DOES OUR PERCEPTION OF GOD INFLUENCE OUR PERCEPTION
OF SUBJECTIVELY “SINFUL” BEHAVIORS?

by

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ABSTRACT

DOES OUR PERCEPTION OF GOD INFLUENCE OUR PERCEPTION OF SUBJECTIVELY “SINFUL” BEHAVIORS?

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The current study investigated the influence of different perceptions of God (i.e., loving vs. punishing) on participants’ attitudes towards subjectively “sinful” behaviors. Participants in the current study were 158 undergraduate students from The University of Texas at Arlington. Participants were instructed to complete the sentence scrambling task (Srull & Wyer, 1979), which was intended to prime them with different images of God. Once they completed the priming task, each participant filled out a questionnaire, which assessed their attitudes towards subjectively “immoral” behaviors. The results showed that regardless of the valence in each sentence, participants who were primed with the presence of God reported less prejudiced attitudes than those who were primed with sentences that excluded the presence of another figure. It was further discovered that participants with a loving baseline image of God were more intolerant of those same behaviors. Potential explanations for this paradoxical set of findings are discussed.
TABLE OF CONTENTS

ACKNOWLEDGEMENTS ................................................................................................................iii

ABSTRACT ..................................................................................................................................... iv

LIST OF TABLES ............................................................................................................................vii

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. INTRODUCTION.................................................................</td>
<td>1</td>
</tr>
<tr>
<td>1.1 Studying People’s Perception of God ....................</td>
<td>2</td>
</tr>
<tr>
<td>1.2 Attitudes toward God and Religion May be Linked to Both Prosocial and Prejudiced Responses</td>
<td>3</td>
</tr>
<tr>
<td>1.3 Effects of Religious Priming May be Explained by the Accessibility Heuristic</td>
<td>6</td>
</tr>
<tr>
<td>1.4 The Current Study ................................................</td>
<td>7</td>
</tr>
<tr>
<td>1.5 Theoretical and Practical Implications of this Research</td>
<td>11</td>
</tr>
<tr>
<td>2. METHOD..................................................................................</td>
<td>13</td>
</tr>
<tr>
<td>2.1 Participants.................................................................</td>
<td>13</td>
</tr>
<tr>
<td>2.2 Materials.........................................................................</td>
<td>13</td>
</tr>
<tr>
<td>2.3 Procedure..........................................................................</td>
<td>15</td>
</tr>
<tr>
<td>3. RESULTS...............................................................................</td>
<td>17</td>
</tr>
<tr>
<td>3.1 Descriptive Statistics ..............................................</td>
<td>17</td>
</tr>
<tr>
<td>3.2 Analysis of Attitude Questionnaire ....................</td>
<td>17</td>
</tr>
<tr>
<td>3.3 Testing the Research Hypotheses .......................</td>
<td>18</td>
</tr>
<tr>
<td>4. DISCUSSION........................................................................</td>
<td>25</td>
</tr>
<tr>
<td>4.1 Limitations of Current Study ..................................</td>
<td>29</td>
</tr>
<tr>
<td>4.2 Future Directions.......................................................</td>
<td>29</td>
</tr>
</tbody>
</table>
## LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 Descriptive Statistics for Personality Variables</td>
<td>17</td>
</tr>
<tr>
<td>3.2 Source Table for Analysis of Variance (ANOVA)</td>
<td>19</td>
</tr>
<tr>
<td>3.3 Contribution of the Controlling God Index, Presence, Valence, and the Interactions Between Them</td>
<td>21</td>
</tr>
<tr>
<td>3.4 Contribution the Loving God Index, Presence, Valence, and the Interactions Between Them</td>
<td>22</td>
</tr>
<tr>
<td>3.5 Contribution of the Conventional Morality Scale, Presence, Valence, and the Interactions Between Them</td>
<td>24</td>
</tr>
</tbody>
</table>
CHAPTER 1
INTRODUCTION

Since its inception, organized religion has significantly influenced the way we interpret and interact with the world around us (Hunsberger & Jackson, 2005). Not only has religion played a role in shaping our thoughts and emotions (Maehr, 2005), but it has also influenced the extent to which we exercise control over our own behaviors through self-control and self-regulation (Baumeister, 2005; Evans, 2005; McCullough & Willoughby, 2009). Under the assumption that we exert free will over our actions, the Judeo-Christian view of religion has always encouraged people to behave in morally appropriate ways, and has discouraged them from engaging in behaviors that are considered sinful (Baumeister, 2005).

According to the Judeo-Christian view of religion, behaving in moral/non-sinful ways involves following the Ten Commandments and avoiding the Seven Deadly Sins (Baumeister & Exline, 1999; Tooke & Ickes, 1988). There are other behaviors/lifestyle styles, however, whose status as sinful or moral are less explicitly defined and allow for more subjective interpretations (e.g., homosexuality, unwed single motherhood). The variation in these interpretations reflects the fact that there is no consensus on the degree to which these behaviors/lifestyle styles should be regarded as sinful. What is sinful to one person may be completely reasonable to someone else; it all depends on their individual perspectives.

The purpose of the current study is to examine one of the potential influences that define these individual perspectives. More specifically, this study will examine the question of whether having a particular image of God (i.e., as loving vs. punishing) influences an individual's attitudes towards the more subjectively "sinful" behaviors.

Although behaviors that are classified as sinful vary from one moral perspective to another, they still tend to be described in similar ways. It has been suggested that all forms of
deviant and sinful behaviors can be explained by a lack (or a failure) of self-control (Baumeister & Exline, 1999; Hirschi & Gottfredson, 1994). In other words, people engage in "sinful" behaviors because they are unable to control their own impulses. But if sinful behaviors involve a lack of self-control, then what motivates people to engage in morally appropriate behaviors? According to most religions, this motivation stems from people's belief that God rewards moral behavior, while at the same time punishing immoral behavior (Jackson & Esses, 1997).

This viewpoint suggests that our interpretation of God's judgment of our actions as either moral or immoral can motivate us to behave in morally appropriate ways. However, if God can be viewed as either a loving or a punishing figure, then what influences our individual perceptions of God? Furthermore, to what extent do our perceptions of God influence our attitudes toward the more subjectively "sinful" behaviors?

1.1 Studying People's Perceptions of God

Benson and Spilka (1973) were among the first researchers to create a reliable and valid measure of people's perceptions of God. Their measure contains two subscales, the Loving and Controlling God Scales, which measure the tendency to see God as primarily loving and forgiving or as primarily stern and unforgiving. One of Benson and Spilka's major findings concerned their participants' self-esteem. Specifically, they found that participants who had a loving image of God (i.e., as accepting, forgiving, approving) tended to have higher self-esteem than those who viewed God as controlling (i.e., as strict, demanding, restricting).

More recently, Greenway, Milne, and Clarke (2003) studied whether specific perceptions of God were related to different personality variables. Their findings complemented those reported by Benson and Spilka (1973). They found that, for both men and women, the participants who scored high on measures of self-esteem tended to see God as loving and caring, whereas those who had more self-doubt, feelings of depression, and low self-esteem were more likely to have a punitive and neglecting image of God.
In another area of research, people's perceptions of God have been related to attachment theory. According to Kirkpatrick and Shaver (1992), the way people relate to God is no different than the way they relate to any other relationship partner. In support of this view, Kirkpatrick and Shaver found that participants who had a loving and responsive attachment towards their romantic partners felt the same kind of loving relationship with God. These feelings of attachment are presumed to originate in one's childhood experience, consistent with Bowlby's (1973) original statement of attachment theory. He proposed that children develop expectations towards their caregivers based on how consistently their needs have been met. These expectations then influence the extent to which the individual believes that other caregivers can be trusted and counted on in the future (see Hazan & Shaver, 1987, for a theoretical elaboration).

1.2 Attitudes toward God and Religion May be Linked to Both Prosocial and Prejudiced Responses

If one's image of God image can be linked both to one's self-esteem and to the type of attachment one feels towards romantic partners, it is possible that it can be linked to one's attitudes toward the more ambiguously "sinful" behaviors as well. Self-esteem and attachment are similar in that they both reflect positive or negative attitudes: these attitudes occur in regard to the self in the case of self-esteem, and in regard to others in the case of attachment style. If one's perceptions of God influence both self-perception and other-perception, they might also influence one's perceptions of whether or not certain behaviors and/or lifestyle preferences that other people display are regarded as "sinful" or not.

In the proposed study, I plan to examine this link by priming participants with specific images of God and then testing to see whether these primed images influence their subsequent attitudes towards individuals who engage in some of the more ambiguously "sinful" behaviors/lifestyles. Although a relationship between God image and prejudiced attitudes has not yet been established, a number of studies have examined the influence of religion/God image on prosocial behavior. In contrast to prejudiced attitudes, which are usually defined as
negative affective reactions towards a particular outgroup (Brewer & Brown, 1998) that tend to occur in the absence of empathic perspective taking (Eisenberg & Eggum, 2008), prosocial attitudes are typically associated with helpful intentions directed towards others (Eisenberg & Eggum, 2008).

Although prosocial and prejudiced attitudes can often occur independent of each other, the connection they share with empathy allows an indirect relationship to exist between them. Therefore, evidence that aspects of religious belief have an influence on prosocial attitudes suggests that they might also have an influence on prejudiced attitudes toward morally ambiguous behaviors and the groups who display them.

*Religious primes and altruistic responding.* In a study conducted by Pichon, Boccato, and Saroglou (2007), participants performed a lexical decision task that required them to decide whether different strings of letters that appeared on a screen were actual words or not. Each letter sequence was preceded by one of four subliminal primes: positive religious words (e.g., *heaven, salvation, and prayer*), neutral religious words (e.g., *bible, chapel, genesis*), non-religious positive words (e.g., *amusement, smile, flower*), or non-religious neutral words (e.g., *cloud, shirt, ladder*). When the participants left the laboratory, they were each given an opportunity to take as many charity pamphlets as they wanted, with the purpose of redistributing them later on. The results revealed that participants who were primed with positive religious words were more likely to behave prosocially by taking more charity pamphlets at the end of the study than were participants who were primed with either non-religious positive words or with neutral religious/non-religious words. Therefore, priming the participants to think about religion in a positive way was enough to place them in an altruistic state of mind, and to actually act in a manner consistent with the association that had just been primed.

Similar results were reported by Shariff and Norenzayan (2007), who used implicit primes to influence prosocial behavior. This study implemented the scrambled sentence paradigm (Srull & Wyer, 1979), which required participants to unscramble a series of five-word
sentences by removing one word and re-arranging the other four. One of the words in each sentence was meant to serve as the prime. Participants were either primed with God-related concepts (e.g., spirit, God, divine, prophet, sacred), secular words related to morality (e.g., jury, police, civic, contract), or were not primed at all through the use of neutral, non-moral words (no examples were included in the article).

During the following task, participants played an economic decision game against a confederate, which required them to regulate the dispersion of 10 one-dollar coins. They had the freedom to keep as many coins as they wanted, and to donate any left-over coins to the confederate. Consistent with the previous findings on the effects of religion and prosocial behavior (e.g., Pichon, Boccato, & Saroglou, 2007), the results showed that the participants who were primed with God-related concepts were more likely to behave unselfishly by giving more money to the confederate than were the participants who were primed with secular words related to morality or the participants who received no prime at all.

In summary, previous studies have shown that priming participants with either the positive side of religion or with God as a neutral entity led them to display more altruistic attitudes and behaviors. Although no studies have specifically examined the relationship between having a negative perception of God and prejudice toward others, a recent study by Bushman et al. (2007) did examine the effects of religious-sanctioned violence on aggression. Bushman et al. (2007) had participants read a violent passage, which they believed was taken either from the Bible or from an ancient scroll. The passage described a man seeking revenge over a mob from another tribe that raped and murdered his wife. In one version of the passage, the man and his comrades decided to take action by killing everyone in the other tribe. In the other version of the passage, it was God who commanded them to take revenge over the other tribe by killing all of its members.

After reading the assigned passage, the participants were given an opportunity to act aggressively by making a confederate listen to a loud blast of noise. The results of this study
showed that regardless of whether or not participants believed in God, they were more likely to act aggressively towards the confederate when they believed that the passage originated from the Bible or when the violent passage they read was sanctioned by God, compared to those who believed the passage originated from a non-religious source or when the violence was not sanctioned by God. These results suggest that simply reading a description of God as a wrathful, vengeful figure who sanctioned violence towards sinners was enough to influence the participants’ willingness to behave aggressively on a subsequent task.

Given this finding, it is reasonable to ask whether priming participants to think about God as a wrathful figure is sufficient to evoke a prejudiced attitude toward the ambiguously immoral behaviors of groups such as homosexuals, unwed single mothers, and drug users. If these behaviors are indeed "ambiguously immoral," then priming an image of God as loving and forgiving may evoke a more tolerant attitude toward these behaviors than priming an image of God as stern and unforgiving.

1.3 Effects of Religious Priming May be Explained by the Accessibility Heuristic

According to Tversky and Kahneman (1973, 1974), people tend to rely on information that has recently been encoded when making subjective judgments about events as well as other people (i.e., the accessibility heuristic). The accessibility of different constructs becomes particularly influential when making interpretations of ambiguous stimuli (Higgins, Rholes, & Jones, 1977; Srull & Wyer, 1979; Southwick, Steele, & Lindell, 1986). Research has shown that through different forms of priming, specific constructs that are made accessible (and re-activated through repetitive primes) can temporarily influence participants’ judgments on subsequent tasks.

In one such study, Srull and Wyer (1979) used a sentence scrambling task to prime participants with traits related to hostility or kindness. Immediately following the priming procedure, participants were instructed to rate the ambiguous behaviors of a fictitious target on a variety of trait dimensions. The results showed that, following the priming task, the traits of
hostility and kindness became more accessible, enabling these trait dimensions to temporarily influence the judgments made about the ambiguous stimuli. In other words, participants in the hostility (or kindness) condition interpreted the behaviors displayed by the fictitious target to be more hostile (or kind) because of the increased accessibility of that trait.

Similar findings have been reported in other studies examining the effects of priming on accessibility in relation to social dominance orientation (Huang & Liu, 2005), political positions (Bryan et al., 2009), sexist attitudes (Rudman & Borgida, 1995), the media (Domke, Shah, & Wackman, 1998), and as previously discussed, altruistic behavior (Pichon, Boccato, & Saroglou, 2007; Shariff & Norenzayan, 2007), and aggression (Bushman et al., 2007). Although the constructs of interest in these studies were relatively stable in each participant’s self-concept, the act of priming the different endpoints of those constructs still had the ability to temporarily influence participants’ subsequent judgments. The goal of the current study is to determine whether a similar relationship exists between the accessibility of different God images (i.e., loving and punishing) and its influence on the interpretation of “subjective morality” items.

1.4 The Current Study

To determine whether making a particular image of God more accessible has the ability to influence the expression of attitudes towards subjectively sinful behaviors/life styles, the current study randomly assigned participants into one of nine priming conditions. These conditions were structured using a 3 x 3 design based on the independent variables that were labeled Presence (presence of God, presence of other, no presence) and Valence (positive, negative, neutral). In each condition, the participants were required to unscramble a series of 4-6 word sentences by dropping one unrelated word and re-arranging the rest to form a grammatical sentence. In the first three conditions, the unscrambled sentences primed participants to see God as either (1) loving (e.g., God forgives everyone), (2) punishing (e.g., God punishes sinners), or (3) as a neutral entity (e.g., God observes mankind).
The following three conditions were included to determine whether primes associated with God resulted in significantly different influences than ones associated with another human being. In other words, if the presence of God is replaced with another human being, will the concepts of love and punishment be as influential on participants’ subsequent attitudes? Participants that were randomly assigned to these conditions were, therefore, primed with a fictitious human being named Morgan who was either seen as a (4) loving (e.g., Morgan is loving and forgiving), (5) punishing (e.g., Morgan is often vengeful), or (6) neutral person (e.g., Morgan is an objective judge).

To control for the fact that the loving and punishing conditions (for both God and Morgan) specifically included the presence of another entity/figure, the next two conditions (7 and 8) were intended to prime participants in either a positive or a negative way without any reference to God or another specific human being (e.g., Everyone is good at heart and Most people have bad intentions). Therefore, if the presence of a specific loving/punishing figure is truly influencing the way in which participants are expressing their attitudes towards ambiguous stimuli, being primed with a loving or punishing entity/figure should result in significantly different attitudes than when generically being primed in a positive or negative way but without the presence of anyone specific. Finally, to control for the positive/negative valence in these last two conditions, the final condition (9) included sentences that were neutral with respect to emotion (e.g., Clouds form in the sky).

As my first and most central hypothesis, I predicted that participants who were primed with a controlling (i.e., punishing) image of God would express more negatively prejudiced attitudes than those who were primed to see God as a loving figure. As a response to the "subjective morality" of the behaviors/life styles in question, greater acceptance and tolerance should characterize the participants who see God as loving and caring, whereas greater rejection and intolerance should characterize the participants who see God as controlling and punishing. In other words, I expected that the accessibility of these associations would
temporarily influence the interpretation of the subjective behaviors/life styles to which the participants were asked to respond.

In an extension of the first hypothesis, I predicted that the degree to which priming God images would influence participants’ subsequent attitudes would vary according to the participants' baseline (i.e., longer-term) perceptions of God. Although participants who were primed with a punishing image of God were still expected to report more prejudiced attitudes than those in the loving God condition, this difference was expected to be stronger for participants whose baseline tendency was to view God as punitive. Similarly, when being primed with a loving image of God, participants whose baseline tendency was to view God as forgiving should report less prejudiced attitudes than those with a punishing baseline measure. In summary, being primed with an image of God that was consistent with one’s “baseline image” should have strengthened the cognitive association that was made with that particular prime, as well as the influence of that prime over participants’ reported attitudes.

There was at least one empirical precedent for making this prediction. Specifically, the results of Bushman et al.'s (2007) study on the effects of religious/non-religious violent primes on aggression showed that when participants were primed with a violent passage, which they believed originated from the Bible or when the violence was sanctioned by God, they displayed more aggression on a subsequent task than those who believed the passage originated from an ancient (non-religious) source or when the violence was not sanctioned by God. Although these effects were stronger for those who believed in God and the Bible, participants who were classified as non-believers were still able to make a cognitive association between religious/God-sanctioned violence and aggression, which influenced their subsequent behaviors. In other words, not having any religious beliefs did not prevent these individuals from being influenced by religious primes. The only difference was that the accessibility of religious/God-sanctioned aggression in believers was strengthened by similar associations that were made in their past. In the case of the proposed study, God primes that were consistent
with participants’ baseline images were expected to have stronger influences on their reported attitudes, although participants who were primed with images that conflicted with their baseline measures should have still been influenced in the predicted direction.

As my second hypothesis, I predicted that participants who were primed to see God as controlling (i.e., punishing) would be more likely to express prejudiced attitudes when compared to those who were merely primed with negative-valenced sentences. Being primed with a punishing image of God was expected to result in a stronger cognitive association between subjectively sinful behaviors and prejudiced attitudes than with primes that were merely negative. This hypothesis is supported by the results of Bushman et al.’s (2007) study, which found that aggressive behavior was more likely to result from being primed with religious sanctioned violence than violence from a non-religious source. In other words, being primed with a punishing image of God was a more influential prime than regular non-religious violence. As a result, being primed with a punishing image of God should have a greater influence on participants’ subsequent prejudiced attitudes than negatively-valenced, non-religious primes in the current study.

As my third hypothesis, I predicted that participants who were primed with a loving image of God would express less prejudiced attitudes than those who were merely primed with positively-valenced sentences. Because of the previously established link between positive primes of religion/God and prosocial behavior (e.g., Pichon, Boccato, & Saroglou, 2007; Shariff and Norenzayan, 2007), being primed with a loving and caring image of God should have resulted in significantly more accepting and less prejudiced attitudes than being primed with positively-valenced but non-religious sentences. The association made between a loving image of God and prosocial behavior was expected to result in more tolerant and accepting attitudes towards subjectively sinful behaviors than that resulting from being primed in a positive but non-religious way.
Finally, in my fourth hypothesis, I predicted that participants with high scores on the Conventional Morality Scale (CMS; Tooke & Ickes, 1988) would be more likely to express prejudiced attitudes, as compared to those who do not adhere to conventional moral values. Although items on the CMS have few directly religious connotations, they are still disguised measures of the participants’ tendency to obey the Ten Commandments and to avoid the Seven Deadly Sins. Accordingly, when compared to participants with low scores on this scale, those who strongly adhere to conventional moral values should have higher standards for what behaviors and lifestyle preferences they consider to be moral versus immoral. Given this difference, participants with higher conventional morality scores should be more likely to interpret subjectively “sinful” behaviors as immoral, whereas those with lower scores were expected to be more tolerant and accepting of these behaviors.

1.5 Theoretical and Practical Implications of this Research

What would be the benefit of discovering that priming participants with a particular image of God can directly influence their subsequent attitudes? From a theoretical point of view, knowing that our positive and negative perceptions of God can be made more accessible and affect the temporary evaluation of ambiguous stimuli, it would extend what we currently know about the effects of religious primes, by potentially revealing that images of God have the same effects as other primed constructs/concepts. If, however, the effects of the religious primes in the proposed study are different than those observed in previous research (i.e., consistent with the accessibility heuristic) in which different constructs/concepts have been primed, it might indicate that our attitudes towards subjectively “sinful” behaviors are better predicted by our stable, longer-term perceptions of God.

From a practical/applied point of view, evidence that people’s attitudes are susceptible to the short-term influences of different primed images of God is both a frightening and reassuring thought, depending on which image (loving or punitive) is primed. Moreover, if a series of God-related primes is sufficient to temporarily influence attitudes within a 30-minute
laboratory session, what kind of influence would result from repeated exposure to similar primes within the day-to-day practice of one’s own religion? If people are taught to fear a punitive God who punishes immoral behavior, and are reminded of this fact on a regular basis (i.e., repetitive priming), how would this influence their interactions and judgments of other people in their everyday lives?

Given the fact that discrimination is well predicted by prejudice (Dovidio et al., 1996), and that repetitive priming increases the accessibility and use of different traits on subsequent ambiguous judgments (Srull & Wyer, 1979), is it possible that the constant reminder of a punishing God will increase the chances of condoning, or even engaging in, religious-sanctioned violence? If people are constantly reminded of the fact that God will punish immoral behavior, they may be more likely to interpret the ambiguous behaviors displayed by others more negatively, which may eventually lead to outright discrimination/violence, if placed in the right situation.

On the other hand, can the simple act of priming people to think of God as a loving figure within one’s religion influence their tolerance, acceptance, and respect of other people they encounter? Furthermore, would a religion that emphasizes a loving God influence people to engage in more prosocial activities (e.g., volunteer work, giving to charities/homeless people, general altruistic behavior) to help their fellow man, despite their previous lifestyle preferences? These are all interesting and important questions that unfortunately, are beyond the scope of this study. The current proposal is intended to be only a first step toward achieving a better understanding the potential short-term impact of our perceptions of God on subjectively “sinful” behaviors. The importance of these broader questions should, however, demonstrate the value of conducting this research.
CHAPTER 2

METHOD

2.1 Participants

Participants in the current study were 158 undergraduate students (114 females, 44 males) enrolled in introductory-level psychology courses at the University of Texas at Arlington. The participants were allowed to vary freely in their gender, age, ethnicity, and religious affiliation (30% Catholic, 29% Non-Denominational, 21% Protestant, 20% Other). Prior completion of the departmental pretest and having a belief in God were the only eligibility requirements. During the on-line pretesting, the participants completed the Loving and Controlling God Scales (Benson & Spilka, 1973), the Conventional Morality Scale (Tooke & Ickes, 1988), and indicated their religious affiliation. Eligible participants were then recruited to come into the laboratory by means of the Experiment Management System (Sona Systems; Fidler, 1997) made available to them through their classes. All participants were either compensated with the experimental credit required in their introductory psychology courses, or with extra credit points that counted toward their total class points in their other introductory-level classes.

2.2 Materials

To obtain baselines measures of their image of God, all eligible participants completed the Loving and Controlling God Image Scales (Benson & Spilka, 1973) on the on-line departmental pretest. This scale contained 10 items that were self-rated on a 7-point Likert scale (see Appendix A). Each item consisted of two adjectives on opposite poles that represented different possible images of God. The participants' scores on one half of the adjective pairs was used to calculate a Loving God index (e.g., rejecting-accepting, hating-loving), whereas their scores on the other half of the adjective pairs was used to calculate a
Controlling God index (e.g., strict-lenient, restricting-freeing). Benson and Spilka (1973) reported a reliability coefficient of 0.72 for the Loving God Scale and 0.60 for the Controlling God Scale.

Another baseline measure included on the online departmental pretest was the Conventional Morality Scale (Tooke & Ickes, 1988). This scale contained 45 items that measured the extent to which one adheres to conventional moral/ethical values. Although the items included in this measure were intended to reflect the respondents' tendency to obey the Ten Commandments and to avoid the Seven Deadly Sins, these items were "disguised" to appear as lifestyle preference items that minimally conveyed any religious connotations (see Appendix B). Each item was self-rated on a 5-point Likert scale that ranged from 1 (extremely uncharacteristic of me) to 5 (extremely characteristic of me). This scale was reported to have an internal consistency score of .88 for a mixed-sex sample of 503 participants (see Tooke & Ickes, 1988, who also report considerable evidence for the scale's construct validity). Examples of items on this measure included “There are people in this world I would kill if I thought I could get away with it,” “I believe that if something feels good and is pleasurable, you should do it as much as you want,” and “I like to control other people’s behavior as much as I can.”

During the experimental phase of the study, all participants were primed using the scrambled sentence paradigm (Srull & Wyer, 1979). Each prime consisted of a 4-6 word sentence that had been scrambled (see Appendix C for a list of primes in each condition). Participants were required to unscramble each sentence by removing one word that was unrelated, and re-arranging the rest. To ensure that the primes remained salient from the time they were activated to the point when participants reported their attitudes, this study followed a procedure that was similar to one of the conditions outlined by Srull and Wyer (1979). Specifically, each participant was instructed to unscramble 30 sentences, 24 of which (80%) represented the appropriate prime in each condition. The other six sentences (20%) were neutral relative to emotion, and did not make any references to God or any other specific figure.
(e.g., *Clouds form in the sky*). The same six neutral sentences were used in each priming condition.

Following the priming task, participants were instructed to complete a 36-item attitude scale (Appendix D). The items on this scale were designed to measure attitudes towards selected group members whose behaviors/life styles are considered deviant or sinful to some, but not all, people (e.g., homosexuals, unwed single mothers). Each item response was scored in a five-point Likert scale format, ranging from 1 (Strongly disagree) to 5 (Strongly agree). High scores indicated the presence of judgmental and rejecting attitudes toward those group members, whereas low scores signified a greater acceptance and tolerance of those group members. Examples of items in this scale included “The idea of homosexual marriages seems ridiculous to me,” “Unwed mothers are people who let their own selfish needs result in a child that wasn't planned for,” “People who abort their unborn child have no respect for human life,” and “Expressing one's sexuality with more than one partner is fine as long as it is done openly and without deception.”

2.3 Procedure

When participants entered the laboratory, they were first asked to complete the priming task, which was presented as a timed cognitive ability task. Their instructions were to unscramble a series of 4-6 word sentences by removing one word that did not belong, and then re-arranging the other words in a coherent way. To determine whether the primes were re-arranged correctly, participants were instructed to write down each unscrambled sentence in the space provided on their form. The experimenter then explained that although the session would be timed, the participants should not rush through the task. They were instructed to take their time, and to be as accurate as possible when unscrambling each sentence. The experimenter then placed an electronic timer in front of them, started the timer, and left the room.

Once the sentence scrambling task has been completed, each participant was instructed to fill out the 36-item attitude questionnaire. To prevent the participants from making a
connection between the attitude questions and the priming task, this phase of the study was conducted by a research assistant who posed as another experimenter. Once the participants have completed the attitude items, they were fully debriefed and thanked for their time. They were also asked not to discuss the study with other students in their classes, to prevent any future participants from having any knowledge of the true nature of the experiment.
CHAPTER 3

RESULTS

3.1 Descriptive Statistics

An examination of the descriptive statistics for participants’ scores on the Loving God index, Controlling God index, and Conventional Morality Scale revealed that their baseline scores for perceiving God as a loving figure were negatively skewed (see Table 3.1 for descriptive statistics). In an attempt to normalize this distribution, each participant’s score on the Loving God index was transformed by being subtracted from a constant (to ensure that it was not smaller than a value of 1), and then calculating the inverse of the new value. This normalizing attempt was successful, as evidenced by a new skewness value of 0.07 for the transformed Loving God index.

Table 3.1 Descriptive Statistics for Personality Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loving God index</td>
<td>26.83</td>
<td>4.41</td>
<td>-1.73</td>
<td>2.56</td>
</tr>
<tr>
<td>Loving God index (transformed)</td>
<td>0.57</td>
<td>0.40</td>
<td>0.07</td>
<td>-1.86</td>
</tr>
<tr>
<td>Controlling God index</td>
<td>12.52</td>
<td>5.39</td>
<td>-0.48</td>
<td>0.15</td>
</tr>
<tr>
<td>Conventional Morality Scale</td>
<td>161.49</td>
<td>20.13</td>
<td>0.22</td>
<td>0.23</td>
</tr>
</tbody>
</table>

3.2 Analysis of Attitude Questionnaire

Because the attitude questionnaire was specially constructed for use in the current study, a varimax factor analysis was conducted to determine how to interpret its 36 items. Although 11 factors were extracted from this analysis, the Cronbach’s alpha of .86 also
indicated that the questionnaire had strong internal consistency. Therefore, it was decided to treat the 36 items of this questionnaire as a single common factor.

3.3 Testing the Research Hypotheses

*Hypothesis 1a.* In the first hypothesis it was predicted that participants who were primed with a punishing image of God would express more prejudiced attitudes towards subjectively “sinful” behaviors/lifestyle preferences when compared to individuals who were primed to see God as a loving figure. To test this prediction, a two-way analysis of variance (ANOVA) was conducted. This analysis included the main effects for the independent variables that were labeled “presence” (presence of God, presence of other, no presence) and “valence” (positive, negative, neutral), as well as the two-way interaction of these "main effect" variables. Contrary to Hypothesis 1a, the ANOVA results revealed no significant interaction between the two independent variables, which suggested that there was no significant difference in the reported attitudes between participants primed with a loving image of God (i.e., presence of God, positive valence) and those who were primed to see God as a punishing figure (i.e., presence of God, negative valence). Hypothesis 1a was, therefore, not supported (see Table 3.2 for the ANOVA source table).

The results of this two-way ANOVA did, however, reveal a marginal main effect for presence, \( F(2,149) = 2.88, p < .06, \text{partial-}\eta^2 = .04 \). Using a post-hoc Tukey analysis, it was discovered that including the presence of God in the priming task resulted in significantly less prejudiced attitudes towards subjectively “sinful” behaviors/lifestyle preferences \( (M = 98.78, SD = 16.95) \) than primes that omitted the presence of a specific entity/figure \( (M = 106.54, SD = 18.35) \). In other words, including the presence of God seemed to positively influence participants so that they expressed less prejudiced attitudes.
Hypothesis 1b. In an extension of the first hypothesis, it was predicted that the degree to which the primes would influence participants’ subsequent attitudes would vary based on their baseline perceptions of God as either a loving or punishing figure. More specifically, when being primed with a punishing image of God, participants whose baseline tendency was to see God as punishing were expected to report more prejudiced attitudes than those with a loving baseline image. Similarly, when being primed with a loving image of God, participants with a loving baseline image were predicted to express less prejudiced attitudes than those with a baseline tendency to view God as a punishing (i.e., controlling) figure. To test each of these predictions, two separate linear regression analyses were conducted on participants’ attitudes towards subjectively “sinful” behaviors/lifestyle preferences.

In the first regression model, the main effect predictors included participants’ baseline score on the Controlling God index and the unweighted effects codes for presence and valence. Because presence and valence were each comprised of three levels, two unweighted effects codes were assigned to each variable. In each unweighted effect code, a value of 0, 1, and -1 was assigned to each level. In each variable, the value of -1 was assigned to the same level in each effect code, whereas the values of 0 and 1 were alternated between the other two levels. The two-way interaction predictors in this model included the interactions between each unweighted effect code and the Controlling God index (4 interaction terms), as well as the interactions between the unweighted effect codes for presence and the unweighted effect codes.

### Table 3.2 Source Table for Analysis of Variance (ANOVA)

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>Partial-(\eta^2) (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presence</td>
<td>1895.70</td>
<td>2</td>
<td>947.85</td>
<td>2.88</td>
<td>0.06</td>
<td>4.00</td>
</tr>
<tr>
<td>Valence</td>
<td>987.83</td>
<td>2</td>
<td>493.92</td>
<td>1.50</td>
<td>0.28</td>
<td>2.00</td>
</tr>
<tr>
<td>Presence * Valence</td>
<td>491.94</td>
<td>4</td>
<td>122.98</td>
<td>0.37</td>
<td>0.83</td>
<td>1.00</td>
</tr>
<tr>
<td>Error</td>
<td>49083.71</td>
<td>149</td>
<td>329.42</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>52450.38</td>
<td>157</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

In the first regression model, the main effect predictors included participants’ baseline score on the Controlling God index and the unweighted effects codes for presence and valence. Because presence and valence were each comprised of three levels, two unweighted effects codes were assigned to each variable. In each unweighted effect code, a value of 0, 1, and -1 was assigned to each level. In each variable, the value of -1 was assigned to the same level in each effect code, whereas the values of 0 and 1 were alternated between the other two levels. The two-way interaction predictors in this model included the interactions between each unweighted effect code and the Controlling God index (4 interaction terms), as well as the interactions between the unweighted effect codes for presence and the unweighted effect codes.
for valence (4 interaction terms). Because the current hypothesis was intended to test the significance of the three-way interactions between the unweighted effect codes for presence and valence and the Controlling God index (4 interaction terms), these were included in the second step of the model.

The results of this regression analysis revealed that the three-way interactions did not significantly add to the first step of the model. Therefore, the three-way interactions, which, if significant, could have supported the hypothesis that having a punishing baseline image of God moderated the influence of the priming task, did not significantly predict participants’ reported attitudes. To determine whether any unpredicted effects existed in the complete model, these were interpreted using a more conservative p-value of .025 to prevent any Type I errors from occurring. Based on this more stringent criterion, none of the predictors in the current model were found to significantly predict participants’ expression of prejudiced attitudes towards subjectively “sinful” behaviors.

Furthermore, the multiple df test was conducted to determine whether any of the main effects, two-way interaction effects (i.e., Controlling God index*presence, Controlling God index*valence), or three-way interaction effect (i.e., Controlling God index*presence*valence) significantly added any variance to the model. The significance of each effect was tested using a separate regression analysis. In each analysis, the effect of interest was added to the second step of the model, while the remaining effects were included in the first step. Using the same stringent criterion of .025, none of the effects were found to significantly add to the model (see Table 3.3 for results).

The second regression model was similar to the first. The main effect predictors included participants’ baseline score on the Loving God index and the same unweighted effect codes for presence and valence that were used in the first model. The two-way interaction predictors in this model included the interactions between each unweighted effect code and the Loving God index (4 interactions terms), as well as the interactions between the unweighted
effect codes for presence and the unweighted effect codes for valence (4 interactions terms).

Because the current hypothesis was intended to test the significance of the three-way interactions between the unweighted effect codes for presence and valence and the Loving God index (4 interaction terms), these were included in the second step of the model.

Table 3.3 Contribution of the Controlling God Index, Presence, Valence, and the Interactions Between Them

<table>
<thead>
<tr>
<th>Predictor</th>
<th>F</th>
<th>p</th>
<th>$\text{sr}^2$ (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Controlling God index</td>
<td>0.09</td>
<td>0.77</td>
<td>0.10</td>
</tr>
<tr>
<td>Presence</td>
<td>2.17</td>
<td>0.12</td>
<td>2.70</td>
</tr>
<tr>
<td>Valence</td>
<td>1.73</td>
<td>0.18</td>
<td>2.20</td>
</tr>
<tr>
<td>Controlling God index * Presence</td>
<td>2.67</td>
<td>0.07</td>
<td>3.40</td>
</tr>
<tr>
<td>Controlling God index * Valence</td>
<td>0.83</td>
<td>0.44</td>
<td>1.00</td>
</tr>
<tr>
<td>Presence * Valence</td>
<td>0.45</td>
<td>0.77</td>
<td>1.10</td>
</tr>
<tr>
<td>Controlling God index * Presence * Valence</td>
<td>0.38</td>
<td>0.83</td>
<td>0.09</td>
</tr>
</tbody>
</table>

The results of this model revealed that the three-way interactions did not significantly add to the prediction of the first step. Therefore, the three-way interactions, which, if significant, could have supported a potential relationship between a having a loving baseline image of God and the priming task, did not significantly predict participants’ expressed attitudes. To determine whether any unpredicted effects were present in the full model, they were interpreted using a more stringent p-value of .025 to prevent any Type I errors from occurring. Based on this criterion, participants’ score on the Loving God index was found to significantly predict their attitudes towards subjectively “immoral” behaviors. This result was seemingly paradoxical. It revealed that participants who perceived God as a loving figure actually expressed more prejudiced attitudes, $t(156) = 3.26$, $p < .01$, $B = 11.35$, $\text{sr}^2 = .06$, than those with low scores on this index. Although this finding may indeed seem counter-intuitive, one possible explanation will be discussed below.

A multiple df test was also performed in this second model to determine whether any of the main effects, two-way interaction effects (i.e., Loving God index * presence, Loving God index * valence), or three-way interaction effect (i.e., Loving God index * presence * valence)
significantly added any variance to the model. The significance of each effect was tested using a separate regression analysis. In each analysis, the effect of interest was added to the second step of the model, while the remaining effects were included in the first step. Using the same stringent criterion of .025, the only effect that was found to significantly add to the model was participants' baseline score on the Loving God index, $F(1,140) = 9.61, p < .01, \eta^2 = .06$ (see Table 3.4 for complete results).

Table 3.4 Contribution of the Loving God Index, Presence, Valence, and the Interactions Between Them

<table>
<thead>
<tr>
<th>Predictor</th>
<th>F</th>
<th>p</th>
<th>$\eta^2$ (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loving God index</td>
<td>9.61</td>
<td>0.01</td>
<td>5.80</td>
</tr>
<tr>
<td>Presence</td>
<td>2.41</td>
<td>0.09</td>
<td>2.90</td>
</tr>
<tr>
<td>Valence</td>
<td>1.66</td>
<td>0.19</td>
<td>2.00</td>
</tr>
<tr>
<td>Loving God index * Presence</td>
<td>0.30</td>
<td>0.74</td>
<td>0.40</td>
</tr>
<tr>
<td>Loving God index * Valence</td>
<td>2.50</td>
<td>0.09</td>
<td>3.00</td>
</tr>
<tr>
<td>Presence * Valence</td>
<td>0.34</td>
<td>0.85</td>
<td>0.80</td>
</tr>
<tr>
<td>Loving God index * Presence * Valence</td>
<td>0.14</td>
<td>0.97</td>
<td>0.30</td>
</tr>
</tbody>
</table>

Hypothesis 2 and 3. In the second hypothesis it was predicted that participants primed with a controlling (i.e., punishing) image of God would express more prejudiced attitudes than those who were primed with negatively-valenced sentences with no references to God or any other specific person. Similarly, in the third hypothesis, participants who were primed to see God as a loving figure were expected to be more tolerant and accepting of subjectively “sinful” behaviors when compared to those primed with positively-valenced primes that omitted the presence of another figure. Because these predictions both involve the interaction between presence and valence, they were tested using the same two-way ANOVA as Hypothesis 1. Due to the non-significant interaction term found in the analysis, Hypotheses 2 and 3 were not supported by the data (see Table 3.2 for the ANOVA source table).

Hypothesis 4. In the last hypothesis, it was predicted that participants who scored high on the Conventional Morality Scale (i.e., more conventionally moral people) would be more intolerant of the subjectively “immoral” behaviors found on the attitude questionnaire when
compared to those with low conventional morality scores. This hypothesis was tested using a linear regression analysis on participants’ reported attitudes. The main effect predictors in this model included participants’ scores on the Conventional Morality Scale and the same unweighted effect codes for presence and valence that were used to text the extension of the first hypothesis. The two-way interaction predictors in this model included the interactions between each unweighted effect code and the Conventional Morality Scale (4 interactions terms), as well as the interactions between the unweighted effect codes for presence and the unweighted effect codes for valence (4 interactions terms). Finally, the three-way interactions in this model included the interactions between the unweighted effect codes for presence and valence and the Conventional Morality Scale (4 interaction terms).

The results of this model revealed that participants’ score on the Conventional Morality Scale was found to significantly predict their expressed attitudes, $t(156) = 3.31, p < .001, B = .24, r^2 = .06$. More specifically, participants who scored high on conventional morality were found to be less tolerant of subjectively “immoral” behaviors when compared to those who scored low on this scale. Hypothesis 4 was, therefore, supported by the data. To determine whether any unpredicted effects were present, they were interpreted using a more conservative p-value of .025 to prevent any Type I errors from occurring. Using this more stringent criterion, no other predictors were found to significantly predict participants’ reported attitudes.

Furthermore, to test the significance of adding each main effect (i.e. Conventional Morality Scale; CMS), two-way interaction effect (i.e., CMS*presence, CMS*valence), and three-way interaction effect (i.e., CMS*presence*valence) to the model, a multiple df analysis was conducted. The significance of each effect was analyzed using a separate regression analysis. In each analysis, the effect of interest was added to the second step, while the remaining effects were included in the first step. Using the same conservative criterion of .025, the only effect that was found to significantly add to the model was participants’ score on the Conventional Morality Scale, $F(1,140) = 10.92, p < .001, r^2 = .06$ (see Table 3.5 for results).
Table 3.5 Contribution of the Conventional Morality Scale, Presence, Valence, and the Interactions Between Them

<table>
<thead>
<tr>
<th>Predictor</th>
<th>F</th>
<th>p</th>
<th>$sr^2$ (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional Morality Scale (CMS)</td>
<td>10.92</td>
<td>0.001</td>
<td>6.40</td>
</tr>
<tr>
<td>Presence</td>
<td>2.41</td>
<td>0.09</td>
<td>2.80</td>
</tr>
<tr>
<td>Valence</td>
<td>1.74</td>
<td>0.18</td>
<td>2.00</td>
</tr>
<tr>
<td>CMS * Presence</td>
<td>0.66</td>
<td>0.52</td>
<td>0.80</td>
</tr>
<tr>
<td>CMS * Valence</td>
<td>2.52</td>
<td>0.08</td>
<td>3.00</td>
</tr>
<tr>
<td>Presence * Valence</td>
<td>0.35</td>
<td>0.84</td>
<td>0.80</td>
</tr>
<tr>
<td>CMS * Presence * Valence</td>
<td>0.21</td>
<td>0.93</td>
<td>0.50</td>
</tr>
</tbody>
</table>
CHAPTER 4
DISCUSSION

The purpose of the current study was to determine whether priming participants with different images of God (i.e., loving versus punishing) had any influence on their reported attitudes towards subjectively "sinful" behaviors/lifestyle preferences. It was hypothesized that participants who were primed to see God as a loving figure would be more tolerant and accepting of those "immoral" behaviors than participants who were primed with punishing images of God.

To determine whether including the presence of God significantly added any influence over and above any primes that were already positively- and negatively-valenced, it was further hypothesized that participants who were primed to see God as punishing would express more prejudiced attitudes than those who received negatively-valenced primes that made no references to any other specific entity/figure. Similarly, those who were primed to see God as a loving figure were expected to express more accepting and tolerant attitudes when compared to participants who were primed with positively-valenced primes that omitted the presence of another figure. The results, reported above, did not support any of these predictions.

Although no statistical differences were found between the priming conditions, there was a marginal effect of the presence of God in the priming task on participants’ attitudes towards subjectively “sinful” behavior. Primes that included the presence of God were associated with less prejudiced attitudes than primes that made no reference to another entity/figure. It seems that regardless of the valence (i.e., positive, negative, neutral) associated with each prime, including the presence of God in the prime positively influenced participants’ attitudes towards subjectively “sinful” behavior when compared to primes that did not make any reference to a specific figure. Similar results were found by Shariff and Norenzayan (2007) who
discovered that participants primed with God-related concepts behaved more altruistically on a subsequent task than those primed with words considered to be secular. Therefore, it seems that any temporary evocation of God is associated with tolerance and the genuine respect of others, an association that reflects the most general/central aspect of contemporary Judeo-Christian religious belief (Hunsberger & Jackson, 2005).

If primes that included the presence of God had the ability to influence participants’ attitudes, then why were no statistical differences found between the priming conditions? One possible explanation, based on a study conducted by Southwick, Steele, and Lindell (1986), is that some participants may have been more resistant to the expected influence of the primes than others—even to the point of showing counterinfluence by moving in the opposite direction. Although the primes were predicted to make certain constructs more accessible (e.g., punishing image of God), thereby allowing them to influence participants’ subsequent judgments of subjective stimuli, participants that had already developed those constructs through past experiences may have been resistant to the expected influence of the constructs in the current primes, and perhaps even reacted against primes that contradicted their existing attitudes.

According to Southwick, Steele, and Lindell (1986), when well-defined constructs are primed, any past experiences associated with the development of these constructs will affect the extent to which they are used to influence subsequent judgments. Therefore, the primes in the current study may have influenced participants with well-defined images of God differently than those with less-developed constructs, with no discernable net effect.

In a follow-up analysis relevant to the first hypothesis, the relationship between participants’ baseline perceptions of God (i.e., loving and punishing) and the different priming conditions was examined. Although no significant interactions were found, indicating that the influence of the primes on participants’ reported attitudes was not dependent on their long-term perceptions of God, a main effect was found for participants who saw God as a loving figure in
the baseline measure. More specifically, participants with higher scores on the Loving God index were more likely to express prejudiced attitudes towards subjectively “immoral” behaviors.

The significant results that have been obtained thus far seem to suggest that although primes including the presence of God were associated with less prejudice, having a loving baseline image of God was associated with more intolerance towards others. If God-related primes serve as a positive influence, why would a loving baseline image of God serve as a negative one? To explain this seemingly paradoxical set of findings, one must first consider the source of each effect. Although participants’ baseline perceptions of God were seen as stable dispositions, perceptions of God that were triggered through the priming task were only temporarily processed. Therefore, it seems likely that trait (i.e., stable) perceptions of God influenced participants’ reported attitudes differently than state (i.e., primed) images of God.

This apparent difference between the influence of stable and temporary constructs on participants’ subsequent judgments can be explained by Southwick, Steele, and Lindell’s (1986) claim that long-term, stable constructs are associated with past experiences, making them more well-defined than constructs that are temporarily primed. Although the stable and primed perceptions of God were intended to reflect the same constructs in the current study, the stable perceptions may have been more deeply embedded and cognitively elaborated due to their long-term associations with other dimensions. This difference between stable and primed constructs may, therefore, explain why the stable images of God influenced participants’ attitudes differently than the primed perceptions.

When examining perceptions of God that were triggered during the priming task, we can see that participants were primed to take on the more general/central aspect of religion, which states that all people should be treated with love and respect (Hunsberger & Jackson, 2005). This would explain their tendency to temporarily be more tolerant and accepting of subjectively “immoral” behaviors when compared to participants who were not primed with the presence of God. On the other hand, baseline perceptions of a loving God, which we are
characterizing as stable traits, had a negative influence on participants’ reported attitudes. Why would a loving image of God be associated with intolerance and the negative judgment of others? One potential explanation is that although participants perceived God to be a loving figure in their own lives, they may not have believed that God’s love should be directed towards others who do not abide by his laws. In other words, participants with a loving image of God may have still used other criteria when interpreting the extent to which others were deserving of God’s love.

Finally, in the last hypothesis of the study, it was predicted that participants with high conventional moral standards would be more intolerant towards people who engage in subjectively “sinful” behaviors when compared to those with lower scores on the Conventional Morality Scale. Not surprisingly, this prediction was statistically supported by the data, signifying the strong predictive influence of participants’ conventional moral standards on their intolerance of “immoral” behaviors. In other words, when making judgments about behaviors that were subjectively “sinful,” participants tended to use their own standards for what they believed to be morally-appropriate.

In summary, the current study found that when participants interpreted the moral appropriateness of subjectively “sinful” behaviors, they were significantly influenced by primes that included the presence of God, their baseline image for how loving they perceived God, as well as their own conventional moral standards. More specifically, participants were found to be more prejudiced towards subjectively “immoral” behaviors when they were primed without the presence of God, when they viewed God as a loving figure, and when they had high standards for what they considered to be moral.

Although the idea that participants were positively influenced by the primed presence of God, but negatively influenced by a loving baseline image of God seemed paradoxical, it was suggested that the influences of temporary perceptions of God were associated with the general perception of religion that all people should be treated equally (Hunsberger & Jackson, 2005),
whereas the influences of stable perceptions of God seemed to be dependent on past experiences that shaped the development of those perceptions. Moreover, to explain how having a loving baseline image of God could have led to more prejudiced attitudes, it was suggested that this loving perception may have only applied to the participants themselves and not to other people who the participants may have felt were less deserving.

4.1 Limitations of Current Study

There were some limitations in the current study that may have prevented a number of effects from being detected. First, it was not clear whether participants’ responses to the Loving and Controlling God Image scales applied to their perception of other people or not. For example, participants who indicated that they believed God was a loving figure, may have only included themselves as the recipients of that love and excluded other people who they felt were less deserving (or vice versa). Knowing the specific terms of their perceptions of God may have improved the likelihood of observing an effect of the interaction between these perceptions and certain priming conditions.

Second, the sample used in the current study was narrow with respect to its religious diversity. Because 80% of the current sample was classified as Christian, there was no way to determine whether the results that were obtained represented the true influence of religious primes on prejudiced attitudes, or whether these findings were specific to those who followed the Christian faith. Either way, a more religiously diverse sample would have potentially allowed any obtained results to be representative of people from multiple perspectives, and generalizable to a more diverse population.

4.2 Future Directions

Based on the results that have been obtained in the current study, it is clear that there is a difference between the influence of perceptions of God that are primed and the influence of perceptions of God that are stable. Primed images of God were more likely to be associated with the general perception in religion that all people should be treated equally (Hunsberger &
Jackson, 2005), whereas the influence of stable perceptions of God seemed to be at least somewhat dependent on other religious predispositions (i.e., one's degree of adherence to the standards of conventional morality). It might, therefore, be beneficial for future studies to more closely investigate the distinction between long-term perceptions of God and those that are temporarily processed. Having a better understanding of this distinction might shed some light on the potential origin of religious-sanctioned prejudice and the circumstances in which these perceptions can influence people's attitudes.

Furthermore, it would be interesting to determine whether responses on the Loving and Controlling God Image scales really do differ relative to the perspective that is taken (i.e., self vs. other). If perceptions of God in relation to the self are different than perceptions of God that are directed towards others (e.g., God loves me, but doesn't love others), priming participants with images of God from either perspective might exert different types of influences on their subsequent attitudes/behaviors. Although this difference in perspective might have occurred in the current study (based on hints provided by some of the results that were obtained), empirically manipulating it in future studies would allow us to better understand these different God images.

Finally, determining whether any differences exist between judgments made towards sinful people and judgments made towards sinful behaviors relative to conventional moral standards would be another interesting idea for future research. The results of an implicit association study conducted by Wenger and Daniels (2006) showed that the cognitive associations made relative to sinners were different than those made relative to sinful behaviors. Specifically, participants were faster and more accurate at making positive associations with sinful people than they were at making negative ones, but were more likely to make negative associations with sinful behaviors than ones that were positive. In other words, the data suggested that participants were able to hold positive perceptions of individuals, but still disapprove of the sinful behaviors they chose to engage in. Because the attitude
questionnaire in the current study was specifically designed to assess participants’ attitudes towards “immoral” behaviors rather than the individuals themselves, future research should be conducted to determine whether distinguishing between these dependent variables can influence how participants with high versus low moral standards choose to interpret them.
APPENDIX A

LOVING AND CONTROLLING GOD IMAGE SCALES
Please rate the way in which you view God in each of the following items:

1. 0----------1----------2----------3----------4----------5----------6
   Close       Distant
2. 0----------1----------2----------3----------4----------5----------6
   Rejecting   Accepting
3. 0----------1----------2----------3----------4----------5----------6
   Impersonal  Personal
4. 0----------1----------2----------3----------4----------5----------6
   Not demanding   Demanding
5. 0----------1----------2----------3----------4----------5----------6
   Hating       Loving
6. 0----------1----------2----------3----------4----------5----------6
   Damning      Saving
7. 0----------1----------2----------3----------4----------5----------6
   Freeing      Restricting
8. 0----------1----------2----------3----------4----------5----------6
   Weak        Strong
9. 0----------1----------2----------3----------4----------5----------6
   Unforgiving  Forgiving
10. 0----------1----------2----------3----------4----------5----------6
    Uncontrolling   Controlling
11. 0----------1----------2----------3----------4----------5----------6
    Disapproving   Approving
12. 0----------1----------2----------3----------4----------5----------6
    Lenient       Strict
13. 0----------1----------2----------3----------4----------5----------6
    Permissive    Rigid
APPENDIX B

CONVENTIONAL MORALITY SCALE
Please choose a number for each statement below to indicate the extent to which it is characteristic of you.

1 – Extremely uncharacteristic of me
2 – Somewhat uncharacteristic of me
3 – Neither characteristic nor uncharacteristic of me
4 – Somewhat characteristic of me
5 – Extremely characteristic of me

___ 1. I like to read erotic books or magazines.
___ 2. I am opposed to the use of alcohol or other recreational drugs.
___ 3. I have taken things I wanted without paying for them or returning them later.
___ 4. My behavior at parties has gotten me into trouble.
___ 5. I donate money to charities.
___ 6. I avoid going to social events where a lot of people will be drunk.
___ 7. I am very forgiving of others who have injured or offended me.
___ 8. If I had enough money, I wouldn’t work another day.
___ 9. I attend church services at least once a week.
___ 10. I prefer a lifestyle that gives me an almost unlimited amount of leisure time.
___ 11. My lifestyle preferences rule out the possibility of premarital or extramarital sexual behavior.
___ 12. I use profanity in my conversations with friends.
___ 13. There are people in this world I would kill if I thought I could get away with it.
___ 14. I “tune out” most of what my parents have to say to me.
___ 15. My pride has kept me from making up with someone I was at odds with.
___ 16. I take care of myself and don’t worry too much about other people.
___ 17. Some people get offended at the kind of language I use.
___ 18. I believe that if something feels good and is pleasurable, you should do it as much as you want.
___ 19. I have avoided people rather than having to apologize to them for something I have done.
___ 20. I envy people who have more than I do.
___ 21. Morality and ethics don’t really concern me.
___ 22. I prefer a lifestyle that permits me to express my sexual needs with different partners.
___ 23. I am careful not to curse or use profanity around other people.
___ 24. I enjoy working hard.
___ 25. I am not willing to shift the blame to others, even if it will keep me out of trouble.
___ 26. Once I start drinking, I don’t know when to stop.
___ 27. I like a good “dirty joke” now and then.
___ 28. The more I get of the fun things in life, the more I want.
___ 29. It would bother me if I were required to kill someone in self-defense.
___ 30. I have strong sexual thoughts or feelings about people I see every day.
___ 31. The problems of other people concern me deeply.
___ 32. My parents disapprove of my lifestyle.
___ 33. I am envious of other people’s sexual relationships.
___ 34. If I want to have sex with someone, I don’t worry about the complications it might cause.
___ 35. No matter how much I get in life, I won’t be satisfied.
___ 36. I enjoy hearing about it when people I don’t like get themselves into trouble.
37. I would not steal something I needed, even if I were sure I could get away with it.
38. I am honest in the way I deal with people.
39. I don't enjoy looking at pornographic films or magazines.
40. At parties, I drink more than most of my friends.
41. I make sure that I get my share of whatever rewards are available.
42. I am careful not to dress in a sexually provocative way.
43. I could not kill another person under any circumstances.
44. I will not take advantage of other people, even when it's clear that they are trying to take advantage of me.
45. I like to control other people's behavior as much as I can.
APPENDIX C

PRIMES
### Punishing God Primes

<table>
<thead>
<tr>
<th>God punishes sinners</th>
<th>God is judging and intolerant</th>
</tr>
</thead>
<tbody>
<tr>
<td>God rejects immorality</td>
<td>God is vengeful and unmerciful</td>
</tr>
<tr>
<td>God is often vengeful</td>
<td>God is a harsh judge</td>
</tr>
<tr>
<td>God harshly judges criminals</td>
<td>God doesn’t forgive the wicked</td>
</tr>
<tr>
<td>God doesn’t tolerate sinful behavior</td>
<td>God is often punishing</td>
</tr>
<tr>
<td>God despises scandalous behavior</td>
<td>God is intolerant towards sinners</td>
</tr>
<tr>
<td>God punishes immoral behavior</td>
<td>God takes revenge upon sinners</td>
</tr>
<tr>
<td>God’s justice requires punishment</td>
<td>God never shows forgiveness</td>
</tr>
<tr>
<td>God doesn’t tolerate sinners</td>
<td>God harshly judges sinners</td>
</tr>
<tr>
<td>God punishes the wicked</td>
<td>God judges the wicked</td>
</tr>
<tr>
<td>God is a punishing entity</td>
<td>God discourages sinful behavior</td>
</tr>
<tr>
<td>God harshly judges immoral behavior</td>
<td>God is punishing and unforgiving</td>
</tr>
</tbody>
</table>

### Loving God Primes

<table>
<thead>
<tr>
<th>God is always forgiving</th>
<th>God loves humanity</th>
</tr>
</thead>
<tbody>
<tr>
<td>God loves us all</td>
<td>God forgives our mistakes</td>
</tr>
<tr>
<td>God always shows mercy</td>
<td>God brings peace to all</td>
</tr>
<tr>
<td>God’s redeeming love</td>
<td>God is forgiving and merciful</td>
</tr>
<tr>
<td>God’s love is wonderful</td>
<td>God gives second chances</td>
</tr>
<tr>
<td>God is loving and forgiving</td>
<td>God knows what’s best</td>
</tr>
<tr>
<td>God takes care of us</td>
<td>God forgives our sins</td>
</tr>
<tr>
<td>God accepts us all</td>
<td>God accepts everybody’s faults</td>
</tr>
<tr>
<td>God always forgives us</td>
<td>God rewards moral behavior</td>
</tr>
<tr>
<td>God doesn’t hold grudges</td>
<td>God encourages moral behavior</td>
</tr>
<tr>
<td>God’s love warms the soul</td>
<td>God has no favorites</td>
</tr>
<tr>
<td>God watches over us</td>
<td>God is loving and accepting</td>
</tr>
</tbody>
</table>

### Neutral God Primes

<table>
<thead>
<tr>
<th>God observes mankind</th>
<th>God likes to listen</th>
</tr>
</thead>
<tbody>
<tr>
<td>God gives us free will</td>
<td>God created mankind</td>
</tr>
<tr>
<td>God is fair and just</td>
<td>God knows the future</td>
</tr>
<tr>
<td>God doesn’t like to intervene</td>
<td>God has seen our destiny</td>
</tr>
<tr>
<td>God is always objective</td>
<td>God lives in peace</td>
</tr>
<tr>
<td>God created the world</td>
<td>God created the universe</td>
</tr>
<tr>
<td>God is a neutral entity</td>
<td>God doesn’t make an appearance</td>
</tr>
<tr>
<td>God never takes sides</td>
<td>God likes to remain neutral</td>
</tr>
<tr>
<td>God sits and watches us</td>
<td>God never shows himself</td>
</tr>
<tr>
<td>God is an objective judge</td>
<td>God is everywhere</td>
</tr>
<tr>
<td>God has a plan</td>
<td>God is all-powerful</td>
</tr>
<tr>
<td>God is all around us</td>
<td>God likes to observe us</td>
</tr>
</tbody>
</table>
Other/Loving Primes

Morgan is always forgiving
Morgan loves us all
Morgan always shows mercy
Morgan’s unconditional love
Morgan’s love is wonderful
Morgan is loving and forgiving
Morgan takes care of us
Morgan accepts people
Morgan always forgives us
Morgan doesn’t hold grudges
Morgan’s love is warm
Morgan watches over us
Morgan loves all of humanity
Morgan forgives our mistakes
Morgan brings peace
Morgan is forgiving and merciful
Morgan gives second chances
Morgan knows what’s best
Morgan forgives us
Morgan accepts everybody’s faults
Morgan rewards good behavior
Morgan encourages moral behavior
Morgan has no favorites
Morgan is loving and accepting

Other/Punishing Primes

Morgan punishes sinners
Morgan rejects immorality
Morgan is often vengeful
Morgan harshly judges criminals
Morgan doesn’t tolerate sinful behavior
Morgan despises scandalous behavior
Morgan punishes bad behavior
Morgan is very punishing
Morgan doesn’t tolerate sinners
Morgan punishes the wicked
Morgan is a punishing person
Morgan harshly judges immoral behavior
Morgan is judging and intolerant
Morgan is vengeful and unmerciful
Morgan is a harsh judge
Morgan doesn’t forgive the wicked
Morgan is often punishing
Morgan is intolerant towards sinners
Morgan takes revenge upon sinners
Morgan never shows forgiveness
Morgan harshly judges sinners
Morgan judges the wicked
Morgan discourages sinful behavior
Morgan is punishing and unforgiving

Other/Neutral Primes

Morgan observes mankind
Morgan has free will
Morgan is fair and just
Morgan doesn’t like to intervene
Morgan is always objective
Morgan is a human being
Morgan is a neutral person
Morgan never takes sides
Morgan sits and watches us
Morgan is an objective judge
Morgan has a plan
Morgan lives among us
Morgan likes to listen
Morgan leads a simple life
Morgan plans for the future
Morgan believes in fate
Morgan lives in peace
Morgan lives in the universe
Morgan doesn’t make appearances
Morgan likes to remain neutral
Morgan is never seen
Morgan travels everywhere
Morgan is knowledgeable
Morgan likes to observe us
### Positive Primes

<table>
<thead>
<tr>
<th>The world is beautiful</th>
<th>It's wonderful to be loved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music warms the soul</td>
<td>Good people are everywhere</td>
</tr>
<tr>
<td>Love conquers all</td>
<td>Laughing can be contagious</td>
</tr>
<tr>
<td>All you need is love</td>
<td>Everything happens for a reason</td>
</tr>
<tr>
<td>Beauty is all around us</td>
<td>Friends are like family</td>
</tr>
<tr>
<td>Most people are trustworthy</td>
<td>Most people are truly happy</td>
</tr>
<tr>
<td>It is better to forgive</td>
<td>Friendship is a gift</td>
</tr>
<tr>
<td>The world's a loving place</td>
<td>It's nice to help others</td>
</tr>
<tr>
<td>Everyone is good at heart</td>
<td>Chocolate is delicious</td>
</tr>
<tr>
<td>Every life is precious</td>
<td>Everyone deserves to be loved</td>
</tr>
<tr>
<td>Most people are wonderful</td>
<td>Laughter is the best medicine</td>
</tr>
<tr>
<td>Everybody has a good side</td>
<td>Hugs say a thousand words</td>
</tr>
</tbody>
</table>

### Negative Primes

<table>
<thead>
<tr>
<th>Everyone has a negative side</th>
<th>It's dangerous to trust people</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most people can't be trusted</td>
<td>Most people will hurt you</td>
</tr>
<tr>
<td>The world is full of criminals</td>
<td>People take advantage of others</td>
</tr>
<tr>
<td>The world is dangerous</td>
<td>Everyone wants to hurt you</td>
</tr>
<tr>
<td>Most people have bad intentions</td>
<td>Our world is unsafe</td>
</tr>
<tr>
<td>Everyone lies and cheats</td>
<td>Death comes to us all</td>
</tr>
<tr>
<td>Nobody is ever safe</td>
<td>Most people are sad inside</td>
</tr>
<tr>
<td>Everyone has a hidden agenda</td>
<td>Nobody is really happy</td>
</tr>
<tr>
<td>Most people are selfish</td>
<td>Most people are pessimistic</td>
</tr>
<tr>
<td>Happiness is a myth</td>
<td>Nobody is really your friend</td>
</tr>
<tr>
<td>True friendships don't exist</td>
<td>Suffering is all around us</td>
</tr>
<tr>
<td>Everyone dies in the end</td>
<td>Problems never go away</td>
</tr>
</tbody>
</table>

### Neutral Primes

<table>
<thead>
<tr>
<th>Clouds form in the sky *</th>
<th>Europe attracts many tourists *</th>
</tr>
</thead>
<tbody>
<tr>
<td>The world has seven continents</td>
<td>Apples grow on trees</td>
</tr>
<tr>
<td>Cars run on gasoline</td>
<td>Baby cats are called kittens *</td>
</tr>
<tr>
<td>Most people have computers</td>
<td>Animals live in the zoo *</td>
</tr>
<tr>
<td>Lots of people eat sushi</td>
<td>Birthdays come once a year</td>
</tr>
<tr>
<td>People greet with handshakes</td>
<td>Umbrellas keep us dry *</td>
</tr>
<tr>
<td>Technology changes every day</td>
<td>Flowers grow in the garden</td>
</tr>
<tr>
<td>Snow falls in the winter</td>
<td>Chocolate is usually brown *</td>
</tr>
<tr>
<td>The moon orbits around us *</td>
<td>People climb mountains</td>
</tr>
<tr>
<td>Everybody has a native language</td>
<td>Ducks and geese are birds</td>
</tr>
<tr>
<td>Humans breathe in oxygen</td>
<td>The desert is very dry</td>
</tr>
<tr>
<td>Most people drive to work</td>
<td>Milk comes from cows</td>
</tr>
<tr>
<td>Fish live in water</td>
<td>Books are in the library</td>
</tr>
<tr>
<td>The sky is blue</td>
<td>Basketball is a sport</td>
</tr>
<tr>
<td>Blankets keep us warm</td>
<td>People swim in the summer</td>
</tr>
</tbody>
</table>
APPENDIX D
ATTITUDE QUESTIONNAIRE
Below are a number of statements concerning personal attitudes and characteristics. Please read each statement and consider the extent to which you agree or disagree with it. Then respond to the statement as accurately as possible by using the following scale to indicate how much you agree with it.

1 − strongly agree
2 − agree somewhat
3 − neither agree nor disagree
4 − disagree somewhat
5 − strongly disagree

___ 1. Homosexual couples should be allowed to adopt children the same as heterosexual couples.
___ 2. Drug addicts should be ostracized from the general stream of society.
___ 3. Welfare recipients are people who need a helping hand.
___ 4. Unwed mothers are people who let their own selfish needs result in a child that wasn't planned for.
___ 5. People who abort their unborn child have no respect for human life.
___ 6. If a couple is truly unhappy with their marriage, getting divorced should be an option.
___ 7. I will not take drugs, but I see no harm if other people take drugs; it is their decision after all.
___ 8. Unmarried couples who live together want the benefits of marriage without accepting the responsibilities.
___ 9. Expressing one's sexuality with more than one partner is fine as long as it is done openly and without deception.
___ 10. Unwed mothers deserve our sympathy because of the many challenges they face trying to raise their children on their own.
___ 11. Couples who get divorced are simply taking the easy way out.
___ 12. Helping those who are unemployed with welfare only reinforces their unproductive behavior.
___ 13. Couples that choose abortion are simply exercising their right to make their own decision.
___ 14. People who cheat on their partners cannot be trusted.
___ 15. Illegal immigrants should be not be allowed to work in this country under any circumstances.
___ 16. Homosexuality is merely a different kind of lifestyle that should not be condemned.
___ 17. People who take drugs are essentially criminals.
___ 18. If couples decide to live together without being married, it is nobody's business but theirs.
___ 19. It's unreasonable to expect people to be monogamous.
___ 20. Welfare recipients are a drain on society.
___ 21. Unmarried women who have unplanned pregnancies produce children who are disadvantaged from the moment they are born.
___ 22. People who have entered this country illegally should be found and deported.
___ 23. There are many circumstances in which abortion during the first trimester is justified, and even likely to be recommended by one's doctor.
___ 24. The idea of homosexual marriages seems ridiculous to me.
___ 25. When two people's lives diverge enough that they feel the need to go their separate ways, divorce is the most reasonable solution to the problem.
___ 26. The recreational use of marijuana should not be criminalized, and people should
be allowed to purchase it legally.

___ 27. Most illegal immigrants are people who are desperate to provide for their families and give them a better life.
___ 28. Abortion is the same as murder.
___ 29. Unmarried couples who live together are unlikely to be good parents.
___ 30. Welfare recipients do not deserve what they get, since they do not contribute to society.
___ 31. Unwed mothers shouldn’t expect other people (taxpayers) to pay for the consequences of their poor judgment.
___ 32. People who cheat on their partner sexually have no respect for their significant other.
___ 33. People who get divorced are too selfish and lazy to do the hard work of fixing the problems in their relationship.
___ 34. Homosexuality is a biologically determined sexual orientation rather than a character defect or a psychological disorder.
___ 35. Illegal immigrants who have been in this country for several years should be given a "path" to obtain their citizenship here.
___ 36. Cohabiting couples can feel just as committed to each other as legally married couples can.
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BIOGRAPHICAL INFORMATION

Ronen Cuperman earned his Master of Science degree in Experimental Psychology at The University of Texas at Arlington. In that time he worked in the Social Interaction Laboratory under the supervision of Dr. William Ickes. His research experience has primarily focused on Personality and Social Psychology. His future career plans are to obtain a research-related position at a well-established institution.