3.21 (2.16)	.65	.20	-.09
IC: I'm not interested in people of other religions.	3.16 (2.20)	.63	.03	.07
TP/LA: People from other religions are immoral.	3.08 (2.23)	.60	.30	-.09
IC: I have a hard time relating to people of other religions.	3.56 (2.21)	.52	.13	.11
TP/LA: People from other religions are intolerant.	3.61 (2.18)	.49	.22	-.00
UE: People from other religions engage in dangerous practices.	3.54 (2.08)	.43	.42	-.11
PB/BQ: The beliefs of other religions are factually incorrect.	3.98 (2.17)	-.07	.87	-.09
PB/DB: There is a big difference between my beliefs and those of other religions.	4.83 (1.96)	-.22	.80	.09
PB/BQ: People from other religions are religiously misguided.	3.79 (2.28)	.12	.69	-.04
PB/BQ: The logic is flawed in other religions.	3.95 (2.20)	.16	.68	-.07
PB/DB: I can't support the views or practices of other religions.	4.03 (2.33)	.12	.64	.02
PB/DB: The beliefs of other religions are opposite to the beliefs of my religion.	4.22 (2.06)	-.08	.63	.17

PB/DB: People from other religions do not believe in God and that is wrong.	3.60 (2.21)	.16	.63	-.00
LI: It's hard for me to grasp why people of other religions believe and act the way they do.	3.91 (2.27)	.33	.36	.13
LI: I don't know a lot about other religions.	4.52 (2.14)	-.10	-.03	.80
LI: I haven't done a lot of research on other religions.	4.47 (2.17)	-.02	.01	.71
LI: I've had little to no experiences with people of other religions.	3.71 (2.22)	.27	-.02	.51
LI: I find other religions to be confusing or hard to understand.	4.02 (2.20)	.14	.22	.50
Variance Explained		46.08%	5.49%	4.15%

LI = "I lack information about this religion," PB/DB = "I have a problem with their beliefs/There are differences in our beliefs," PB/BQ = "I have a problem with their beliefs/Their beliefs are questionable," UE = "They provoke unpleasant emotions," IC = "I have interpersonal concerns," TP/LA = "They are terrible people/They are low in agreeableness."

* Participants responded to each item through a 1 (strongly disagree) to 7 (strongly agree) scale.

Correlations among factors ranged from weak to strong. Factor 1 *Negative Evaluation* was strongly and positively correlated with Factor 2 *Belief Differences* ($r = .73$) as well as moderately and positively correlated with Factor 3 *Personal Ignorance* ($r = .40$). Factor 2 *Belief Differences* was weakly and positively correlated with Factor 3 *Personal Ignorance* ($r = .27$).

Bivariate Correlations

To examine overall predictive ability, bivariate correlations were conducted between the three factor scores produced from the previous analysis and the eight outgroup feeling thermometers. In addition, the average of the eight feeling thermometers was determined to be internally consistent ($\alpha = .91$); therefore, it was included in the bivariate correlations as well.

All correlations were significant and negative in direction. However, the strength of the relationships differed across the combination of variables. Although no strong correlations were found, five moderate, three weak, and one very weak correlations were found between the eight feeling thermometers and Factor 1 *Negative Evaluation*; six moderate and two weak correlations were found between the eight feeling thermometers and Factor 2 *Belief Differences*; three weak and five very weak correlations were found between the eight feeling thermometers and Factor 3 *Personal Ignorance*. The collective result is likely well represented by the correlations between the factor scores and the average feeling thermometer: Moderate correlations between the average feeling thermometer and Factor 1 *Negative Evaluation* ($r = -.50$) and Factor 2 *Belief Differences* ($r = -.54$), and a weak correlation between the average feeling thermometer and Factor 3 *Personal Ignorance* ($r = -.23$). See Table 8 for bivariate correlation statistics.

Table 8. Correlation Matrix.

	Factor 1 <i>Negative Evaluation</i>	Factor 2 <i>Belief Differences</i>	Factor 3 <i>Personal Ignorance</i>
Feeling Thermometer <i>Jews</i>	-.35**	-.26**	-.18**
Feeling Thermometer <i>Muslims</i>	-.47**	-.46**	-.23**
Feeling Thermometer <i>Buddhists</i>	-.49**	-.57**	-.22**
Feeling Thermometer <i>Hindus</i>	-.52**	-.52**	-.22**
Feeling Thermometer <i>Agnostics</i>	-.41**	-.47**	-.16**
Feeling Thermometer <i>Atheists</i>	-.38**	-.45**	-.17**
Feeling Thermometer <i>Wiccans</i>	-.32**	-.40**	-.14*
Feeling Thermometer <i>Satanists</i>	-.18**	-.24**	-.14**
Feeling Thermometer Average	-.50**	-.54**	-.23**

* $p < .05$, ** $p < .001$

Regressions

To examine the comparative ability of factor scores in predicting feeling thermometers, two regressions were conducted: 1) a multiple regression and 2) a multivariate multiple regression. To test for effects when examining relationships between factors scores and the feeling thermometers collectively, a multiple regression was conducted with the three factor scores as predictors and the average score of the eight feeling thermometers as the outcome. Collectively, the factor scores were significant in predicting the average feeling thermometer ($F[3, 338] = 49.70, p < .001$) and explained 31% of the variance. Both Factor 1 *Negative Evaluation* and Factor 2 *Belief Differences* showed significant effects, whereas Factor 3 *Personal Ignorance* did not. See Table 9 for the test statistics at the univariate level. Both associations were negative, that is, with higher levels of endorsement of the items, there were lower temperature ratings, or less warmth toward the outgroups.

Table 9. Test Statistics at the Univariate Level (Multiple Regression)

	<i>b</i>	<i>SE b</i>	β	<i>t</i>	<i>p</i>
Constant	50.92	1.02		49.79	< .001
Factor 1 <i>Negative Evaluation</i>	-4.51	1.74	-.20	-2.59	.010
Factor 2 <i>Beliefs Differences</i>	-8.96	1.68	-.38	-5.33	< .001
Factor 3 <i>Personal Ignorance</i>	-0.44	1.30	-.02	-0.34	.737

$R^2 = .31$

To test for effects when examining relationships between factor scores and each feeling thermometer individually, a multivariate multiple regression (via General Linear Modeling) was used with the three factor scores as predictors and the eight feeling thermometers as outcomes. The variance explained by the factor scores differed by the target religion, with approximately 30% of the variance explained for Buddhist and Hindu targets, approximately 20-25% of the variance explained for Muslim, Agnostic, and Atheist targets, approximately 10-15% of the variance explained for Jewish and Wiccan targets, and approximately 7% of the variance explained for Satanist targets. Both Factor 1 *Negative Evaluation* and Factor 2 *Belief Differences* showed significant multivariate effects (Wilks' $\lambda = .91$, $F[8, 331] = 4.23$, $p < .001$ and Wilks' $\lambda = .86$, $F[8, 331] = 6.63$, $p < .001$, respectively), whereas Factor 3 *Personal Ignorance* did not (Wilks' $\lambda = .98$, $F[8, 331] = .98$, $p = .449$). At the univariate level, Factor 1 *Negative Evaluation* was significantly predictive of feeling thermometers for those who are Jewish, Muslim, Buddhist, and Hindu, but not those who are Agnostic, Atheist, Wiccan, or Satanist. See Table 10 for the test statistics at the univariate level. All associations were negative. At the univariate level, Factor 2 *Belief Differences* was significantly predictive of feeling thermometers for those who are Muslim, Buddhist, Hindu, Agnostic, Atheist, Wiccan, and Satanist, but not those who are Jewish. All associations were negative.

Table 10. Test Statistics at the Univariate Level (Multivariate Multiple Regression)

	<i>b</i>	<i>SE b</i>	<i>t</i>	<i>p</i>
Feeling Thermometer Jews ($R^2 = .12$)				
Intercept	72.14	1.16	62.43	<.001
Factor 1 <i>Negative Evaluation</i>	-8.15	1.93	-4.22	<.001
Factor 2 <i>Beliefs Differences</i>	0.58	1.82	0.32	.751
Factor 3 <i>Personal Ignorance</i>	-0.30	1.32	-0.23	.822
Feeling Thermometer Muslims ($R^2 = .24$)				
Intercept	50.82	1.52	33.46	<.001
Factor 1 <i>Negative Evaluation</i>	-8.76	2.54	-3.45	.001
Factor 2 <i>Beliefs Differences</i>	-7.43	2.39	-3.11	.002
Factor 3 <i>Personal Ignorance</i>	-1.01	1.73	-0.58	.560
Feeling Thermometer Buddhists ($R^2 = .30$)				
Intercept	64.50	1.26	51.06	<.001
Factor 1 <i>Negative Evaluation</i>	-4.77	2.11	-2.26	.024
Factor 2 <i>Beliefs Differences</i>	-11.00	1.99	-5.53	<.001
Factor 3 <i>Personal Ignorance</i>	-0.25	1.44	-0.17	.864
Feeling Thermometer Hindus ($R^2 = .30$)				
Intercept	60.87	1.27	48.10	<.001
Factor 1 <i>Negative Evaluation</i>	-8.30	2.12	-3.92	<.001
Factor 2 <i>Beliefs Differences</i>	-8.12	1.99	-4.08	<.001
Factor 3 <i>Personal Ignorance</i>	0.75	1.44	0.52	.603
Feeling Thermometer Agnostics ($R^2 = .22$)				
Intercept	53.89	1.42	37.91	<.001
Factor 1 <i>Negative Evaluation</i>	-3.72	2.38	-1.56	.119
Factor 2 <i>Beliefs Differences</i>	-11.15	2.24	-4.99	<.001
Factor 3 <i>Personal Ignorance</i>	0.49	1.62	0.30	.762
Feeling Thermometer Atheists ($R^2 = .21$)				
Intercept	44.81	1.57	28.50	<.001
Factor 1 <i>Negative Evaluation</i>	-2.64	2.63	-1.00	.317
Factor 2 <i>Beliefs Differences</i>	-12.89	2.47	-5.21	<.001
Factor 3 <i>Personal Ignorance</i>	0.38	1.79	0.21	.832
Feeling Thermometer Wiccans ($R^2 = .16$)				
Intercept	41.39	1.53	27.07	<.001
Factor 1 <i>Negative Evaluation</i>	-1.21	2.56	-0.47	.636
Factor 2 <i>Beliefs Differences</i>	-11.13	2.41	-4.63	<.001
Factor 3 <i>Personal Ignorance</i>	-0.41	1.74	-0.24	.813
Feeling Thermometer Satanists ($R^2 = .07$)				
Intercept	18.97	1.43	13.23	<.001
Factor 1 <i>Negative Evaluation</i>	2.13	2.40	0.89	.376
Factor 2 <i>Beliefs Differences</i>	-7.45	2.26	-3.30	.001
Factor 3 <i>Personal Ignorance</i>	-2.79	1.63	-1.71	.088

STUDY 2 DISCUSSION

Study 2 addressed the question: To what extent do lay accounts for religious prejudice predict expressed religious prejudice? It was hypothesized that endorsements of the lay accounts identified through Study 1 would positively predict expressed religious prejudice, as suggested by the justification-suppression model of prejudice. As the justification-suppression model does not address comparative predictive power of justifications, no hypotheses were declared in regards to this matter. The research question was examined by conducting three sets of analyses: 1) exploratory factor analysis, 2) bivariate correlations, and 3) multiple regressions.

Exploratory Factor Analysis

The exploratory factor analysis addressed the quantitative structure of lay accounts from Study 1. Although Study 1 determined a structure as well, such was qualitative in nature. Therefore, Study 2 offered a replication test of Study 1's structure of lay accounts under different circumstances, shifting from qualitative to quantitative analyses. In Study 1's qualitative analysis, five general themes were identified (i.e., *I lack information about this religion*, *I have a problem with their beliefs* [inclusive of the secondary themes of *There are differences in our beliefs* and *Their beliefs are questionable*], *They provoke unpleasant emotions*, *I have interpersonal concerns*, and *They are terrible people* [inclusive of the secondary theme of *They are low in agreeableness*]). However, in Study 2's quantitative analysis, three general factors were identified (i.e., *Negative Evaluation*, *Belief Differences*, and *Personal Ignorance*). Yet, despite four item divergences, it appeared the three factors corresponded relatively well to the five themes. The first factor consisted of the themes *They provoke unpleasant emotions*, *I have*

interpersonal concerns, and *They are terrible people/They are low in agreeableness*; the second factor consisted of the themes *I have a problem with their beliefs/ There are differences in our beliefs* and *I have a problem with their beliefs/Their beliefs are questionable*; and the third factor consisted of the theme *I lack information about this religion*. In general, two of the themes were replicated as factors, while three of the themes were combined together into a larger factor. The combination of the three themes into one is, although unexpected, not illogical.

The three themes combined into Factor 1 *Negative Evaluation* related to negative evaluations of emotions (i.e., the theme *They provoke unpleasant emotions*), interpersonal relations (i.e., the theme *I have interpersonal concerns*), and traits (i.e., the theme *They are terrible people/They are low in agreeableness*). These would often be expected to correspond. For example, they could be thought to mirror the relationships between prejudice, discrimination, and stereotypes. *They provoke unpleasant emotions* corresponds to prejudice as both are focused on the experience of negative emotions in regards to the target group. *I have interpersonal concerns* corresponds to discrimination as both are focused on avoiding or rationales for avoiding the target group. *They are terrible people/They are low in agreeableness* corresponds to stereotypes as both are focused on attributing socially unacceptable traits to the target group. Prejudice, discrimination, and stereotypes are considered fundamentally intertwined, as emotions, actions, and thoughts are all capable of interacting with each other. This factor may be the representation of such enmeshment.

However, two other factors did emerge as well, meaning other latent constructs were among the items. The second factor, *Beliefs Differences*, likely reflected another cognitive construct but lacked the affective and interpersonal emphasis of the *Negative Evaluation* factor. Further differentiating it from Factor 1 *Negative Evaluation*, this factor shifted focus from the

people of the target religion to the beliefs of the religion itself, which may be the reason for the separation from Factor 1 *Negative Evaluation*. Nevertheless, given the relative similarities, there was a strong correlation between Factor 1 *Negative Evaluation* and Factor 2 *Belief Differences*.

The third and last factor, *Personal Ignorance*, represented another shift in perspective, moving from accounts focused on the target religion or the people of the target religion to the participants themselves. This factor likely represented another cognitive construct, although more metacognitive in nature. This shift to the participants themselves likely overrode any other similarities to other items, leaving it differentiated into its own factor and resulting in weak to moderate correlations with the other factors.

Although the themes were generally reflected in the factors, while acknowledging three of the themes were combined into one factor, four items did not load most strongly onto the factor that would be expected, given the pattern of other factor loadings. These items were: 1) “I have a hard time accepting a person who is not Christian” (which would be expected to load most strongly onto Factor 2 *Belief Differences* but instead loaded more strongly onto Factor 1 *Negative Evaluation*), 2) “Religion is an inappropriate term for these other religions” (which would be expected to load most strongly onto Factor 2 *Belief Differences* but instead loaded more strongly onto Factor 1 *Negative Evaluation*), 3) “People from other religions do not truly believe what they practice” (which would be expected to load most strongly onto Factor 2 *Belief Differences* but instead loaded more strongly onto Factor 1 *Negative Evaluation*), and 4) “It’s hard for me to grasp why people of other religions believe and act the way they do” (which would be expected to load most strongly onto Factor 3 *Personal Ignorance* but instead loaded slightly more strongly onto Factor 2 *Belief Differences*).

Three of these items, in retrospect, may have been worded in manners that correspond better to the factors to which they loaded instead of the factors to which they might be expected to load most strongly. “I have a hard time accepting a person who is not Christian” may be worded in a manner that is more consistent with the interpersonal concerns of Factor 1 *Negative Evaluation*, as the item may imply a lack of desire to interact with people of other religions. “People from other religions do not truly believe what they practice” may be worded in a manner that is more consistent with the negative traits attributed to people of other religions as present in Factor 1 *Negative Evaluation* – although similar types of wording were present in the items loading on Factor 2 *Belief Differences* (e.g., “People from other religions are religiously misguided”). It may be that the item implies a lack of candor or awareness on the part of the person of the other religion, a negative characteristic that would correspond well to Factor 1 *Negative Evaluation*. “It’s hard for me to grasp why people of other religions believe and act the way they do” may be worded in a manner that is more consistent with the cognitive aspect of Factor 3 *Belief Differences*, as the item may imply illogicality of the target religion.

However, the reason for the misloading of the remaining item is less clearly inferred. “Religion is an inappropriate term for these other religions” might be expected to load most strongly onto Factor 2 *Belief Differences* but instead loaded more strongly onto Factor 1 *Negative Evaluation*. It may be that the item reflected an overarching negative evaluation of the religion, which would be applicable to Factor 1 *Negative Evaluation*, or just confused participants in general, as a replacement term (e.g., cult) was not offered to clarify the meaning of the item.

Bivariate Correlations

Bivariate correlations were conducted to test the relationship of the factor scores to the feeling thermometers. Further, based on the order of the measures in the questionnaire, the variables were assessed in the same order as the justification-suppression model (i.e., lay accounts/justifications assessed before feeling thermometers/expressions of prejudice). This arrangement, in line with the justification-suppression model, is an appropriate start for testing the function of the model, albeit in a manner that is correlational, not causal, in nature.

Within the organization, lay accounts were predictive of the feeling thermometers, all in the negative direction, as would be assumed by the justification-suppression model. That is, greater endorsement of the various accounts was associated with lower warmth toward the other religions. However, the relationships did differ in strength. Moderate correlations were found between the average feeling thermometer and Factor 1 *Negative Evaluation* and Factor 2 *Belief Differences*, with only a weak correlation between the average feeling thermometer and Factor 3 *Personal Ignorance*. As would be expected, this general pattern was replicated between the individual feeling thermometers (focusing on each specific target religion) and the factor scores: Moderate correlations were more common for Factor 1 *Negative Evaluation* and Factor 2 *Belief Differences*, with weak correlations more common for Factor 3 *Personal Ignorance*.

Regressions

Two regressions (i.e., a multiple regression and a multivariate multiple regression) were conducted to examine the differential effect of factor scores on feeling thermometers, thus providing information on the relative strength of justifications for the domain of religious prejudice. The justification-suppression model does not address whether certain justifications (or, in this case, accounts) are more or less predictive of prejudice. Therefore, the factors scores were all entered into two regressions to test their comparative effect.

The first regression, a multiple regression, addressed the overall effect of the factor scores, as it used the average feeling thermometer as the outcome variable. In addition to a multivariate effect, two of the three factor scores were significant at the univariate level, specifically Factor 1 *Negative Evaluation* and Factor 2 *Belief Differences*. Comparatively, Factor 2 *Belief Differences* had a larger effect than Factor 1 *Negative Evaluation* in predicting the average feeling thermometer.

These findings are relatively consistent with inferences that can be based on the empirical literature. Factor 3 *Personal Ignorance* is more reflected in the lay explanations of others' ethnic prejudice as opposed to the empirical theories of researchers. Indeed, ignorance was listed as a preferred explanation when described through both free-response and multiple choice by lay people. However, it is not as well-represented in the empirical theories from psychological researchers (e.g., justification-suppression model, intergroup threat theory, terror management theory). Because its support within the literature is fragmented based on the perspective taken, it is reasonable to find that Factor 3 *Personal Ignorance* was not significant when compared the other factors, which are more central to studies on religious prejudice.

Factor 1 *Negative Evaluation* likely sums the interconnections between prejudice, stereotypes, and discrimination. Unpleasant emotional, cognitive, and interpersonal judgements all combine, an amalgamation that suits prior literature and theory. Within the justification-suppression model, Factor 1 *Negative Evaluation* likely corresponds best to the fifth justification described: beliefs, values, religion, and stereotypes, as the factor focuses on socially-unfavored inferences of people from the target religion. Further, intergroup threat theory and terror management theory both center on threat and its resulting fear when explaining prejudice, also relating well to the factor. Therefore, although not well-reflected in the lay accounts of ethnic

prejudice, it is unsurprising that Factor 1 *Negative Evaluation* continued to be significant in the comparative analysis, given the heavy emphasis on negative emotion, cognition, and behavior in the prejudice literature.

Factor 1 *Negative Evaluation* was less predictive, however, of the average feeling thermometer than Factor 2 *Belief Differences*. The continued significance of Factor 2 *Belief Differences* is unsurprising. Like Factor 1 *Negative Evaluation*, it is well-reflected in empirical theories and it, once again, corresponds well to the fifth justification (i.e., beliefs, values, religion, and stereotypes) of the justification-suppression model. It also mirrors other empirical theories. Intergroup threat theory and terror management theory both propose differences between groups are prompts of threat and its accordant fear. Further, Factor 2 *Belief Differences* is even observable in the lay explanations for others' ethnic prejudice, at least when participants were using close-ended questions. The continued significance of Factor 2 *Belief Differences* corresponds well to existing literature and is, therefore, expected.

The explanation for Factor 2 *Belief Differences* outperforming Factor 1 *Negative Evaluation* in terms of prediction is less clear. Nevertheless, the inferred location along the sequential path of prejudice may provide an explanation. Factor 2 *Belief Differences* appears to be more central to prompts of prejudice. For example, the intergroup threat theory and terror management theory often include the identification of differences early in the steps of their theories, at least before the manifestation of stereotypes, prejudice, and discrimination (fear does occur before the identification of differences in terror management theory, but this is specific to fear of death). Therefore, the divergence in the importance of the two lay accounts may reflect the divergence in timing of their latent constructs (i.e., belief differences occurs earlier than negative evaluation in the theories' processes and is, therefore, more conducive to prejudice).

The second regression, a multivariate multiple regression, tested for specific effects of the factor scores, as it used the individual feeling thermometers, one for each of the eight religions, as the outcome variables. At the multivariate level, two of the three factors scores were significant, specifically Factor 1 *Negative Evaluation* and Factor 2 *Belief Differences*. At the univariate level, Factor 1 *Negative Evaluation* was only associated with half of the feeling thermometers, specifically those targeting people who are Jewish, Muslim, Buddhist, and Hindu, but not those who are Agnostic, Atheist, Wiccan, or Satanist. The lack of significance for the latter group may be because each of these religions were more likely to be perceived as opposites to Christianity (as the first two do not believe in God, and the second two, participants believe worship the opposite of God – Satan). This intense perception of belief differences may have overridden any of the negative evaluations made about the target group, especially considering Factor 2 *Belief Differences* continued to be a significant predictor for each of these target religions.

At the univariate level, Factor 2 *Belief Differences* was significantly associated with all feeling thermometers with the exception for those targeting Jewish individuals. This may be due to the similarity between the Jewish and Christian faiths, as these two religions are much more similar than the other religions included (e.g., Hinduism, Atheism). Maybe only because the inclusion of other groups shifted the frame of reference, the differences between the Christian participants and Jewish targets were not perceived to be large and, therefore, this lay account became insignificant, and only Factor 1 *Negative Evaluations* was significant in predicting prejudice toward Jewish people.

GENERAL DISCUSSION

Prejudice continues to be a significant societal problem. It has consequences not only for the targets, who experience physical and psychological issues (e.g., Williams, 1999; Williams & Williams-Morris, 2000), but also for the larger community, with manifestations of problems in the health care system and criminal justice system (FBI, 2016), just to name two examples.

Although all forms of prejudice constitute important issues to overcome and, therefore, topics to address, the present study focused on religious prejudice, as religious groups are some of the most disliked groups in America (Edgell et al., 2006; Pew Research Center, 2014). Further, although there is a vast literature examining prejudice, religious prejudice often does not receive as much attention as other types of prejudice. Therefore, this study addressed this limitation of the research by focusing on a broad range of religious groups (i.e., people who are Jewish, Muslim, Buddhist, Hindu, Agnostic, Atheistic, Wiccan, and Satanist) as targets of prejudice.

Other limitations were addressed as well. In prior research, the perspective of the layperson has received little attention, despite it likely being of large importance when it comes to interventions designed to reduce prejudice. Therefore, the present study examined lay accounts for religious prejudice, specifically the participants' own religious prejudice. Existing studies, based on lay and researcher perspective alike, have exclusively focused on explanations for the prejudice of others. Although this allows for a minimization of self-protective bias, an introspective account would likely be helpful in programs designed to target those who demonstrate prejudice. By providing a more accurate view from the perspective of a religiously prejudiced person, it will facilitate the design of more effective preventive or reactive education.

Due to a lack of directly applicable literature, the present study integrated several theories of prejudice to ground the methodological design. The justification-suppression model of prejudice was used as a grand framework and served as the focus of the first aim of this study, which was to evaluate a portion of the model, specifically, the connection between justification factors and expressed/experienced prejudice.

Of the four interlocking steps of the justification-suppression model of prejudice, the connection between the justification factors and expressed/experienced prejudice describes the mechanism in which certain beliefs, traits, actions, etc. act as a release of the prejudice, allowing a person to express more prejudice without personal or social sanction. Within the theory, six types of justifications were identified; however, not all were present in the lay accounts identified in Study 1 and replicated in Study 2. Such is to be expected, as justifications are not expected to be conscious (e.g., using situational ambiguity to engage in prejudice is likely unconscious). Therefore, not all justifications could be explicitly described in the methodological format of choice. Other justifications are likely less applicable to religious prejudice (e.g., references to the “genetic inferiority” of social Darwinism is less relevant to religion as opposed to ethnicity). Nevertheless, the three lay accounts provided by participants do match several of the justifications discussed in the justification-suppression model, specifically several within the collection of justifications titled “beliefs, values, religion, and stereotypes.” Further, there are additional connections to justifications listed under “intergroup processes,” although many interactions were imagined. Indeed, one code was *They make me anxious*, which corresponds almost perfectly to the justification “intergroup anxiety.” Correspondence to other justifications were more implicit than explicit. For example, because religion is viewed as a controllable action to many participants, as many participants discussed how people’s behaviors were problematic,

justifications listed under “attributions and personal responsibility” were often present, but in a manner that was covert (e.g., implying that people deserve negative feelings because they are thought to worship Satan). Therefore, although not as diverse as the model itself, a number of lay accounts were identified, supporting the assertion that justifications are numerous.

Further support for the model was found in the significant correlations between the lay accounts and expressed prejudice. Although the justification-suppression model is causal in nature, proposing that justifications cause higher levels of expressed prejudice, such a mechanism was not tested, as Study 2 was correlational in nature. However, to be causal, there also must be a correlation, meaning the present study can act as an initial step in testing. Within the format of the present study, support was found for a relationship between lay accounts and expressed prejudice, as all three lay accounts showed significant correlations with expressed prejudice within bivariate correlations, ranging from weak to moderate in strength. Therefore, additional support was found for the theory, suggesting that the explanations used by people to justify (or excuse) their prejudice are indeed related to the prejudice itself. Nevertheless, additional work needs to be conducted to determine if this relationship is causal in nature.

In addition, due to practical limitations, only the connection between justifications and expressed prejudice was addressed by the present study. Suppressions were not addressed. Therefore, no comment can be made in regards to how the model functions in this manner or as a whole. Additional research should address suppressions independently, but also in conjunction with justifications, to evaluate the validity of the model in both a stepwise and overarching method.

Such future work will be of great benefit to programs designed to reduce prejudice. But, the present study offers suggestions as well. The diversity in lay accounts needs to be heeded.

When attempting to reduce prejudice, programs should allow for a wide range of accounts. Expecting program participants to enter with the same mindset may pose problems for any educational methods. Therefore, flexibility should be built into the program itself, allowing it to be tailored to individual participant needs, or different programs should be designed for different participants. This is important even if the relationship between lay accounts and expressed prejudice is only correlational in nature, using phrasing inappropriate to participants may alienate them and increase the risk of dropout or disengagement.

However, it should be noted that these recommendations are limited to efforts that address religious prejudice in Christians. Prejudice that takes other forms may function differently, especially given the differences between religious prejudice and prejudice based on race, gender, etc. For example, religious status is not often identifiable. Certainly, there may be observable markers (e.g., cross necklace, hijab), but such indicators are not consistent and may be indicative of other statuses (e.g., nationality). Because religious minorities cannot be accurately recognized in interpersonal interactions, religious prejudice is likely to have different consequences (e.g., avoidance of religious minorities is less likely if their status is unknown). However, other forms of prejudice may be more common (e.g., assuming and acting as though all others are Christian, which is a microaggression). Therefore, the catalogue and evaluation of lay accounts needs to be explored for each type of prejudice. Although some lay accounts may generalize (e.g., interpersonal concerns), others are less likely to do so (e.g., personal ignorance).

In addition to the justification-suppression model of prejudice, the findings are relevant to the three theories that revolve around threat and/or superiority, intergroup threat theory, terror management theory, and social identity theory. Albeit through different mechanisms, each of these theories describes prejudice as an outcome of a person feeling threatened by/superior to

other groups. Such themes were reflected in the lay accounts in different manners, some explicit and some implicit. Within the lay accounts, participants describe feeling scared by or anxious around people of other religions and describe how they do not trust or want to associate with them, phrases that denote a perception of threat. Further, by describing people of other religions in a variety of negative ways, individuals imply a feeling of superiority, assuming that, when individuals attribute negative traits to others, they believe they do not possess the same traits (e.g., describing someone as immoral implies “They are immoral; I am not”). Accordingly, both threat and superiority are reflected in the lay accounts, specifically present in Factor 1 *Negative Evaluation*. Other features of the three theories are present as well. All three describe how feelings of threat and superiority are based on the perceptions of differences between the ingroup and the outgroup. Such an emphasis on differences is the core of Factor 2 *Belief Differences*. Therefore, this study also found support for intergroup threat theory, terror management theory, and social identity theory.

Outside of theory testing, this study also included a second aim that was more descriptive in nature: to catalogue lay accounts of religious prejudice. This was accomplished through both studies, offering both qualitative and quantitative support for the different themes. Five themes were identified in the free-responses of participants within Study 1. These were 1) *I lack information about this religion*, 2) *I have a problem with their beliefs*, 3) *I have interpersonal concerns*, 4) *They provoke unpleasant emotions*, and 5) *They are terrible people*. Within the quantitative analysis of Study 2, where exemplars of each theme were provided to participants, three factors emerged: 1) Negative Evaluation (mostly consisting of the themes *I have interpersonal concerns*, *They provoke unpleasant emotions*, and *They are terrible people*), 2) Belief Differences (mostly consisting of the theme *I have a problem with their beliefs*), and 3)

Personal Ignorance (mostly consisting of the theme *I lack information about this religion*). Therefore, while acknowledging four of 30 items that did not load as expected, the themes appeared to largely generalize across methodology, although three of the themes did collapse into one factor. In retrospect, this combination is not uninterpretable, as it well represents the existing connections between emotions, cognitions, and interpersonal relations already identified in the literature (i.e., prejudice, stereotyping, and discrimination).

The approximate replication across qualitative to quantitative formats gives credence to the reliability and validity of these lay accounts, especially because the two formats included two separate samples. Therefore, it is believed these accounts are representative of explanations that exist in the general population. Further supporting this assertion is the generalizability of the lay accounts across sample type. Although a quantitative analysis for college students was not conducted (as these data were not collected), it did appear the lay accounts were relatively consistent when analyzed qualitatively, as only five new themes were added based on an examination of the college student responses. However, it must be emphasized that these accounts are limited to Christians.

Therefore, at least within Christians, it appears people use a wide variety of specific phrases to explain their religious prejudice (as there were 65 codes in the qualitative analysis), but these can be considered reflective of three general accounts (as there were three factors in the quantitative analysis) about themselves or their target. As would be expected by the prejudice and attribution literature, participants favored accounts that criticized the outgroup, placing responsibility on the people of the target religion. It appears that, when accounting for their own religious prejudice, most of the time, people do not consider themselves at fault, justifying their

prejudice with problems within the outgroup, escaping personal and social sanction while doing so.

However, there was an exception to this pattern. One account focused on the participants themselves, specifically their lack of information on the target religion. Appearing to contradict the existing research, it identifies a negative characteristic of the participant, albeit a minor one compared to those levied against people of other religions. However, such an account may function in a different manner than assumed. Most often, it seemed to function as an excuse, allowing the participant to experience prejudice without being accountable for such prejudice, a way for participants to say “It’s not my fault; I don’t know any better.” Therefore, the account may function not as a method of taking responsibility for their prejudice, but as a way to provide an explanation while escaping social and personal sanction, arriving at the same outcome as the other, more overt, lay accounts.

This information could be used to benefit existing programs designed to reduce prejudice. For example, these findings correspond well, albeit indirectly, to the empirically-supported method of exposure to and, especially, cooperation with the target group as a method of prejudice reduction. Because lay accounts focus primarily on the negative (e.g., negative emotions towards, negative interactions with, negative traits of the target religion) and the differences (e.g., in beliefs) that may exist between the ingroup and the outgroup, interaction with the target religions may result in the identification of positive features, all of which would contradict the lay accounts (including the personal ignorance account).

However, a causal pathway was not tested by the present study and, therefore, future research can address this limitation. More work is also needed to explore the lay accounts of participants who are of other religions. Because of a lack of diversity in participant religions,

only Christians could be analyzed for this study. Some of the codes, themes, and factors may replicate in religiously diverse samples given their unspecific nature (e.g., the code “They are intolerant”), but others will not replicate as they would only be applicable to Christians (e.g., the code “They do not believe in Jesus”).

Further, additional work should use other methods of data collection regarding lay accounts. Because an overarching effect was desired, lay accounts in Study 2 were measured collectively, merged across target religion (i.e., participants were directed to think of other religions in general when responding to the items). It may be useful for future studies to instruct participants to think of one religion in particular to get a more nuanced evaluation, as the factor structure of items may be different when focused on one target.

The third and final aim of this study was to compare lay accounts against each other in their ability to predict religious prejudice. Although all three lay accounts were predictive when tested under bivariate conditions, only Factor 1 *Negative Evaluation* and Factor 2 *Belief Differences* were significant when all three were entered as predictors in a regression analysis. Further, of the two, Factor 2 *Belief Differences* had the stronger effect.

This contextualization of lay accounts provides additional information for the justification-suppression model of prejudice. The model itself does not address whether some justifications are more impactful than others. Therefore, although not causal in nature, this does appear to be the case within a correlational format. Belief differences outperform negative evaluation, which both outperform personal ignorance when predicting religious prejudice. Although this differential effect may differ across the type of prejudice (e.g., prejudice based in race, gender, sexual orientation), it is important to recognize the possibility.

Indeed, one lay account became insignificant when included in analyses with other lay accounts. Therefore, it may be that some accounts do not pose any causal mechanism at all. Instead, they may act in a manner similar to morality within the social intuitionist model (Haidt, 2001). The social intuitionist model suggests that, within morality, reasoning does not function in a causal manner, instead acting as post-hoc support for a decision that has already been made via intuition. Factor 3 *Personal Ignorance*, which lost significance when moving from bivariate correlations to multiple regressions, may act in the same manner. It may be that this account serves no contributive purpose, instead only acting as retroactive support designed to make participants feel more secure in their decision, protecting them from personal and social sanction. This may be especially applicable given the nature of personal ignorance. Constituting more of an excuse than a justification, this lay account may be especially prone to acting post hoc, appearing only when individuals have to explain behavior that has already occurred (as opposed to manifesting before the expression of prejudice, even when at an unconscious level). However, additional work is necessary to test this inference. Future work should compare the causal mechanisms of different accounts; the difference between accounts that rely on justifications versus accounts that rely on excuses may be an appropriate framework to begin such an investigation.

Although this study is not causal in nature, information based on the comparative predictive ability of lay accounts may be beneficial for programs that seek to reduce prejudice. Based on the present study, it is suggested that, if resources are limited, the focus should be on differences in beliefs, as this was the lay account most predictive of prejudice – although the efficacy of doing so will have to be tested through additional research. Programs can focus on reducing the perceived differences by emphasizing universalities across religion. This may be

best accomplished through interdisciplinary work. Although the combination of fields will depend on the prejudice in question, using religious prejudice as an example, a religious studies scholar who has expertise in comparative religion will be able to appreciate and describe practical and philosophical connections between Christianity and other world religions to demonstrate and discuss shared beliefs.

Conclusion

The present studies addressed three aims: 1) evaluate a portion of the justification-suppression model, specifically, the connection between justification factors and expressed/experienced prejudice, 2) catalogue lay accounts of religious prejudice, and 3) compare lay accounts against each other in their ability to predict religious prejudice. Although each aim poses different applications to prejudice theory and social programs, all three are important to understand. Prejudice is a considerable problem, continuing to pose difficulties for marginalized individuals and society overall. For this reason, prejudice has been a widely studied phenomenon in psychology, being continuously researched for longer and in greater intensity than many other topics, resulting in numerous theories and studies across decades.

However, it is important to study prejudice using the perspective of not only psychological researchers, but also the lay people themselves. To eliminate prejudice, theorists and practitioners will likely find it necessary to understand the perpetration of prejudice. To do so, the perspective of the prejudiced must be understood. Researchers need to learn how to communicate by using the mentality, and even the language of, the lay person. Otherwise, programs risk isolating their participants, resulting in disengagement or offense, and, subsequently, less effective programs. This study provides information on how to accomplish such a goal: Lay accounts, in the words of the individuals themselves, have been identified and

their comparative ability to predict prejudice has been analyzed. Although there is much more work to be done, this is another step forward in understanding and eliminating prejudice.

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APPENDIX A

IRB APPROVAL LETTERS



Office of the Vice President for
Research & Economic Development
Office for Research Compliance

November 23, 2016

Tess Gemberling
Dept. of Psychology
College of Arts & Sciences
Box 870348

Re: IRB#: 16-OR-411 "Lay Justifications for Interfaith Intolerance: A Pilot Study"

Dear Ms. Gemberling:

The University of Alabama Institutional Review Board has granted approval for your proposed research.

Your application has been given expedited approval according to 45 CFR part 46. You have also been granted the requested waiver of written documentation of informed consent. Approval has been given under expedited review category 7 as outlined below:

(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies

Your application will expire on November 22, 2017. If your research will continue beyond this date, complete the relevant portions of the IRB Renewal Application. If you wish to modify the application, complete the Modification of an Approved Protocol Form. Changes in this study cannot be initiated without IRB approval, except when necessary to eliminate apparent immediate hazards to participants. When the study closes, complete the appropriate portions of the IRB Request for Study Closure Form.

Please use reproductions of the IRB approved stamped consent/assent forms to obtain consent from your participants.

Should you need to submit any further correspondence regarding this proposal, please include the above application number.

Good luck with your research.

Sincerely,

Carpano T. Myles, MSM, CIM, CIP
Director & Research Compliance Officer



The University of Alabama
801 University Blvd
Tuscaloosa AL
TEL: 205 348 6457
FAX:

NOTICE OF APPROVAL FOR HUMAN RESEARCH

DATE: October 18, 2017
TO: Gemberling, Tess, Institute for Social Science Research
McCallum, Debra, Institute for Social Science Research
FROM: Graham, Jeanelle, MPH, Research Compliance Specialist, NM Expedited
PROTOCOL TITLE: Lay Justifications for Interfaith Intolerance
FUNDING SOURCE: NONE
PROTOCOL NUMBER: 17-09-523
APPROVAL PERIOD: Approval Date: October 16, 2017 Expiration Date: October 15, 2018

The Institutional Review Board (IRB) for the protection of human subjects has reviewed the protocol entitled: Lay Justifications for Interfaith Intolerance. The project has been approved for the procedures and subjects described in the protocol. This protocol must be reviewed for renewal on a yearly basis for as long as the research remains active. Should the protocol not be renewed before expiration, all activities must cease until the protocol has been re-reviewed.

If approval did not accompany a proposal when it was submitted to a sponsor, it is the PI's responsibility to provide the sponsor with the approval notice.

This approval is issued under University of Alabama's Federal Wide Assurance 00000647 with the Office for Human Research Protections (OHRP). If you have any questions regarding your obligations under Committee's Assurance, please do not hesitate to contact us.

Please direct any questions about the IRB's actions on this project to:

Graham, Jeanelle

Graham, Jeanelle

Approval Period: October 16, 2017 through October 15, 2018
Review Type: FULLBOARD
IRB Number: 03

APPENDIX B

QUESTIONNAIRE MEASURES

Feeling Thermometers

We are interested in learning about your feelings towards people of different religions. To answer these items, please use a "feeling thermometer", which likens feelings to temperatures. Specifically, use the descriptions below to guide your responses.

- 0 = Very cold / very unfavorable feeling towards people of this religion
- 15 = Quite cold / quite unfavorable feeling towards people of this religion
- 30 = Fairly cold / fairly unfavorable feeling towards people of this religion
- 40 = A bit more cold / a bit more unfavorable feeling towards people of this religion
- 50 = No feeling at all towards people of this religion
- 60 = A bit more warm / a bit more favorable feeling towards people of this religion
- 70 = Fairly warm / fairly favorable feeling towards people of this religion
- 85 = Quite warm / quite favorable feeling towards people of this religion
- 100 = Very warm / very favorable feeling towards people of this religion

The numbers above are only examples. You may use any number from 0 to 100. For example, 23 would be a feeling in between quite cold and fairly cold; 87 would be a feeling in between fairly warm and quite warm. (If you choose not to answer any of these items, please leave the slider at the preset temperature [a temperature of 47].)

	0	10	20	30	40	50	60	70	80	90	100
Please rate how you feel about Christians.											
Please rate how you feel about Jews.											
Please rate how you feel about Muslims.											
Please rate how you feel about Buddhists.											

Please rate how you feel about Hindus.										
Please rate how you feel about Agnostics.										
Please rate how you feel about Atheists.										
Please rate how you feel about Wiccans.										
Please rate how you feel about Satanists.										

Lay Accounts

We would like more information on your responses to the items on the previous page. Listed below are your responses. In one or two sentences, please explain why you selected those specific numbers for your feeling ratings towards people of different religions.

Once again, here is the feeling thermometer used to select your responses.

- 0 = Very cold / very unfavorable feeling towards people of this religion
- 15 = Quite cold / quite unfavorable feeling towards people of this religion
- 30 = Fairly cold / fairly unfavorable feeling towards people of this religion
- 40 = A bit more cold / a bit more unfavorable feeling towards people of this religion
- 50 = No feeling at all towards people of this religion
- 60 = A bit more warm / a bit more favorable feeling towards people of this religion
- 70 = Fairly warm / fairly favorable feeling towards people of this religion
- 85 = Quite warm / quite favorable feeling towards people of this religion
- 100 = Very warm / very favorable feeling towards people of this religion

(If you choose not to answer a question, please write "I choose not to answer" in the space below.)

Your feeling towards Christians: A $\{q://QID81/ChoiceNumericEntryValue/1\}$ on the thermometer above.

In one or two sentences, please explain why you selected that specific number for your feeling rating towards Christians.

Your feeling towards Jews: A $\{q://QID81/ChoiceNumericEntryValue/3\}$ on the thermometer above.

In one or two sentences, please explain why you selected that specific number for your feeling rating towards Jews.

Your feeling towards Muslims: A $\{q://QID81/ChoiceNumericEntryValue/2\}$ on the thermometer above.

In one or two sentences, please explain why you selected that specific number for your feeling rating towards Muslims.

Your feeling towards Buddhists: A $\{q://QID81/ChoiceNumericEntryValue/4\}$ on the thermometer above.

In one or two sentences, please explain why you selected that specific number for your feeling rating towards Buddhists.

Your feeling towards Hindus: A $\{q://QID81/ChoiceNumericEntryValue/5\}$ on the thermometer above.

In one or two sentences, please explain why you selected that specific number for your feeling rating towards Hindus.

Your feeling towards Agnostics: A $\{q://QID81/ChoiceNumericEntryValue/9\}$ on the thermometer above.

In one or two sentences, please explain why you selected that specific number for your feeling rating towards Agnostics.

Your feeling towards Atheists: A $\{q://QID81/ChoiceNumericEntryValue/8\}$ on the thermometer above.

In one or two sentences, please explain why you selected that specific number for your feeling rating towards Atheists.

Your feeling towards Wiccans: A $\{q://QID81/ChoiceNumericEntryValue/6\}$ on the thermometer above.

In one or two sentences, please explain why you selected that specific number for your feeling rating towards Wiccans.

Your feeling towards Satanists: A $\{q://QID81/ChoiceNumericEntryValue/7\}$ on the thermometer above.

In one or two sentences, please explain why you selected that specific number for your feeling rating towards Satanists.

APPENDIX C

ADDITIONAL MEASURES FOR SECONDARY ANALYSIS

1. Demographics: age, gender, race, sexual orientation, romantic relationship status, education, employment status, income, political orientation, residency outside US (yes/no, location, time), US region (13 items)
2. Religious identification: level of religiosity, level of spirituality, frequency of formal services, frequency of informal activities, religion, religious denomination, transitions across religions, description of religious beliefs (7 items)
3. Revised Religious Life Inventory (24 items, Hills, Francis, & Robbins, 2005): 1) Extrinsic orientation (7 items, $\alpha = .76$), 2) Intrinsic orientation (9 items, $\alpha = .93$), 3) Quest orientation (8 items, $\alpha = .83$)
4. Measures of specific religiosity (given based on applicability; e.g., Hindu Religious Pathways only given to Hindus)
 - Christianity – Revised Religious Fundamentalism Scale (12 items, $\alpha = .92$, Altemeyer & Hunsberger, 2004)
 - Judaism – American Jewish Identity Scales (Friedlander et al., 2010): 1) Religious identification (18 items, $\alpha = .93$), 2) Cultural identification (15 items, $\alpha = .88$)
 - Islam – Psychological Measure of Islamic Religiousness (Abu-Raiya, Pargament, Mahoney, & Stein, 2008): 1) Islamic beliefs (5 items, $\alpha = .97$), 2) Islamic ethical principles & universality (14 items, $\alpha = .96$), 3) Islamic religious duty, obligation & exclusivism (12 items, $\alpha = .77$), 4) Islamic religious struggle (6 items, $\alpha = .90$), 5) Islamic positive religious coping & identification (14 items, $\alpha = .88$), 6) Punishing Allah reappraisal (3 items, $\alpha = .77$), 7) Islamic religious conversion (6 items, $\alpha = .89$)
 - Hinduism – Hindu Religious Pathways (37 items, Tarakeshwar, Pargament, & Mahoney, 2003): 1) Path of devotion (24 items, $\alpha = .76$), 2) Path of knowledge (5 items, $\alpha = .83$), 3) Path of ethical action (4 items, $\alpha = .89$), 4) Path of yoga (4 items, α not provided)
 - None located for Buddhism, Wicca, Satanism, Atheism, or Agnosticism
5. Ten-Item Personality Inventory (Gosling, Rentfrow, & Swann, 2003): 1) Openness (2 items, $\alpha = .45$), 2) Conscientiousness (2 items, $\alpha = .50$), 3) Extraversion (2 items, $\alpha = .68$), 4) Agreeableness (2 items, $\alpha = .40$), 5) Neuroticism (2 items, $\alpha = .73$)
6. Satisfaction with Life Scale (5 items, $\alpha = .87$, Diener, Emmons, Larsen, & Griffin, 1985)
7. Acceptance of Stereotyping Questionnaire (12 items, $\alpha = .78$, Carter, Hall, Carney, & Rosip, 2006)
8. New Social Desirability Scale (10 items, $\alpha = .79$, Strahan & Gerbasi, 1972)
9. Need for Cognition Scale (18 items, $\alpha = .90$, Cacioppo, Petty, and Kao, 1984)
10. Short Schwartz's Value Survey (10 items, Lindeman & Verkasalo, 2005)
11. Interpersonal Reactivity Index (Davis, 1980): 1) Perspective taking (7 items, $\alpha = .75-.78$), 2) Empathic concern (7 items, $\alpha = .70-.72$)
12. Need for Affect Questionnaire (Appel, Gnambis, and Maio, 2012): 1) Approach (5 items, $\alpha = .82$), 2) Avoidance (5 items, $\alpha = .81$)
13. Interfaith Intolerance Scale (14 items; Crosby & Varela, 2014)

APPENDIX D

DESCRIPTIONS AND EXAMPLES OF CODES AND THEMES

Name	Description	Examples*
PRIMARY THEME: “I lack information about this religion.”		
Code 1. “I do not know a lot about this religion.”	Participants state they: (a) lack information on the religion, (b) know little to nothing about the religion, (c) acknowledge uncertainty about their knowledge of the religion.	1) “I don’t know much about this” 2) “as much as I know about Wiccans” 3) “not really sure what that is”
Code 1a. “I do not know the people.”	Participants state they: (a) do not know anyone of the religion, (b) have had little to no interaction with someone of the religion.	1) “I do not know any Satanists” 2) “I’ve never had any interaction with Wiccans” 3) “I have little experience with people from this background”
Code 1b. “I have not researched this religion.”	Participants state they: (a) have not studied or researched the religion.	1) “I’ve never studied them before” 2) “I have not studied them” 3) “I have not researched it”
Code 2. “I do not understand this religion.”	Participants state they: (a) do not understand the religion, (b) find the religion confusing.	1) “I don’t understand this religion” 2) “it is a confusing religion” 3) “I do not have a complete understanding”
Code 2a. [Lack of perspective-taking.]	Participants express (a) a difficulty with taking the perspective of people of the religion.	1) “I don’t understand how they can feel the way they do” 2) “not sure why anyone would want to worship the devil” 3) “how can you not believe in a higher power?”
PRIMARY THEME: “I have a problem with their beliefs.”		
Secondary Theme: “There are differences in our beliefs.”		
Code 1. “Our beliefs are different.”	Participants state: (a) there is a difference or little similarity between their beliefs and those of the other religion, (b) there is	1) “my beliefs are very different than Atheists” 2) “didn’t believe the same religiously” 3) “I feel little similarity with Wiccans”

	no match between their beliefs and those of the other religion.	
Code 1a. “Our belief are opposites.”	Participants state: (a) the beliefs of the other religions are opposite of, go against, are at odds with, are contradictory to, and an antithesis to their beliefs.	<ol style="list-style-type: none"> 1) “they are the opposite of what I believe” 2) “it goes against everything I believe in” 3) “completely at odds with Christianity”
Code 2. “They do not accept my beliefs.”	Participants state people of the religion: (a) are not Christian, (b) do not believe in their beliefs, (c) reject their beliefs. The specific issue is not provided.	<ol style="list-style-type: none"> 1) “they don’t believe like in Christianity” 2) “not my religion.” 3) “they do not believe like I do”
Code 2a. “They do not believe in God.”	Participants identify a specific problem with: (a) hating, defying, rejecting, rebuking, going against, or ignoring God, (b) not worshiping, serving, believing in, honoring, serving, following, or praying to God.	<ol style="list-style-type: none"> 1) “they deliberately go against God” 2) “don’t honor God of the bible” 3) “Atheists don’t believe in God”
Code 2b. “They do not believe in Jesus.”	Participants identify a specific problem with: (a) rejecting, being against, refusing to recognize, or hating Jesus/Christ, (b) not honoring or believing in Jesus/Christ.	<ol style="list-style-type: none"> 1) “they have chosen to reject our lord and Savior Jesus Christ” 2) “they don’t believe in Jesus.” 3) “they do not believe in the divinity of Jesus”
Code 2c. “They do not live by the Bible.”	Participants identify a specific problem with: (a) not following the Bible, (b) not following Christian laws or teachings.	<ol style="list-style-type: none"> 1) “they go against the Bible” 2) “do not follow God’s laws” 3) “are contrary to the teaching of Jesus Christ”
Code 2d. “They do not believe in creationism.”	Participants identify a specific problem with: (a) not believing in creationism.	<ol style="list-style-type: none"> 1) “creating each and everyone of us” 2) “that we just appeared from nothing” 3) “that created and formed humanity”
Code 3: “I do not accept their beliefs.”	Participant state they: (a) do not accept, agree with, support, condone, or like the religion or its beliefs, (b) have a problem	<ol style="list-style-type: none"> 1) “I don’t support the worship of a devil” 2) “I do not agree with the Muslim faith” 3) “I cannot condone any of it”

	with the religion of its beliefs. The specific issue is not provided.	
Code 3a. “I do not accept the worship of Satan.”	Participants identify a specific problem with: (a) worshipping, following, choosing, serving, studying, believing in, being a child of, or producing works of Satan/the Devil.	<ol style="list-style-type: none"> 1) “I believe Satan is evil” 2) “they openly worship a horrible fallen angel” 3) “they are choosing the devil”
Code 3b. “I do not accept the practice of witchcraft.”	Participants identify a specific problem with: (a) practicing, believing in, worshipping, or following witchcraft/spells/magic.	<ol style="list-style-type: none"> 1) “I do not agree with witchcraft” 2) “I heard they use spells on people” 3) “they practice black magic”
Code 3c. “I do not accept having no religion.”	Participants identify a specific problem with: (a) not believing in anything, (b) not having a religion.	<ol style="list-style-type: none"> 1) “I’m not sure how you can believe in nothing” 2) “not having a religion isn’t correct” 3) “I just question their non-beliefs”
Code 3d. “I do not accept being undecided.”	Participants identify a specific problem with: (a) being undecided, (b) having dual positions, (c) being uncertain.	<ol style="list-style-type: none"> 1) “they need to make up their minds” 2) “they have a wish-washy attitude” 3) “they just don’t know what to believe”
Code 3e. “I do not accept the worship of false gods.”	Participants identify a specific problem with: (a) worshiping or believing in false gods/idols/statues.	<ol style="list-style-type: none"> 1) “they worship false gods” 2) “Pagan idolaters” 3) “I do know that they have statues, which is wrong”
Code 3f. “I do not accept the worship of nature.”	Participants identify a specific problem with: (a) worshiping, praying to or believing in nature.	<ol style="list-style-type: none"> 1) “they pray to nature” 2) “I do not believe in any religion that believes that the world and I are one” 3) “but I think they worship nature”

Secondary Theme: “Their beliefs are questionable.”

Tertiary Theme: “Their beliefs are incorrect.”

Accordant Code. “Their beliefs are incorrect.”	Participants state the religion is: (a) incorrect or false, (b) a lie.	<ol style="list-style-type: none"> 1) “this is a false belief” 2) “Wicca can’t possibly be true” 3) “just a lie”
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Code 1. “They are misguided.”	Participants state people of the religion: (a) are misguided, mislead, or deceived.	1) “they are misguided” 2) “they are deceived” 3) “they are also sorely mislead”
Code 2. “They are ignorant.”	Participants state people of the religion: (a) lack information, (b) are ignorant, (c) don’t know, (d) lack a realization.	1) “they know not what they do” 2) “little religious knowledge that they have received” 3) “ignorance of God’s word”
Code 3. “They are stupid.”	Participants state people of the religion: (a) are stupid, foolish, or uneducated.	1) “uneducated people” 2) “stupidest thing you could do” 3) “only a fool would say”
Code 4. “They are disregarding evidence.”	Participants state people of the religion: (a) are disregarding evidence, (b) are close-minded to Christian beliefs.	1) “there is evidence of God” 2) “there is an overwhelming amount of scientific evidence that points toward the existence of a Higher being” 3) “there has been enough evidence of the presence of some form of God”

Tertiary Theme: “This is not a real religion.”

Accordant Code. “This is not a real religion.”	Participants state the religion is: (a) not a real religion, (b) it should not be called a religion. Participants use quotations.	1) “this is not a religion” 2) “it’s ridiculous to call it a religion” 3) “this “faith” is terrorizing”
Code 1. “It is a cult.”	Participants state the religion is: (a) a cult.	1) “that type of cult” 2) “nothing more than a violent, disturbed cult” 3) “Islam is a dangerous cult”
Code 2. “It is a rebellion.”	Participants state the religion is: (a) a rebellion against social norms, (b) a counterculture.	1) “melodramatic counterculture” 2) “rebellion from social norms” 3) “take delight in trying to shake things up”
Code 3. “It is man-made.”	Participants state the religion is: (a) made-up, (b) man-made.	1) “7 th century made up religion” 2) “I think it is made up” 3) “a man-made religion”
Code 4. “They just want attention.”	Participants state the religion is: (a) a mechanism for gaining attention or	1) “they are people who [...] draw attention to themselves” 2) “they are doing it for attention.”

	expressing drama.	3) “it just seems like such a dramatic thing”
Tertiary Theme: “Their religion is illogical.”		
Accordant Code. “Their religion is illogical.”	Participants state the religion is: (a) illogical or irrational, (b) non-sense.	1) “their God makes no sense” 2) “their logic is flawed” 3) “the rituals they perform is nonsense”
Tertiary Theme: [Questioning legitimacy.]		
Accordant Code. [Questioning legitimacy.]	Participants question the legitimacy of the religion by stating people of the other religion (a) do not truly believe in what they profess, (b) are in denial.	1) “they know there is something greater than they are” 2) “Satanists don’t really believe that they are worshipping Satan” 3) “Agnostics are just in denial”
Code 1. “They’ll convert”	Participants state the religion is: (a) temporary.	1) “there are no Atheists in fox holes and precious few in a cancer ward” 2) “most Atheists do not stay that way” 3) “a lot of them change their mind”
Code 2. [Expression of suspicions.]	Participants express doubts, suspicious, or skepticism they have of the religion.	1) “have strong doubts about Hinduism” 2) “seems a little suspect” 3) “I just question their non-beliefs”
PRIMARY THEME: “They provoke unpleasant emotions.”		
Code 1. “They make me anxious.”	Participants state people of the religion [or the religion itself]: (a) concern or alarm them, (b) make them uncomfortable, wary, guarded, or nervous.	1) “it’s just not what I am comfortable with” 2) “it seems unsafe for me sometimes to be around them” 3) “I feel nervous”
Code 2. “They scare me.”	Participants state people of the religion [or the religion itself]: (a) scare, terrify, frighten, or horrify them; (b) are creepy or freaky.	1) “scary” 2) “just creeps me out” 3) “these are truly people to fear”
Code 2a. “They are in danger.”	Participants state people of the religion [or the religion itself]: (a) practice in manners that invite spiritual danger, (b) invite evil	1) “they are dealing with a very dangerous and dark power” 2) “evil spirits are able to gain power through ignorance of God’s word”

Code 3. "They disgust me."	spirits. Participants state people of the religion [or the religion itself]: (a) disgust them.	3) "that's just bad juju" 1) "I am disgusted" 2) "they support disgusting [...] beliefs" 3) "I just can't stomach the idea"
Code 4. "They offend me."	<i>Participants state people of the religion [or the religion itself]: (a) offend or insults them.</i>	1) "their religion is offensive to my religion" 2) "it is insulting" 3) "very offensive"
Code 5. "They make me angry."	<i>Participants state people of the religion [or the religion itself]: (a) makes them angry, (b) frustrates or aggravates them.</i>	1) "it infuriates me" 2) "it does frustrate me" 3) "which is very aggravating to me"
PRIMARY THEME: "I have interpersonal concerns."		
Code 1: "I do not want to associate with them."	Participants state they: (a) do not want to associate or interact with people of the religion, (b) have the religion involved in their life, (c) are happy they do not know anyone of the religion, (d) are uninterested in the religion or its people.	1) "not interested in Muslims" 2) "I don't want to be associated with them" 3) "it is not someone I could care to be around"
Code 2: "I cannot relate to them."	Participants state they: (a) do not click, relate, (b) do not know how to interact with or treat people of the religion.	1) "I don't really click with them" 2) "I feel that I can't relate to Atheists much" 3) "I feel that I do not have that much in common and cannot relate that well"
Code 3. "I do not respect them."	Participants state they: (a) are unable to respect people of the religion, (b) do not deserve respect.	1) "I don't respect Agnostics" 2) "I cannot respect people who follow such practices" 3) "they deserve the least respect of all"
Code 4: "I do not trust them."	Participants state they: (a) are unable to trust people of the religion.	1) "I don't think I trust them" 2) "but I do not know if I really trust it" 3) "I would not trust a Wiccan"
Code 5. "They will try to convert me."	<i>Participants state people of other religions: (a) attempt to convert</i>	1) "they try to convince me that there is no God" 2) "try to get them to not believe in God"

participants to their religion, (b) try to convince participants to doubt or abandon their religion.

3) “all they've done is try and push their beliefs onto me”

PRIMARY THEME: “They are terrible people.”		
Accordant Code: “They are terrible people.”	Participants state people of the religion: (a) are terrible or horrible, (b) are scum, (c) stink.	1) “Muslims are terrible” 2) “this is a horrible religion to have” 3) “they stink”
Secondary Theme: “They are high in openness.”		
Code 1. “They are weird.”	Participants state people of the religion: (a) are weird, strange, different, abnormal, or odd.	1) “Wiccans are pretty strange” 2) “they are different” 3) “just seems abnormal”
Code 2. “They are crazy.”	Participants state people of the religion: (a) are crazy or nuts.	1) “crazy people.” 2) “they were nuts” 3) “this sounds crazy”
Secondary Theme: “They are high in conscientiousness.”		
Code 1. “They are skeptical.”	Participants state people of the religion: (a) are skeptical, cynical, require proof, use science.	1) “because I don’t like skeptics.” 2) “always try to say we can prove that” 3) “I strongly oppose nihilism and cynical tendencies”
Secondary Theme: “They are low in conscientiousness.”		
Code 1. “They are not trying.”	Participants state people of the religion: (a) are not trying to improve themselves.	1) “Atheists tend not to be trying to better themselves” 2) “I doubt it has anything to do with people trying to be their own best selves” 3) “I don’t think someone who is Satanist is trying to attain a peaceful happy life”
Secondary Theme: “They are low in agreeableness.”		
Tertiary Theme: “They are low in straightforwardness.”		
Code 1. “They are liars.”	Participants state people of the religion: (a) are liars, not genuine, not honest, (b) are scams.	1) “you don’t know which ones are honest” 2) “it isn’t genuine” 3) “they are whatever there beliefs are, scams”

<i>Tertiary Theme: “They are low in modesty.”</i>		
Code 1. “They are arrogant.”	Participants state people of the religion: (a) are arrogant or condescending, (b) cannot conceive of anything greater than themselves, (c) believe they have all the answers.	1) “I find them to be arrogant” 2) “they cannot conceive of anything greater than themselves” 3) “they think they have all the answers”
<i>Tertiary Theme: “They are low in altruism.”</i>		
Code 1. “They are annoying.”	Participants state people of the religion: (a) are annoying, off-putting, or abrasive.	1) “Atheists are more likely to be abrasive” 2) “kind of especially annoying” 3) “Muslims are a bit off-putting”
Code 2. “They are immoral.”	Participants state people of the religion: (a) are evil, immoral, not good, bad, corrupt, wicked, or dark, (b) are sinners are criminals.	1) “they are evil people” 2) “they are sinner” 3) “I makes me feel like their morals are bad”
Code 3. “They are mean.”	Participants state people of the religion: (a) are mean, cruel, nasty, not nice, hard-hearted, vile, or lack warmth, (b) are dicks or jerks.	1) “very cruel religion” 2) “were not nice people” 3) “they are generally dicks”
Code 4. “They are intolerant.”	Participants state people of the religion: (a) are intolerant, hateful, or discriminatory. The target is unspecified.	1) “Too much hate in the world” 2) “their religion is about [...] discrimination” 3) “they tend to be close-minded”
Code 4a. “They are intolerant towards Christians.”	Participants state people of the religion: (a) are intolerant, hateful, or discriminatory towards Christians or Christianity.	1) “have a grudge against Christians” 2) “hatred towards [...] Christians” 3) “looks at Christianity negatively”
Code 4b. “They are intolerant towards people of other religions.”	Participants state people of the religion: (a) are intolerant, hateful, or discriminatory towards people of other religions. Christians are a different code.	1) “I feel they just don’t like other religions” 2) “most intolerant of those who are religious” 3) “we have to live in tolerance of other’s beliefs and they are incapable of that”

Code 4c. “They are intolerant towards Americans.”	Participants state people of the religion: (a) are intolerant, hateful, or discriminatory towards Americans.	1) “they don’t like Americans” 2) “many of them hate Americans” 3) “they do not like Americans”
Code 5. “They are self-absorbed.”	Participants state people of the religion: (a) are self-absorbed, self-centered, selfish, all about themselves, or egocentric.	1) “all Muslims that I have met to be self-serving, self-centered people” 2) “agnostics are all about themselves” 3) “they’re pretty self-absorbed”

Tertiary Theme: “They are low in compliance.”

Code 1. “They are stubborn.”	Participants state people of the religion: (a) are stubborn, set in their ways, or dogmatic.	1) “Atheists are so dogmatic” 2) “they’re so set in their ways” 3) “that they risk becoming dogmatic”
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Quaternary Theme: “They are harmful to society.”

Accordant Code “They are harmful to society.”	Participants state people of the religion: (a) have caused problems, (b) want the worst for others, (c) make society worse.	1) “that is not what we need” 2) “caused nothing but problems” 3) “upends the balance between good and evil”
Code 1. “They cause chaos.”	Participants state people of the religion: (a) cause chaos, (b) cause conflict, (c) encourage destruction.	1) “in a society of even more chaos” 2) “destroying relationships or communities” 3) “encourage [...] destruction”
Code 2. “They hurt people.”	Participants state people of the religion: (a) are violent, (b) kill others, (c) use religion as a weapon, (d) emphasize death for others, (e) hurt others.	1) “they want to kill” 2) “their religion is about death” 3) “they try to hurt others”
Code 2a. “They mistreat women.”	Participants state people of the religion: (a) hurt, harm, repress, or mistreat women; (b) are misogynistic.	1) “the way they treat women is disgusting” 2) “they are also particularly anti-women” 3) “women are treated as property”
Code 2b. “They mistreat children.”	Participants state people of the religion: (a) hurt, harm, or mistreat children.	1) “they have sex with these children” 2) “they molest boys” 3) “created by a pedophile”
Code 3. “They are	Participants state people of the religion:	1) “because of their terrorism acts”

terrorists.”	(a) are terrorists. There is a reference to terrorism.	2) “Muslims hijack planes and blow up buildings.” 3) “to enact their jihad”
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Secondary Theme: “They are high in neuroticism.”

Code 1. “They are angry.”	Participants state people of the religion: (a) are angry.	1) “Agnostics are very often angry people” 2) “I don’t like the Atheists that are angry” 3) “most Atheists are either young people or angry people”
Code 2. “They are indulgent.”	Participants state people of the religion: (a) indulge in their desires.	1) “they [...]promote self-indulgence” 2) “they are using it as an excuse or method of doing things they are tempted to do” 3) “Atheists want to live the life they want without guilt”
Code 3. “They are sad.”	Participants state people of the religion: (a) are sad, hurt, negative, or pessimistic.	1) “Atheists have been hurt deeply in some way” 2) “because is very sad not to believe in anything” 3) “this is a very negative outlook”
Code 4: “They are extreme.”	Participants state people of the religion: (a) are extreme, radical, or fanatic.	1) “Muslims are a little extreme” 2) “they are way too radical” 3) “they have a tendency to be fanatics”

Italicized codes are those identified through the analysis of the PY101 students.

* Each of the examples are the applicable excerpts from complete explanations provided by participants.