

ABSTRACT

Bane of Adam's Rib: Religious Priming Effects on Sexism

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Previous research has indicated that sexism can be separated into factors of ambivalence – hostile and benevolent – to address the many issues that arise with discrimination against women. Whereas hostile sexism is openly negative toward women, benevolent sexism positively camouflages unfair differentiation between the sexes. Many cultural organizations and traditions subtly approve of sexism, including Judeo-Christian religious beliefs. The present study examined the effect of different types of subliminal religious priming – agent, institution, or spiritual – on attitudes toward women, hostile sexism, and benevolent sexism. Participants exposed to religious primes were more likely to endorse benevolent sexist statements than those in a control group. This effect remained after controlling for participant gender and self-reported religiosity. The main difference was between the agent religious prime condition and the control group. The implications of religious approval of benevolent sexist attitudes and behaviors are examined, as well as connections with personality and cognitive styles.

Bane of Adam's Rib: Religious Priming Effects on Sexism

by

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TABLE OF CONTENTS

List of Tables	iv
List of Figures	v
Acknowledgments	vi
Dedication	vii
 Chapter One: Introduction	 1
Sexism	2
Religion and Sexism	10
Religious Priming	12
Hypotheses	15
 Chapter Two: Method	 17
Participants	17
Measures and Procedures	17
 Chapter Three: Results	 22
Religious Priming and Ambivalent Sexism	22
Religious Priming and Attitudes toward Women	24
Additional Analyses Controlling for SDO, RWA, and RF	24
 Chapter Four: Discussion	 26
Limitations and Directions for Future Research	28
 Appendices	 33
Appendix A: Survey Materials	34
 References	 39

LIST OF TABLES

Table 1: Descriptive statistics of self-report measures	22
Table 2: Original and estimated marginal means of benevolent sexism controlling for religiosity variables	25

LIST OF FIGURES

Figure 1: Mean level of sexism endorsement (hostile and benevolent) for each type of priming condition	23
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CHAPTER ONE

Introduction

Despite efforts to the contrary, prejudice and its effects remain pervasive and often long-lasting in societies across the globe. By far the oldest, most universal form of prejudice is based on gender. Though sexism operates similarly to other forms of prejudice within society, as it follows Allport's classic definition of antipathy that arises from an untrue generalization of people in a group (1954), it is also unique. Unlike other forms of prejudice, such as ethnic or cultural, sexism can be just as powerful when based purely on antagonism of females as when it develops from ambivalence or even positivity toward them. Therefore, women can experience not only destructive effects of blatant negative prejudice and discrimination, but also the more subtle yet equally harmful effects of seemingly positive and helpful beliefs about their place within society (Glick & Fiske, 1996).

Sexism has deep roots not only in human history, but also in many religious traditions. Though most espouse equality between the sexes, many religious texts still include passages where women are set apart or expected to be treated differently than men. In Judeo-Christian religions, men and women are distinguished by how and when they are created within the first chapters of Genesis. The Qu'ran states that "men are the protectors and maintainers of women" (4:34). Some of these antiquated beliefs and actions have fallen out of favor with current denominations and sects; however, their underlying ideas continue to reinforce sexism in their respective cultures. Because of this

long-standing connection between sexism and religion, merely activating religious concepts in people may lead to increased endorsement of sexist ideals.

Sexism

The beginnings of sexism can be traced back through evolutionary demands and biological differences between the genders. First, there are several sexually dimorphic differences (e.g., body size, height, weight, etc.) that predisposed ancient civilizations toward patriarchy (Harris, 1991). Second, the nature of reproduction in humans favored women staying near her offspring for longer periods of time than men, meaning that domestic duties often fell to them in addition to child rearing. Though these differences may have begun as simple genetic outcomes, subjective inferences attempting to explain gender differences escalated with the dawn of evolutionary theory in the 19th century, with many scientists hypothesizing that one hallmark of a civilized people was the superiority of its men to its women (Swim & Hyers, 2009).

What divides sexism from other prejudices such as ageism, racism, and homophobia is the necessity of women for procreation coupled with the necessity to keep them subordinate to men (Eckes, 2002; Glick et al., 2000). There are fluctuations in how women are viewed which are dependent on how they act. If they are “good” women (e.g., submissive, caring, motherly, etc.), then they are fit to be cherished, loved, and protected by men. However, if they are “bad” women (e.g., competent, unruly, unemotional, etc.), then they should be derogated or outcast by men. Certainly this two-sided nature of prejudice occurs with other out-groups, but not nearly as consistently as with women. Ambivalent racism, for instance, depends on the salience of racial tensions in order to be activated (Katz & Hass, 1988) and has become closer to a single factor over

time (Swim, Aikin, Hall, & Hunter, 1995) Ambivalent sexism, however, requires no outside stimuli for activation and has retained its two-factor structure over time (Glick & Fiske, 2011).

These two constructs, negative feelings and positive yet belittling feelings toward women have proved difficult to clearly define and measure. The first attempt was made by Nadler and Morrow (1959), who distinguished two types of authoritarian attitudes toward women as openly subordinating attitudes and chivalry. Openly subordinating attitudes includes endorsing the subordination of women and seeing women as inferior. On the other hand, chivalry is based on feelings of protectiveness toward women and viewing women as morally and intellectually pure. Both types were found to be related to authoritarian attitudes and racism, but were still believed to be separate types of sexism. Then, as the feminist movement of the 1970s took hold, the scale became dated and unused.

A two-factor structure was proposed nearly forty years later by Glick and Fiske (1996), who classified two different, though related factors, termed hostile and benevolent sexism. Compared to previous incarnations of sexism scales, their Ambivalent Sexism Inventory (ASI) highlights the dual nature of prejudice, discrimination, and stereotyping in general, which may be a contributor to the longevity of such thoughts and behaviors. Their items focus on the ideals underlying each part of sexism, namely three facets that appear to drive feelings toward women. These are paternalism, gender differentiation, and heterosexuality, which are negatively or positively-skewed in each factor of sexism (1996).

Hostile sexism is the more well-known and openly despised facet of sexism: It is similar to what most people consider misogynist beliefs. Hostile sexism explicitly approves of male dominance over females, displays women as infringing on men's rights to rule, and shows women as alluring temptresses who will undermine men's hard work through sexual bartering (Becker & Wright, 2011). Specifically, the three facets of sexism become dominative paternalism (women need to be submissive to a man because they are not competent), competitive gender differentiation (women do not have traits required to do men's work), and hostile heterosexuality (women exploit men's desire for them) (Glick & Fiske, 1996).

Populations that focus on equality and fairness between genders are less likely to endorse hostile sexism items, as are women in comparison to men, probably due to their negative tone and outward disliking of women (Glick et al., 2000; Masser & Abrams, 1999). However, this is not to say that all women do not approve of hostile sexism as a whole: Becker (2010) found that women who report higher levels of hostile sexism did so while thinking of norm-deviant stereotypes (e.g., career women, feminists, etc.), not women in more traditional roles. Men mirror this discrepancy: they report higher hostile sexism toward a non-traditional woman (i.e., a promiscuous temptress) compared to a traditional woman (Sibley & Wilson, 2004).

Hostile sexist views often co-occur with high scores on social dominance orientation (SDO), a measure of approval with in-group domination and superiority (Christopher & Wojda, 2008; Sibley, Wilson, & Duckitt, 2007). SDO has also been found to predict other forms of prejudice, particularly in men (cf. Kteily, Sidanius, & Levin, 2011; Whitley & Ægisdóttir, 2000). Because SDO indicates concern with group

status, it is sensitive to threats from competition, especially out-groups, which is a key facet of hostile sexism (Sibley et al., 2007). This also extends into the workplace, where SDO predicts the level of employment skepticism for women (e.g., women do not have the skills required at work) (Christopher & Wojda, 2008).

Benevolent sexism, on the other hand, quietly endorses stereotyped gender roles and other forms of discrimination under the guise of positive attributions to women. Benevolent sexism does not place women as a threat, but instead views women as fragile creatures that are in need of protection, specialized in areas that men are not (in the arts or with children), or places them on a pedestal in order to be cherished and admired. This gives rise to the “women are wonderful” effect, where female stereotypes are rated consistently higher than male stereotypes (Eagly & Mladinic, 1989). Here, the three facets of sexism are presented as protective paternalism (women depend on men for protection and status), complementary gender differentiation (women have different roles because they are better at them than men), and heterosexual intimacy (men need to love and cherish women) (Glick & Fiske, 1996). Though this differentiation may be executed in a more palatable way, it nonetheless promotes the belief that men and women are unequal.

By far, benevolent sexism is the more insidious and harmful form of sexism for three reasons. First, it is not easily identified as sexism by either the giver or recipient (Glick & Fiske, 1996; Kilianski & Rudman, 1998). For instance, Barreto and Ellemers (2005) examined reactions to both a hostile and benevolent sexist. People were less likely to categorize a benevolent sexist as a sexist at all and rated them as more likable compared to a hostile sexist. Likability heavily influences the ability to perceive sexism,

as it goes against the prototype of the angry, dominant sexist (2005). In a job interview experiment by Dardenne, Dumont, and Bollier (2007), women perceived a benevolently sexist text as containing the least sexism, even in comparison to a non-sexist condition.

Second, both men and women are more likely to endorse benevolent sexism compared to hostile sexism. Part of this is due to the nature of the two factors, but there is also evidence that suggests that men and women endorse benevolent sexism for different reasons. Men are more likely to endorse benevolent sexism if they also hold a Right-Wing Authoritarian (RWA) world view, which is characterized by a desire for social cohesion through authority and conventionalism (Altemeyer, 1981; Sibley et al., 2009). Opposed to hostile sexism, benevolent sexism allows the conventions of “traditional women” to proliferate in a positive light. The relationship between RWA and benevolent sexism has also been observed in the workplace, as benevolent sexism fully mediates the relationship between RWA and preferences for women to hold traditional roles in the workforce (Christopher & Wojda, 2008).

However, women’s endorsement of benevolent sexism is a more complex issue than men’s, as it involves women approving of derogation of other women. In fact, the issue of whom women believe the “other women” are can impact ratings of benevolent sexism. In a reverse of the pattern observed with hostile sexism, women reported more support for benevolent sexism when it was directed at traditional women, such as housewives, or at themselves compared to non-traditional women (Becker, 2010). In addition to this, women are more likely to internalize benevolent sexist beliefs and express them as accurate of themselves, which can lead to detrimental outcomes such as greater depression and less desire for higher education (Swim & Hyers, 2009). Though

women usually directly disapprove of hostile sexism, they are much more egalitarian when confronted with benevolent sexism, not fully aware that supporting benevolent sexism is still approving of unfair treatment and legitimizing power for men (Kilianski & Rudman, 1998; Pratto & Pitpitan, 2008).

Third, benevolent sexism does not require approval of victims to affect them. Mere exposure to benevolent sexist behaviors can have a negative impact on women's self-focused thoughts and performance. Exposure to benevolent sexism leads to more intrusive thoughts and autobiographical memories about being incompetent and appearing foolish (Dardenne et al., 2007; Dumont, Sarlet, & Dardenne, 2010). After witnessing an act of benevolent sexism, women reported more body surveillance and body shame, variables associated with self-objectification, a threat to well-being (Shepherd, Erchull, Rosner, Taubenberger, Queen, & McKee, 2011; Swim, Hyers, Cohen, & Ferguson, 2011).

In task performance, Dutch women performed worse on simple grammatical, cognitive, and spatial tasks if they were exposed to benevolent sexist ideals beforehand, either through instructions, job descriptions, or interactions (Dardenne et al., 2007). This also occurs in cooperative tasks: Women who worked with a benevolently sexist partner in a task were more willing to give male team members leadership roles and described themselves as more relationally adept than those who worked with a non-sexist partner (Barreto, Ellemers, Piebinga, & Moya, 2010). In addition, Swim and colleagues (2001) found that women reported experiencing sexist behavior with personal impact approximately twice per week, ranging from sexual objectification to role beliefs/prejudices. Given the evidence presented earlier, women may experience more

sexist behaviors of which they are unaware or have seemingly no personal impact. That is, women may be subjected to these performance and self-esteem threatening interactions several times per week.

The presence of hostile and benevolent sexism is not simply the product of modern political correctness or only present in fully developed countries: Cross-cultural research has lent credence to the nearly universal existence of these two forms of sexism (Glick & Fiske, 2011; Glick et al., 2000). They can be reliably measured using the ASI in countries as diverse as Ghana, China, Colombia, Italy, and Australia, and are predictive of the level of gender inequality in these countries, as measured by gender empowerment and gender-related development index from the United Nations (Glick et al., 2000).

There are various theories that offer explanations for why sexism continues to persist in diverse cultures and environment. However, two are of particular interest in understanding the strength and proliferation of sexism – system justification and stereotype content model. System justification theory posits that the extent to which people approve of stereotypes (even of their own group) increases their acceptance of the status quo as fair (Jost & Kay, 2005). When both genders were exposed to benevolent sexist or complementary gender stereotypes, they were more likely to maintain the system of unfair differentiation (Napier, Thorisdottir, & Jost, 2010). This highlights how the cognitively accessible traits of groups work to reinforce their place in society: Hence, the concept of women as in need of protection or morally superior bolsters the system of inequality between genders.

Stereotype content model presents insight as to why the same person may have opposing attitudes toward women, such as endorsing both hostile and benevolent sexism for different groups of women. According to the stereotype content model, people act differently toward out-groups depending on their level of warmth and level of competence (Fiske, Cuddy, Glick, & Xu, 2002). Warmth is described as a positive intent toward other groups, whereas competence is the level of capability offered to the other groups. The placement of out-groups on these bipolar traits affects how they are perceived and treated by others.

Groups with high warmth but low competence are pitied – viewed as friendly, yet not adequately able to do everything on their own. These include the elderly, disadvantaged ethnic groups, and traditional women, particularly groups like homemakers and grandmothers (Wade & Brewer, 2006). Pitied women are also more likely to be the subject of benevolent sexism, as they both emphasize the need to take care of or protect these groups (Eckes, 2002; Fiske et al., 2002). For instance, working mothers are seen as warmer, but also less competent at their jobs compared to working fathers, who increase in warmth due to parenthood, but lose no competence (Cuddy, Fiske, & Glick, 2004).

In contrast, groups characterized by high competence and low warmth are envied. They appear very ambitious and hard-working, yet are categorized as socially cold and unemotional. Asians, Jews, and non-traditional women (e.g., feminists, businesswomen, female scientists, etc.) are placed into envious stereotypes (Fiske et al., 2002). Non-traditional women are more likely to be confronted with hostile sexism by both sexes, as

they are seen as competition and lacking in “womanly graces” (Fiske, 2012; Wade & Brewer, 2006).

Religion and Sexism

Women are the only out-group that has been present since the inception of the world’s religions. Hence, the relationship between religion and sexism is much more nuanced than other prejudices, such as racism or homophobia. Just as sexism operates uniquely on the societal level, many religious traditions are no longer obviously sexist (though some still persist), yet still persist in upholding teachings or beliefs that discreetly (or not so) discriminate against women. The Catholic Church, one of the largest stalwarts of the Christian faith, denounced men’s abuse of power over women, yet reinforced the “genius of women” in nurturance and motherhood (Ratzinger, 2004). Similarly, the fundamentalist movement among Protestant Evangelicals seeks to protect the institution of marriage and the family that God demands. Muslims also exhibit increased approval of both hostile and benevolent sexism as their religiosity increases (Hunsburger, Owusu, & Duck, 1999; Tasdemir & Sakalli-Ugurlu, 2010). An analysis of the world’s major religions revealed that the religiosity espoused by these institutions similarly influences followers’ negative attitudes toward women (Stephanie, 2011).

In support of this, Hunsburger and Jackson (2005) found that only scores on religious fundamentalism (RF), a measure that indicates support for one’s beliefs as completely true, had a consistent, negative impact on tolerance toward women. In contrast, Kirkpatrick (1993) demonstrated that RF was associated with negative attitudes against women, whereas a similar construct, Christian orthodoxy (CO), was linked to greater positive attitudes toward women. These studies failed to address exactly what

type of women elicit these feelings (e.g., housewives versus feminists). Given the previous research showing differences in reactions toward pitied and envied subtypes of women, it is necessary to address how religion influences attitudes toward specific groups of women, not just women as a whole.

However, the lack of connection between negative attitudes and other measures of religiosity (e.g., extrinsic and intrinsic religiosity) should not be considered completely non-sexist. Most prior research did not use ambivalent sexism measures to assess feelings toward women, meaning that whereas a lack of negative attitudes may be possibly viewed as a lack of hostile sexism, an increase in positive attitudes is not necessarily only non-sexist: It could also be benevolently sexist. In confirmation of this, more recent research has found that increased CO scores are associated with the protective paternalism facet of benevolent sexism, though only in men (Maltby, Hall, Anderson, & Edwards, 2010). Extrinsic religiosity, intrinsic religiosity, and scriptural literalism were all found to be positively associated with benevolent sexism, but not hostile sexism (Burn & Busso, 2005).

Given its relationship with RF, RWA, and CO, sexist beliefs may also be associated with closed-minded aspects of religion, not just the content. This cognitively rigid approach to one's religious beliefs has also been associated with other prejudices, such as ethnic, religious, and sexual (Johnson, Rowatt, Barnard-Brak, Patock-Peckham, LaBouff, & Carlisle, 2011). Whether or not a church or denomination encourages parishioners to hold their religious beliefs in this rigid way, religious teachings forbidding women from occupying the highest offices in the church continues to reinforce inequality between the sexes, even in multi-racial, class-diverse churches (Yancey & Kim, 2008).

When these sexist beliefs are linked to a Christian belief system, they create an environment where women feel they do not have influence or adequate chances to advance (Hall, Christerson, & Cunningham, 2010).

Religious Priming

As shown, previous research has focused on the relationship between measures of religiosity and sexism. However, there are more subtle ways of assessing the effects of religion on attitudes toward women. One of these methods, first used by Srull and Wyer (1979) is priming, in which mental representations of concepts are activated and influence later cognitions, emotions, or behaviors. Though the effect is short-lived, this cognitive activation leads to small but measurable changes in attitudes and behaviors compared to control conditions.

Bargh, Chen, and Burrows (1996) examined behavioral outcomes of priming in studies in which participants exposed to “polite” words (e.g., considerate, yield, cordially) were less likely to interrupt an experimenter compared to those primed with “rude” or neutral words. This has expanded to include priming in other sensory modalities, including sense of smell (Li, Moallem, Paller, & Gottfried, 2007), hearing (Kouider & Dupoux, 2005), and touch (Williams & Bargh, 2008; Ackerman, Nocera, & Bargh, 2010). Though these changes in emotions and behaviors may seem inconsequential or only relevant in a laboratory setting, recent research shows that they can have effects in a more ecologically valid environment. For instance, people standing near a church report more negative feelings toward various ethnic and religious out-groups than those near a civic building (LaBouff, Rowatt, Johnson, & Finkle, 2012).

People who vote in a school building are more likely to support educational funding than those who vote in other places (Berger, Meredith, & Wheeler, 2008).

Priming can also occur with (supraliminal) or without (subliminal) a person's awareness. For example, when people are directly exposed to the prime words (as in Bargh et al., 1996), they are aware of their presence, even if they are not aware of their effect on their cognitive processes. On the other hand, in subliminal priming, people are not aware of the effect or the exposure to the target primes. This is the preferred method as it decreases the likelihood of encountering error due to contrast effects or demand characteristics (Bargh & Chartrand, 2000). Activating religious concepts has been shown to occur in both supraliminal and subliminal contexts with varying results (Galen, 2012).

For supraliminal primes, Shariff and Norenzayan (2007) found that participants who completed a scrambled sentence task (SST) with religious words were more likely to donate money than those who completed the task with control words. Religious SSTs have also been shown to increase task persistence and anxiety (Toburen & Meier, 2010), decrease cheating (Randolph-Seng & Nielson, 2007), and increase generosity and cooperation in social games (Ahmed & Salas, 2011). In addition, the increased support for military attacks associated with reminders of death vanishes when fundamentalists are shown religious passages emphasizing compassion (Rothschild, Abdollahi, & Pyszczynski, 2009). However, supraliminal religious priming can also result in negative outcomes: Participants primed with the Golden Rule (i.e., "Do unto others as you would have done to you") attributed to Jesus Christ endorsed more explicitly anti-gay attitudes (Vilaythong, Lindner, & Nosek, 2010).

Religious subliminal priming requires more technological sophistication compared to supraliminal priming, using quick flashes of religious words (ranging from 20-60 ms) covered by a pre- and post-mask to ensure the word does not linger in iconic memory. These subliminal priming tasks result in similar, paradoxical changes in attitudes and behavior, such as increased willingness to volunteer for a charity (Pichon, Boccato, & Saroglou, 2007), decreased responsibility for actions (Dijksterhuis, Preston, Wegner, & Aarts 2008), and increased levels of covert racism and negative affect toward African-Americans (Johnson, Rowatt, & LaBouff, 2010). It has also been shown to increase submission to authority through thoughts and behaviors (Saroglou, Corneille, & Van Capellen, 2009).

The current study uses a subliminal priming task in order to activate religious concepts to examine its effects on sexist attitudes. Though most previous research has simply used various words associated with Christianity, ranging anywhere from Christ to Christmas, comfort to church, and sermon to spirit, the current study is the first to test the separation of three types of religious priming. Preston, Ritter, and Hernandez (2010) have identified three distinct types of Christian priming – agent, institution, and spiritual. Religious agents are described as those who impart religious information or hold divine power, which include God, angel, and prophet. Religious institution primes are related to the rituals or practices of being a member of the religion, such as communion, church, and prayer. Lastly, spiritual primes are the more abstract or conceptual words related to religion. These include holy, divine, and faith. Their research has indicated that subliminally priming religion increases cooperation with in-group members and charity

toward the in-group, whereas priming God increases cooperation with out-group members and giving to out-group charities.

As shown, previous religious priming research may have accidentally primed a specific religious concept (such as the church in LaBouff et al., 2012), but not with specific forethought. Deliberately differentiating between these religious prime types may provide insight into why religion can result in such disparate attitudinal and behavioral outcomes toward others. Especially given the diverse nature of prejudice against women, it is important to clearly assess what types of religious concepts are related to sexist attitudes. Though research in this area has only focused on treatment of a single out-group member, it has not yet been expanded to feelings toward an out-group overall. As mentioned, the goal of this study was to examine if priming different types of religious concepts, agent, institution, and spiritual, affects sexist beliefs and/or attitudes toward women compared to control concepts.

Hypotheses

Religious Priming and Ambivalent Sexism

Given religion's relationship with benevolent sexism, it is expected that activating religious concepts will lead to increased endorsement of benevolent sexism items (*hypothesis 1*). These effects should be present even after controlling for the effect of general religiousness and gender.

Religious Priming and Attitudes toward Women

According to the stereotype content model, attitudes toward women who are perceived to be warm, but not competent tend to be paternal or pitying, resulting in

increased compassion and sympathy. This response is closely related to the protective paternalism facet of benevolent sexism. Therefore, it is expected that exposure to religious primes will increase positive feelings these toward groups of women (*hypothesis 2*). On the other hand, groups that are perceived as cold but competent are regarded with envy, emphasizing competition for resources. Given its close relationship with hostile sexism, no changes in attitudes toward the envious groups are expected after religious priming.

CHAPTER TWO

Method

Participants

One-hundred twenty-eight Baylor University undergraduate students¹ ($M_{\text{age}} = 19.1$ yrs., $SD = .98$, 101 women) were recruited for this study using the Sona-Systems participants scheduling software. In exchange for their participation, participants received one hour of course credit. The online survey and in-lab portion each took approximately 30 minutes to complete.

The ethnicity of the sample was predominately Caucasian (59.1%), while the remainder consisted of Asian/Pacific Islander (16.5%), Hispanic (14.2%), African American (6.3%), and other (3.9%). The majority of the sample's religious affiliation was Protestant (67.7%) or Catholic (18.1%), but also included Buddhists (2.4%), Muslims (2.4%), "none" (8.7%), and "other" (1%).

Measures and Procedures

Self-Report Measures

After completing informed consent, participants were asked to complete an online survey at least 24 hours before their appointed time in the laboratory. It was administered using the Qualtrics survey website. It included measures of religiosity, sexism, attitudes

¹ The original sample size was $n = 145$ participants. However, some participants ($n = 7$) experienced survey difficulties and were unable to complete either pre- or post-experimental survey. Other participants were excluded for awareness or suspicion of prime words ($n = 8$) or familiarity with experimental procedure ($n = 2$). These did not differ based on group ($\chi^2 = 13.48, p = .34$).

toward women, and personality constructs. See Appendix A for a copy of the questionnaire items.

A. *Demographics*. Several items measured various demographic variables, including gender, race, age, religion, and level of education. Included in these items was also a one item measure of general religiosity (i.e., “To what extent do you consider yourself a religious person?”), which included response points from 1(not at all) to 7 (very much).

B. *Ambivalent Sexism Inventory (ASI)*. Hostile and benevolent sexism were measured using the 22-item ASI (Glick & Fiske, 1996). The 11-item hostile sexism subscale measures the explicit derogation of women in relation to men (e.g., “Women seek to gain power by getting control over men”), while the 11-item benevolent sexism subscale examined the more positive discrimination toward women (e.g., “Women should be cherished and protected by men”). In addition, the benevolent sexism subscale was broken down into the three underlying themes of sexist beliefs – gender differentiation, protective paternalism, and promotion of heterosexual intimacy. Participants responded to all items using a 6-point rating scale (0 = disagree strongly; 5 = agree strongly).

C. *Social Dominance Orientation (SDO)*. The 16-item SDO scale (Pratto, Sidanius, Stallworth, & Malle, 1994) measured the extent to which participants prefer inequality amongst social groups, specifically the dominance of their own in-group over other groups. Items assess the degree to which participants agree or disagree with statements concerning inequality (e.g., “Inferior groups should stay in their place”) using a 7-point scale ranging from 1 (very negative) to 7 (very positive).

D. *Right-wing Authoritarianism (RWA)*. The 10-item RWA scale (Altemeyer, 1981) was used to measure endorsement of authoritarian ideals (e.g., “What our country really needs is a strong, determined leader who will crush evil, and take us back to our true path”), including aggression, submission to authority, and conventionalism. A 7-point rating scale was also used for this scale (1 = strongly disagree; 7 = strongly agree).

E. *Religious Fundamentalism (RF)*. The 12-item short RF measure (Altemeyer & Hunsberger, 2004) examined the degree participants felt their religious beliefs are inerrant, necessary for salvation, and opposed to evil forces who seek to destroy (e.g., “God has given humanity a complete, unfailing guide to happiness and salvation, which must be totally followed”). Responses were coded using a 9-point scale ranging from -4 (very strongly disagree) to 4 (very strongly agree).

F. *Thermometer Items toward Gender Stereotypes*. Feelings toward several gender stereotypical groups were assessed using thermometer items. Participants were asked to rate how warm or cold they felt toward the group or person on a scale ranging from 0° to 100°. Warmer temperatures indicate more positive feelings toward the target, whereas colder temperatures indicate more negative feelings. Some female gender stereotypes included were stay-at-home mothers, single mothers, female athletes, businesswomen, and feminists (see Wade & Brewer, 2006).

Lexical Decision Task/Priming Procedure

After completing the online survey, participants were asked to come in to the lab to finish the experiment. Prior to their arrival in the lab, participants were randomly assigned to one of the four priming conditions – control, agent, spiritual, or institution. When the participant arrived, he or she was instructed to complete a computerized

version of a lexical decision task (LDT), which served to administer the subliminal prime. The LDT was run using Inquisit (Version 3.0.3) software. During this task, a string of letters would appear on the screen. The participant was asked to decide whether the string of letters was a word or not a word. If a word appeared on screen (e.g., lobster, cupboard, shirt), then the “A” key should be pressed; if the string of letters was not a word (e.g. glibe), then the “5” key should be pressed. The participant was asked to complete the task as fast as possible but without sacrificing accuracy. Each participant completed five blocks of 16 trials.

The subliminal priming occurred during the LDT. Prior to the presentation of the string of letters, a fixation point (+) appeared on the screen. This was followed by a pre-mask (XXXXXXXXXX) for 70 ms, the prime word for 35 ms, and, finally, a post-mask (XXXXXXXXXX) for another 70 ms. After the masks and prime, the screen was blank for 395 ms until the string of letters appeared. Participants could then press the appropriate answer key for word or not a word. Participants in the control condition were primed with neutral words like those chosen for the “word” letter strings. Those in the agentic, spiritual, or institution conditions were primed with the word-pairs God/Angel, Faith/Belief, and Scripture/Church, respectively (see Preston et al., 2010).

Post-Priming Survey

After completing the LDT and being primed, participants were asked to fill out another questionnaire that was a shortened version of the first survey. This survey was also administered online through the Qualtrics website. The scales included the ASI, thermometer items toward the same groups as the first survey, and a shortened list of demographics.

Debriefing

At the conclusion of the experiment, participants were asked a series of questions to probe for suspicion. In order to ensure the priming remained subliminal, participants were asked if they could recall any words they saw during the LDT. Those who reported seeing the prime words were removed from further investigation. Other questions probed for suspicion concerning the true nature of the experiment (e.g., “Did you feel the two studies you completed were related in any way?”; “Did anything affect how you performed in each of the studies?”). After assessing the participants’ level of suspicion, experimenters then debriefed them and answered any questions they had concerning the study. After this, participants were thanked and allowed to leave.

CHAPTER THREE

Results

All measures were scored and aggregated to create mean scores (see Table 1). The RF scores were recoded in order to remove the negative sign, so that lower scores indicated less endorsement of RF.

Table 1. *Descriptive statistics of self-report measures*

Self-Report Measure	Mean	<i>SD</i>	Range
Hostile Sexism	3.48	.71	1-6
Benevolent Sexism	3.81	.69	1-6
Religious Fundamentalism (RF)	5.18	.57	1-9
Right-Wing Authoritarianism (RWA)	3.89	.92	1-7
Social Dominance Orientation (SDO)	4.2	.36	1-7

Religious Priming and Ambivalent Sexism

Appropriate items on the ASI were reverse-scored and the total scores for hostile (HS) and benevolent sexism (BS) were totaled. An analysis of variance (ANOVA) was run to examine the effect of the subliminal religious priming on both HS and BS.

Overall, those in the religious priming conditions – agent ($M = 4.01$, $SD = .73$), institution ($M = 3.74$, $SD = .7$), and spiritual ($M = 3.92$, $SD = .62$) – reported higher levels of BS than those in the control condition ($M = 3.52$, $SD = .64$), $F(3, 120) = 2.96$, $p =$

.035, partial $\eta^2 = .069^1$ (See Figure 1). An ANCOVA was then run to partial out the effects of general religiosity and gender. The priming effect remained even after these two variables were controlled for, $F(3, 120) = 3.1, p = .031$, partial $\eta^2 = .072$. There were no differences between the priming conditions on HS.

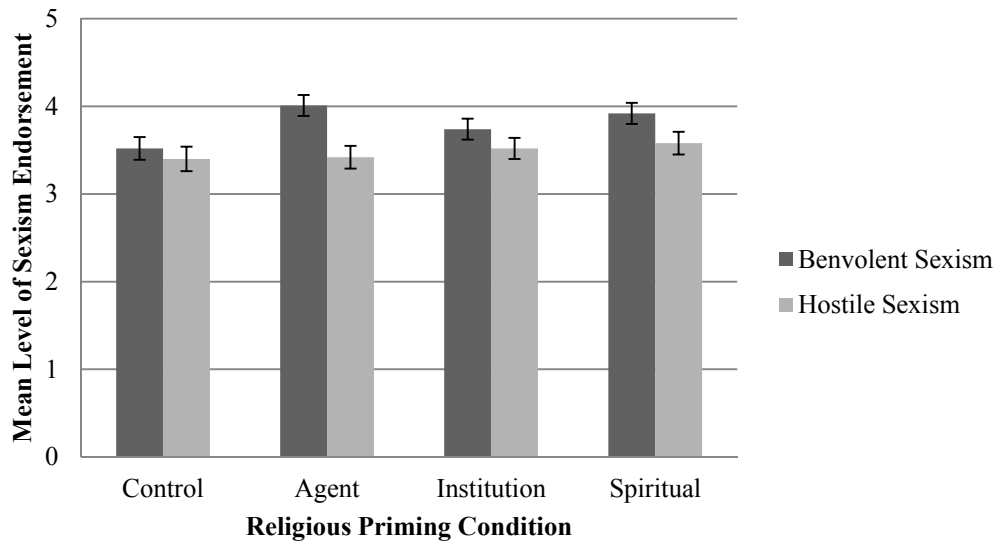


Figure 1. Mean level of sexism endorsement (hostile and benevolent) for each type of priming condition.

Post-hoc analysis using Tukey's HSD revealed that the only significant difference between groups was between the agent ($M = 4.01, SD = .73$) and control priming conditions ($M = 3.52, SD = .64$). Hypothesis 1 was confirmed, that participants exposed to religious primes will show increased levels of BS, but not HS. The main difference driving this effect appears to be between the agent religious primes and the control primes.

¹ Degrees of freedom were reduced from 124 to 120 because four participants did not complete the ASI in its entirety, lacking data on this measure.

Religious Priming and Attitudes toward Women

The thermometer items concerning women were examined in two different ways. The two sexual orientation groups (straight women and lesbian women) were measured individually. The others were separated into the two main categories of the stereotype content model (envious and pitied). The female scientists, businesswomen, female athletes, and feminists' item scores were aggregated into the envious group (low warmth, high competence). Stay-at-home mothers, single mothers, and female teachers were aggregated into the pitied group (high warmth, low competence). There were no differences between the religious priming conditions and control conditions in regards to any of the thermometer items. Therefore, hypothesis 2 was not confirmed.

Additional Analyses Controlling for SDO, RWA, and RF

Additional analyses of the effect of priming religious concepts on sexism explored the relationship controlling individually for SDO, RWA, and RF. The ANCOVAs revealed that SDO and RF reduced the effect of religious priming condition to a non-significant trend in the predicted direction, $F(3, 107) = 2.05, p = .11$, and $F(3, 109) = 2.02, p = .12$, respectively². However, when controlling for RWA, the effect was reduced to marginal significance, $F(3, 116) = 2.48, p = .065$ ³ (See Table 2).

²For SDO, degrees of freedom were reduced from 119 to 107 because 12 participants did not complete the full measure. Similarly, degrees of freedom were reduced from 119 to 109 for RF because 10 participants did not complete the measure.

³ Like SDO and RF, degrees of freedom for RWA were reduced from 119 to 116 because three participants failed to complete the measure.

Table 2. *Original and estimated marginal means of benevolent sexism controlling for religiosity variables*

Religious Priming Condition	\bar{x}	SDO	RF	RWA
Control	3.52(.64)	3.55 (.15)	3.54 (.14)	3.53 (.14)
Agent	4.01(.73)	4.00 (.13)	3.97 (.13)	3.99 (.12)
Institution	3.74(.7)	3.77 (.13)	3.74 (.13)	3.71 (.12)
Spiritual	3.92(.62)	3.90 (.13)	3.91 (.13)	3.91 (.12)

Note. Standard deviations (for the original means) and standard errors of the marginal means are presented in parentheses.

CHAPTER FOUR

Discussion

Subliminal exposure to religious concepts, particularly those associated with religious agents (i.e., God and angel), increased endorsement of benevolent sexism. However, religious priming was not associated with any changes in how people felt toward pitied or envious groups of women. This suggests that the activation of religious concepts influences how people view women in general, but not necessarily certain groups of women. These findings add to the previous literature (Burn & Busso, 2005; Hall et al., 2010; Maltby et al., 2010) by indicating that religious concepts alone are capable of shifting participants' attitudes toward women, regardless of their level of religiosity or gender.

This is the first study to show that religious priming affects sexist attitudes, though it has been shown to increase other forms of prejudice, like racism (Johnson et al., 2010). It also demonstrates that this change is not dependent on participant gender, as theorized by Maltby and colleagues (2010), but instead influences both sexes' approval of benevolent sexism. Thus, though the religious priming was outside of participants' awareness, it had an indiscriminate effect on increasing benevolent sexism.

Unlike previous religious priming studies however, which emphasize an intergroup explanation, these effects persisted even though the majority of the sample was a part of the out-group in question. Prior research has suggested that the reason religious priming increases prejudice is due to antagonism toward out-groups (Johnson et al., 2010; Norenzayan & Shariff, 2008). Given our findings, it appears that religion may

have a different relationship with sexism compared to other prejudices. Benevolent sexism disguises inequality through positive attributes and special abilities for the out-group, a distinction not found with other forms of prejudice. As noted earlier, most people do not perceive benevolent sexism to be derogatory, so its endorsement is difficult to classify as completely out-group antagonism. Therefore, it is unclear whether the results of the present study could be adequately assessed by the interaction of in-group promotion and out-group derogation.

Instead, the system justification theory provides a better framework for understanding the present results (Jost & Kay, 2005). Approval of benevolent sexism provides an outlet for both sexes to support the status quo for separate reasons: Men retain their position in society over women and women remain protected (though unequal). Therefore, the cognitive accessibility of benevolent sexism after exposure to religious primes provides evidence that religion is a domain that also reinforces the justification of inequality between genders. Religion then may act as another cultural or societal enhancer of this system.

Another potential explanation for the effect of agent religious priming is the supernatural punishment hypothesis. This states that people act according to religious teachings because of fear of punishment by supernatural beings (Shariff & Norenzayan, 2011). Therefore, priming religious agents may have not only activated biblical teachings concerning women, which, as discussed earlier, can be construed as benevolent sexist, but also activated a fear of punishment for not obeying God's commands that was not inherent in the other religious primes (institution and spiritual). However, most religions in America dismiss the notion that hostile sexism is appropriate treatment for

women, meaning that it is not taught that God approves of hostile sexist behavior. This hypothesis is bolstered by findings that people, both religious and non-religious, are less likely to cheat and are more generous when thoughts of God are activated, especially if they are of a punishing and wrathful God (Shariff & Norenzayan, 2007; 2010), and that priming religion in general increases submission to authority (Saroglou, et al., 2009).

While priming religious concepts affected approval of feelings and behaviors toward women, it did not alter how participants rated female stereotypes, whether they were pitied or envied. However, this might be contributed to the fact that religious priming was found to impact the entire construct of benevolent sexism, whereas the stereotype content model implies that only protective paternalism would increase feelings toward pitied stereotypes (Fiske et al., 2002). Complementary gender differentiation and heterosexual intimacy may play a larger role in the relationship between religion and sexism than protective paternalism, though this has yet to be investigated. Also, the chosen female subtypes may not have been strong enough to elicit the pitied responses required to affect attitudes toward them.

Limitations and Directions for Future Research

Improvements to this study could help explain the results using available theoretical frameworks. Measuring participants' personal images of God would have provided a better test of the supernatural punishment hypothesis. Whether participants hold a negative, neutral, or positive view of God may directly impact what is activated when primed with religious agents. By controlling for different views of God (Shariff & Norenzayan, 2010), it can be examined whether changes in endorsement of benevolent sexism are due to fear of a wrathful God or a generalized association between religion

and sexism. However, given the positive valence of benevolent sexism, it may be that views of a kind God may also increase acceptance of benevolent sexism in the same way that benevolent sexists are classified as likable, nice men (Barreto & Ellemers, 2005). A similar issue is participants' pre-existing gendered ideals of the supernatural beings presented. Again, the full examination, including perceived motherly characteristics, of god-image may provide insight into why supernatural beings are associated with higher levels of benevolent sexism.

Expanding this study beyond an undergraduate sample would greatly improve generalizability of the findings, especially given the overt Christian atmosphere of Baylor University and small cell sizes. The general public may not be as religiously active or educated as the students at a religious college. Previous research of a non-student sample has indicated that religious identity, particularly questioning and accepting identities, impacts levels of prejudice, including sexism (Balkin, Schlosser, & Levitt, 2009). Therefore, a more diverse sample of participants would test whether the effect of religious priming on sexism changes due to differing levels of religious immersion.

In addition, the current study primed religious concepts implicitly, via subliminal priming, but measured sexism explicitly, through responses on a survey. It would be interesting to note whether an implicit priming procedure of religious concepts affects an implicit measure of sexism, such as an implicit association task using traditional and non-traditional women (see Greenwald, McGhee, & Schwartz, 1998). By matching the awareness level of priming with the awareness level of the outcome, a fuller picture of the interaction between religion and sexism may be obtained.

Though this study focused primarily on self-reported attitudes, it would be prudent to examine the effect of religious priming on sexist behaviors, both for men and women. For men, this could include an evaluation of or an interaction with a female confederate to examine whether they are more prone to respond or act in benevolent sexist ways following exposure to religious concepts. For women, future studies could observe their interactions with male confederate, responses to overt instances of benevolent sexist behaviors, or changes self-focused emotions and attitudes.

In line with inquiries into religion's impact on other prejudices, a logical step for research would be to parse out the effects of the content of religious beliefs and the cognitive rigidity often intertwined with it. This study briefly examined the effects of SDO, RWA, and RF, which are all associated with cognitive rigidity. Though the effect of religious priming was diminished slightly by controlling for each of these variables, it was beyond the scope of the current experiment to fully explore the underlying connection between cognitive styles and religion. Further investigation in this area using more sophisticated statistical techniques will provide a better understanding about the unique relationship between religion and sexism. Previous studies have found that the cognitive rigidity associated with religion, not religious content, is more predictive of prejudicial attitudes toward ethnic out-groups, though this is reversed for value-violating groups (Shen, Yelderman, Haggard, & Rowatt, in press).

Future investigations could also use more ecologically valid priming techniques to investigate the strength of connection between religion and sexism. Similar to LaBouff et al. (2012), religious environments may serve to prime feelings and perhaps actions toward women. This could become very important when considering the use of religious

buildings in a voting context, as exposure to benevolent sexism has been shown to decrease women's willingness to engage in collective action to improve their status (Becker & Swim, 2011).

In addition, this first examination of the separation of types of religious priming showed that future studies should be wary of simply priming "Christian concepts". This experiment found differences between agent, institution, and spiritual religious priming, adding merit to the assertion that different aspects of religion activate distinctive cognitions. Indeed, one of these differences may be the active agency primed by God and angel compared to the community primed by church and scripture. In line with this theory, Sasaki and Kim (2011) have found that participants react differently to their own religion's primes depending on their cultural background. Westerners tend to adjust to difficult situations after priming, whereas those from Eastern cultures were more likely to seek out social affiliation. Therefore, it is necessary not only to examine the nature of religion itself, but also its function within society. With future religious priming research, it may prove useful to make these separations to help elucidate further the paradoxical effects of religion on prejudice.

Though many religions preach a "love thy neighbor" approach to interacting with others, several studies have found that there are limits to this command, including ethnic, religious, and value-violating out-groups. The current study adds that religion may also prescribe caveats in interactions between men and women, particularly in benevolent ways. Though these behaviors appear positive, they result in negative outcomes for women, reinforcing a system in which they remain submissive to the needs of men. This

experiment indicates that religion may not only operate as a facilitator of sexist ideals, but also as a promoter of their continuation in modern society.

APPENDICES

APPENDIX A

Survey Materials

Ambivalent Sexism Inventory (Glick & Fiske, 1996)

The following are a series of statements concerning men and women and their relationships in contemporary society. Please indicate the degree to which you agree or disagree with each statement using the scale below. If you do not feel comfortable choosing an answer, feel free to leave it blank.

- _____ 1. No matter how accomplished he is, a man is not truly complete as a person unless he has the love of a woman. (BS)
- _____ 2. Many women are actually seeking special favors, such as hiring policies that favor them over men, under the guise of asking for "equality". (HS)
- _____ 3. In a disaster, women ought not necessarily to be rescued before men. (BS)
- _____ 4. Most women interpret innocent remarks or acts as being sexist.(HS)
- _____ 5. Women are too easily offended.(HS)
- _____ 6. People are often truly happy in life without being romantically involved with a member of the other sex. (BS)
- _____ 7. Feminists are not seeking for women to have more power than men. (HS)
- _____ 8. Many women have a quality of purity that few men possess. (BS)
- _____ 9. Women should be cherished and protected by men. (BS)
- _____ 10. Most women fail to appreciate fully all that men do for them. (HS)
- _____ 11. Women seek to gain power by getting control over men. (HS)
- _____ 12. Every man ought to have a woman whom he adores. (BS)
- _____ 13. Men are complete without women. (BS)
- _____ 14. Women exaggerate problems they have at work. (HS)

- _____ 15. Once a woman gets a man to commit to her, she usually tries to put him on a tight leash. (HS)
- _____ 16. When women lose to men in a fair competition, they typically complain about being discriminated against. (HS)
- _____ 17. A good woman should be set on a pedestal by her man. (BS)
- _____ 18. There are actually very few women who get a kick out of teasing men by seeming sexually available and then refusing male advances. (HS)
- _____ 19. Women, compared to men, tend to have a superior moral sensibility. (BS)
- _____ 20. Men should be willing to sacrifice their own well-being in order to provide financially for the women in their lives. (BS)
- _____ 21. Feminists are making entirely reasonable demands of men. (HS)
- _____ 22. Women, as compared to men, tend to have a more refined sense of culture and good taste. (BS)

Social Dominance Orientation
(Pratto, Sidanius, Stallworth, & Malle, 1994)

Instructions: Which of the following objects or statements do you have a positive or negative feeling towards? Beside each object or statement, place a number from “1” to “7” which represents the degree of your positive or negative feeling.

1	2	3	4	5	6	7
Very Negative	Negative	Slightly Negative	Neither positive nor negative	Slightly Positive	Positive	Very Positive

- _____ 1. Some groups of people are simply not the equals of others.
- _____ 2. Equality.
- _____ 3. It is important that we treat other countries as equals.
- _____ 4. This country would be better off if we cared less about how equal all people were.
- _____ 5. To get ahead in life, it is sometimes necessary to step on others.

- _____ 6. In an ideal world, all nations would be equal.
- _____ 7. Increased social equality.
- _____ 8. If people were treated more equally we would have fewer problems in this country.
- _____ 9. Some people are just more deserving than others.
- _____ 10. It is not a problem if some people have more of a chance in life than others.
- _____ 11. We should try to treat one another as equals as much as possible. (All humans should be treated equally.)
- _____ 12. Some people are just more worthy than others.
- _____ 13. Increased economic equality.
- _____ 14. Some people are just inferior to others.

The Revised 12-Item Religious Fundamentalism Scale
(Altemeyer & Hunsberger, 1992)

- 4 very strongly disagree
-3 strongly disagree
-2 moderately disagree
-1 slightly disagree
0 neutral
+1 slightly agree
+2 moderately agree
+3 strongly agree
+4 very strongly agree

Use the scale above to indicate to what extent you agree, disagree, or are neutral to the following twelve statements.

- _____ 1. God has given humanity a complete, unfailing guide to happiness and salvation, which must be totally followed.
- _____ 2. No single book of religious teachings contains all the intrinsic, fundamental truths about life.
- _____ 3. The basic cause of evil in this world is Satan, who is constantly and ferociously fighting against God.

- _____ 4. It is more important to be a good person than to believe in God and the right religion.
- _____ 5. There is a particular set of religious teachings in this world that are so true, you can't go any "deeper" because they are the basic, bedrock message that God has given humanity.
- _____ 6. When you get right down to it, there are basically only two kinds of people in the world: the Righteous, who will be rewarded by God; and the rest, who will not.
- _____ 7. Scriptures may contain general truths, but they should NOT be considered completely, literally true from beginning to end.
- _____ 8. To lead the best, most meaningful life, one must belong to the one, fundamentally true religion.
- _____ 9. "Satan" is just the name people give to their own bad impulses. There really is *no such thing* as a diabolical "Prince of Darkness" who tempts us.
- _____ 10. Whenever science and sacred scripture conflict, *science* is probably right.
- _____ 11. The fundamentals of God's religion should never be tampered with, or compromised with others' beliefs.
- _____ 12. *All* of the religions in the world have flaws and wrong teachings. There is *no* perfectly true, right religion.

Right-Wing Authoritarianism
(Altemeyer, 1981)

Instructions: Please answer the following questions according to how much you agree or disagree with each statement using the scale below. You will probably find that you agree with some of the statements and disagree with others, to varying extents.

1	2	3	4	5	6	7
Strongly Disagree	Moderately Disagree	Slightly Disagree	Neutral	Slightly Agree	Moderately Agree	Strongly Agree

- _____ 1. What our country really needs is a strong, determined leader who will crush evil, and take us back to our true path.
- _____ 2. There are many radical, immoral people in our country today, who are trying to ruin it for their godless purposes, whom the authorities should put out of action.

_____ 3. Once our government leaders give us the “go-ahead,” it will be the duty of every patriotic citizen to help stomp out the rot that is poisoning our country from within.

_____ 4. It is always better to trust the judgment of the proper authorities in government and religion than to listen to the noisy rabble-rousers in our society who are trying to create doubts in people’s minds.

_____ 5. It’s better to have trashy magazines and radical pamphlets in our communities than to let the government have the power to censor them.

_____ 6. What our country needs most is discipline, with everyone following our leader in unity.

_____ 7. Gays and lesbians are just as healthy and moral as anybody else.

_____ 8. Everyone should have their own lifestyle, religious beliefs, and sexual preferences, even if it makes them different from everyone else.

_____ 9. People should pay less attention to the Bible and other old traditional forms of religious guidance, and instead develop their own personal standards of what is moral and immoral

_____ 10. There is nothing wrong with premarital sexual intercourse.

REFERENCES

- Ackerman, J. M., Nocera, C. C., & Bargh, J. A. (2010). Incidental haptic sensations influence social judgments and decision. *Science*, 328(5986), 1712–1715. doi:10.1126/science.1189993
- Ahmed, A. M., & Salas, O. (2011). Implicit influences of Christian religious representations on dictator and prisoner's dilemma game decisions. *The Journal of Socio-Economics*, 40(3), 242–246. doi:10.1016/j.socec.2010.12.013
- Allport, G. W. (1954). *The nature of prejudice*. Oxford England: Addison-Wesley.
- Altemeyer, B. (1981). *Right-wing authoritarianism*. Manitoba: University of Manitoba Press.
- Altemeyer, B., & Hunsberger, B. (2004). A revised religious fundamentalism scale: The short and sweet of it. *International Journal for the Psychology of Religion*, 14(1), 47–54. doi:10.1207/s15327582ijpr1401_4
- Balkin, R. S., Schlosser, L. Z., & Levitt, D. H. (2009). Religious identity and cultural diversity: Exploring the relationships between religious identity, sexism, homophobia, and multicultural competence. *Journal of Counseling & Development*, 87(4), 420–427.
- Bargh, J. A., & Chartrand, T. L. (2000). The mind in the middle: A practical guide to priming and automaticity research. In H. T. Reis & C. M. Judd (Eds.), *Handbook of research methods in social and personality psychology*. (pp. 253–285). New York, NY US: Cambridge University Press.
- Bargh, J. A., Chen, M., & Burrows, L. (1996). Automaticity of social behavior: Direct effects of trait construct and stereotype activation on action. *Journal of Personality and Social Psychology*, 71(2), 230–244. doi:10.1037/0022-3514.71.2.230
- Barreto, M., & Ellemers, N. (2005). The burden of benevolent sexism: How it contributes to the maintenance of gender inequalities. *European Journal of Social Psychology*, 35(5), 633–642. doi:10.1002/ejsp.270
- Barreto, M., Ellemers, N., Piebinga, L., & Moya, M. (2010). How nice of us and how dumb of me: The effect of exposure to benevolent sexism on women's task and relational self-descriptions. *Sex Roles*, 62(7-8), 532–544. doi:10.1007/s11199-009-9699-0

- Becker, J. C. (2010). Why do women endorse hostile and benevolent sexism? The role of salient female subtypes and internalization of sexist contents. *Sex Roles*, 62(7-8), 453–467. doi:10.1007/s11199-009-9707-4
- Becker, J. C., & Swim, J. K. (2012). Reducing endorsement of benevolent and modern sexist beliefs: Differential effects of addressing harm versus pervasiveness of benevolent sexism. *Social Psychology*, 43(3), 127–137. doi:10.1027/1864-9335/a000091
- Becker, J. C., & Wright, S. C. (2011). Yet another dark side of chivalry: Benevolent sexism undermines and hostile sexism motivates collective action for social change. *Journal of Personality and Social Psychology*, 101(1), 62–77. doi:10.1037/a0022615
- Burn, S. M., & Busso, J. (2005). Ambivalent sexism, scriptural literalism, and religiosity. *Psychology of Women Quarterly*, 29(4), 412–418. doi:10.1111/j.1471-6402.2005.00241.x
- Caprariello, P. A., Cuddy, A. J. C., & Fiske, S. T. (2009). Social structure shapes cultural stereotypes and emotions: A causal test of the stereotype content model. *Group Processes & Intergroup Relations*, 12(2), 147–155. doi:10.1177/1368430208101053
- Christopher, A. N., & Wojda, M. R. (2008). Social dominance orientation, right-wing authoritarianism, sexism, and prejudice toward women in the workforce. *Psychology of Women Quarterly*, 32(1), 65–73. doi:10.1111/j.1471-6402.2007.00407.x
- Cuddy, A. J. C., Fiske, S. T., & Glick, P. (2004). When Professionals Become Mothers, Warmth Doesn't Cut the Ice. *Journal of Social Issues*, 60(4), 701–718. doi:10.1111/j.0022-4537.2004.00381.x
- Dardenne, B., Dumont, M., & Bollier, T. (2007). Insidious dangers of benevolent sexism: Consequences for women's performance. *Journal of Personality and Social Psychology*, 93(5), 764–779. doi:10.1037/0022-3514.93.5.764
- Dijksterhuis, A., Preston, J., Wegner, D. M., & Aarts, H. (2008). Effects of subliminal priming of self and God on self-attribution of authorship for events. *Journal of Experimental Social Psychology*, 44(1), 2–9. doi:10.1016/j.jesp.2007.01.003
- Duckitt, J., & Sibley, C. G. (2010). Right-wing authoritarianism and social dominance orientation differentially moderate intergroup effects on prejudice. *European Journal of Personality*, 24(7), 583–601.

- Dumont, M., Sarlet, M., & Dardenne, B. (2010). Be too kind to a woman, she'll feel incompetent: Benevolent sexism shifts self-construal and autobiographical memories toward incompetence. *Sex Roles*, 62(7-8), 545–553. doi:10.1007/s11199-008-9582-4
- Eagly, A. H., & Mladinic, A. (1989). Gender stereotypes and attitudes toward women and men. *Personality and Social Psychology Bulletin*, 15(4), 543–558. doi:10.1177/0146167289154008
- Eckes, T. (2002). Paternalistic and envious gender stereotypes: Testing predictions from the stereotype content model. *Sex Roles*, 47(3-4), 99–114. doi:10.1023/A:1021020920715
- Fiske, S. T. (2012). Managing ambivalent prejudices: Smart-but-cold and warm-but-dumb stereotypes. *Annals of the American Academy of Political and Social Science*, 639(1), 33–48. doi:10.1177/0002716211418444
- Fiske, S. T., Cuddy, A. J. C., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology*, 82(6), 878–902. doi:10.1037/0022-3514.82.6.878
- Galen, L. W. (2012). Does religious belief promote prosociality? A critical examination. *Psychological Bulletin*, 138(5), 876–906. doi:10.1037/a0028251
- Glick, P., & Fiske, S. T. (1996). The Ambivalent Sexism Inventory: Differentiating hostile and benevolent sexism. *Journal of Personality and Social Psychology*, 70(3), 491–512. doi:10.1037/0022-3514.70.3.491
- Glick, P., & Fiske, S. T. (2011). Ambivalent sexism revisited. *Psychology of Women Quarterly*, 35(3), 530–535. doi:10.1177/0361684311414832
- Glick, P., Fiske, S. T., Mladinic, A., Saiz, J. L., Abrams, D., Masser, B., Adetoun, B., et al. (2000). Beyond prejudice as simple antipathy: Hostile and benevolent sexism across cultures. *Journal of Personality and Social Psychology*, 79(5), 763–775. doi:10.1037/0022-3514.79.5.763
- Good, J. J., & Rudman, L. A. (2010). When female applicants meet sexist interviewers: The costs of being a target of benevolent sexism. *Sex Roles*, 62(7-8), 481–493. doi:10.1007/s11199-009-9685-6
- Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. K. (1998). Measuring individual differences in implicit cognition: The implicit association test. *Journal of Personality and Social Psychology*, 74(6), 1464–1480. doi:10.1037/0022-3514.74.6.1464

- Hall, M. E. L., Christerson, B., & Cunningham, S. (2010). Sanctified sexism: Religious beliefs and the gender harassment of academic women. *Psychology of Women Quarterly*, 34(2), 181–185. doi:10.1111/j.1471-6402.2010.01560.x
- Hunsberger, B., & Jackson, L. M. (2005). Religion, meaning, and prejudice. *Journal of Social Issues*, 61(4), 807–826. doi:10.1111/j.1540-4560.2005.00433.x
- Hunsberger, B., Owusu, V., & Duck, R. (1999). Religion and prejudice in Ghana and Canada: Religious fundamentalism, right-wing authoritarianism and attitudes toward homosexuals and women. *International Journal for the Psychology of Religion*, 9(3), 181–194. doi:10.1207/s15327582ijpr0903_2
- Johnson, M. K., Rowatt, W. C., Barnard-Brak, L. M., Patock-Peckham, J. A., LaBouff, J. P., & Carlisle, R. D. (2011). A mediational analysis of the role of right-wing authoritarianism and religious fundamentalism in the religiosity–prejudice link. *Personality and Individual Differences*, 50(6), 851–856. doi:10.1016/j.paid.2011.01.010
- Johnson, M. K., Rowatt, W. C., & LaBouff, J. (2010). Priming Christian religious concepts increases racial prejudice. *Social Psychological and Personality Science*, 1(2), 119–126.
- Jost, J. T., & Kay, A. C. (2005). Exposure to benevolent sexism and complementary gender stereotypes: Consequences for specific and diffuse forms of system justification. *Journal of Personality and Social Psychology*, 88(3), 498–509. doi:10.1037/0022-3514.88.3.498
- Kilianski, S. E., & Rudman, L. A. (1998). Wanting it both ways: Do women approve of benevolent sexism? *Sex Roles*, 39(5-6), 333–352. doi:10.1023/A:1018814924402
- Kirkpatrick, L. A. (1993). Fundamentalism, Christian orthodoxy, and intrinsic religious orientation as predictors of discriminatory attitudes. *Journal for the Scientific Study of Religion*, 32(3), 256–268. doi:10.2307/1386664
- Kouider, S., & Dupoux, E. (2005). Subliminal Speech Priming. *Psychological Science*, 16(8), 617–625. doi:10.1111/j.1467-9280.2005.01584.x
- Kteily, N. S., Sidanius, J., & Levin, S. (2011). Social dominance orientation: Cause or “mere effect”? Evidence for SDO as a causal predictor of prejudice and discrimination against ethnic and racial outgroups. *Journal of Experimental Social Psychology*, 47(1), 208–214. doi:10.1016/j.jesp.2010.09.009
- LaBouff, J. P., Rowatt, W. C., Johnson, M. K., & Finkle, C. (2012). Differences in attitudes toward outgroups in religious and nonreligious contexts in a multinational sample: A situational context priming study. *International Journal for the Psychology of Religion*, 22(1), 1–9. doi:10.1080/10508619.2012.634778

- Li, W., Moallem, I., Paller, K. A., & Gottfried, J. A. (2007). Subliminal smells can guide social preferences. *Psychological Science*, 18(12), 1044–1049. doi:10.1111/j.1467-9280.2007.02023.x
- Maltby, L. E., Hall, M. E. L., Anderson, T. L., & Edwards, K. (2010). Religion and sexism: The moderating role of participant gender. *Sex Roles*, 62(9-10), 615–622. doi:10.1007/s11199-010-9754-x
- Masser, B., & Abrams, D. (1999). Contemporary sexism: The relationships among hostility, benevolence, and neosexism. *Psychology of Women Quarterly*, 23(3), 503–517. doi:10.1111/j.1471-6402.1999.tb00378.x
- Nadler, E. B., & Morrow, W. R. (1959). Authoritarian attitudes toward women, and their correlates. *The Journal of Social Psychology*, 49, 113–123. doi:10.1080/00224545.1959.9921970
- Napier, J. L., Thorisdottir, H., & Jost, J. T. (2010). The joy of sexism? A multinational investigation of hostile and benevolent justifications for gender inequality and their relations to subjective well-being. *Sex Roles*, 62(7-8), 405–419. doi:10.1007/s11199-009-9712-7
- Norenzayan, A., & Shariff, A. F. (2008). The origin and evolution of religious prosociality. *Science*, 322(5898), 58–62. doi:10.1126/science.1158757
- Pichon, I., Boccato, G., & Saroglou, V. (2007). Nonconscious influences of religion on prosociality: A priming study. *European Journal of Social Psychology*, 37(5), 1032–1045. doi:10.1002/ejsp.416
- Pratto, F., & Pitpitan, E. V. (2008). Ethnocentrism and sexism: How stereotypes legitimize six types of power. *Social and Personality Psychology Compass*, 2(6), 2159–2176. doi:10.1111/j.1751-9004.2008.00148.x
- Pratto, F., Sidanius, J., Stallworth, L. M., & Malle, B. F. (1994). Social dominance orientation: A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology*, 67(4), 741–763. doi:10.1037/0022-3514.67.4.741
- Preston, J. L., Ritter, R. S., & Hernandez, J. I. (2010). Principles of religious prosociality: A review and reformulation. *Social and Personality Psychology Compass*, 4(8), 574–590. doi:10.1111/j.1751-9004.2010.00286.x
- Randolph-Seng, B., & Nielsen, M. E. (2007). Honesty: One effect of primed religious representations. *The International Journal for the Psychology of Religion*, 17, 303–315

- Ratzinger, J.C. (2004). Letter to the bishops of the Catholic Church on the collaboration of men and women in the church and in the world. The Roman Curia. Vatican City.
- Ritter, B. A., & Yoder, J. D. (2004). Gender differences in leader emergence persist even for dominant women: An updated confirmation of role congruity theory. *Psychology of Women Quarterly*, 28(3), 187–193. doi:10.1111/j.1471-6402.2004.00135.x
- Rothschild, Z. K., Abdollahi, A., & Pyszczynski, T. (2009). Does peace have a prayer? The effect of mortality salience, compassionate values, and religious fundamentalism on hostility toward out-groups. *Journal of Experimental Social Psychology*, 45(4), 816–827. doi:10.1016/j.jesp.2009.05.016
- Saroglou, V., Corneille, O., & Van Cappellen, P. (2009). “Speak, Lord, your servant is listening”: Religious priming activates submissive thoughts and behaviors. *International Journal for the Psychology of Religion*, 19(3), 143–154. doi:10.1080/10508610902880063
- Sasaki, J. Y., & Kim, H. S. (2011). At the intersection of culture and religion: A cultural analysis of religion’s implications for secondary control and social affiliation. *Journal of Personality and Social Psychology*, 101(2), 401–414. doi:10.1037/a0021849
- Shariff, A. F., & Norenzayan, A. (2007). God is watching you: Priming God concepts increases prosocial behavior in an anonymous economic game. *Psychological Science*, 18(9), 803–809. doi:10.1111/j.1467-9280.2007.01983.x
- Shariff, A. F., & Norenzayan, A. (2011). Mean gods make good people: Different views of God predict cheating behavior. *International Journal for the Psychology of Religion*, 21(2), 85–96. doi:10.1080/10508619.2011.556990
- Shen, M.J., Yelderman, L. A., Haggard, M., & Rowatt, W.C. (in press). Disentangling the belief in God and cognitive rigidity/flexibility components of religiosity to predict racial and value-violating prejudice: A post-critical belief scale analysis. *Personality and Individual Differences*.
- Shepherd, M., Erchull, M. J., Rosner, A., Taubenberger, L., Queen, E. F., & McKee, J. (2011). “I’ll get that for you”: The relationship between benevolent sexism and body self-perceptions. *Sex Roles*, 64(1-2), 1–8. doi:10.1007/s11199-010-9859-2
- Sibley, C. G., & Wilson, M. S. (2004). Differentiating hostile and benevolent sexist attitudes toward positive and negative sexual female subtypes. *Sex Roles*, 51(11-12), 687–696. doi:10.1007/s11199-004-0718-x

- Sibley, C. G., Wilson, M. S., & Duckitt, J. (2007). Antecedents of men's hostile and benevolent sexism: The dual roles of social dominance orientation and right-wing authoritarianism. *Personality and Social Psychology Bulletin*, 33(2), 160–172. doi:10.1177/0146167206294745
- Srull, T. K., & Wyer, R. S. (1979). The role of category accessibility in the interpretation of information about persons: Some determinants and implications. *Journal of Personality and Social Psychology*, 37(10), 1660–1672. doi:10.1037/0022-3514.37.10.1660
- Stephanie, S. (2011). Help or hindrance? Religion's impact on gender inequality in attitudes and outcomes. *World Development*, 39(8), 1308–1321. doi:10.1016/j.worlddev.2010.12.004
- Swim, J. K., Aikin, K. J., Hall, W. S., & Hunter, B. A. (1995). Sexism and racism: Old-fashioned and modern prejudices. *Journal of Personality and Social Psychology*, 68(2), 199–214. doi:10.1037/0022-3514.68.2.199
- Swim, J. K., & Hyers, L. L. (2009). Sexism. In T. D. Nelson (Ed.), *Handbook of prejudice, stereotyping, and discrimination*. (pp. 407–430). New York, NY US: Psychology Press.
- Swim, J. K., Hyers, L. L., Cohen, L. L., & Ferguson, M. J. (2001). Everyday sexism: Evidence for its incidence, nature, and psychological impact from three daily diary studies. *Journal of Social Issues*, 57(1), 31–53. doi:10.1111/0022-4537.00200
- Taşdemir, N., & Sakallı-Uğurlu, N. (2010). The relationships between ambivalent sexism and religiosity among Turkish university students. *Sex Roles*, 62(7-8), 420–426. doi:10.1007/s11199-009-9693-6
- Toburen, T., & Meier, B. P. (2010). Priming God-related concepts increases anxiety and task persistence. *Journal of Social and Clinical Psychology*, 29(2), 127–143. doi:10.1521/jscp.2010.29.2.127
- Vilaythong, O. T., Lindner, N. M., & Nosek, B. A. (2010). Do unto others: Effects of priming the golden rule on Buddhists and Christians attitudes toward gay people. *Journal for the Scientific Study of Religion*, 49(3), 494–506. doi:10.1111/j.1468-5906.2010.01524.x
- Wade, M. L., & Brewer, M. B. (2006). The structure of female subgroups: An exploration of ambivalent stereotypes. *Sex Roles*, 54(11-12), 753–765. doi:10.1007/s11199-006-9043-x

- Whitley, B. E. J., & Ægisdóttir, S. (2000). The gender belief system, authoritarianism, social dominance orientation, and heterosexuals' attitudes toward lesbians and gay men. *Sex Roles, 42*(11-12), 947–967. doi:10.1023/A:1007026016001
- Williams, L. E., & Bargh, J. A. (2008). Keeping one's distance: The influence of spatial distance cues on affect and evaluation. *Psychological Science, 19*(3), 302–308. doi:10.1111/j.1467-9280.2008.02084.x
- Yancey, G., & Kim, Y. J. (2008). Racial diversity, gender equality, and SES diversity in Christian congregations: Exploring the connections of racism, sexism, and classism in multiracial and nonmultiracial churches. *Journal for the Scientific Study of Religion, 47*(1), 103–111. doi:10.1111/j.1468-5906.2008.00394.x