

Bellarmino University

ScholarWorks@Bellarmino

Undergraduate Theses

Undergraduate Works

12-7-2018

Religious Motivation, Priming and Their Effects on Sexist Language

Bridget Bard
balady439@gmail.com

Hank Rothgerber
Bellarmino University, hrothgerber@bellarmino.edu

Follow this and additional works at: https://scholarworks.bellarmino.edu/ugrad_theses



Part of the [Feminist, Gender, and Sexuality Studies Commons](#), [Religious Thought, Theology and Philosophy of Religion Commons](#), and the [Social Psychology Commons](#)

Recommended Citation

Bard, Bridget and Rothgerber, Hank, "Religious Motivation, Priming and Their Effects on Sexist Language" (2018). *Undergraduate Theses*. 33.
https://scholarworks.bellarmino.edu/ugrad_theses/33

This Honors Thesis is brought to you for free and open access by the Undergraduate Works at ScholarWorks@Bellarmino. It has been accepted for inclusion in Undergraduate Theses by an authorized administrator of ScholarWorks@Bellarmino. For more information, please contact jstemmer@bellarmino.edu, kpeers@bellarmino.edu.

Running head: RELIGIOUS MOTIVATION, PRIMING AND THEIR EFFECTS ON SEXIST LANGUAGE

Religious Motivation, Priming and Their Effects on Sexist Language

Bridget Bard

Bellarmino University

Abstract

This experiment delves into the potential effects of sexist language used in the Christian religious context on increased use of sexist language, and endorsement of sexism on an individual level. In order to demonstrate a relationship between these two variables, an experiment was designed. Participants were exposed to either a religious or neutral priming session and were then immediately asked to complete several scales and measures of sexist language, sexism, and their level of intrinsic religious motivation. The hypothesis was that participants who ranked lower on intrinsic religious motivation, and who received a religious prime, would generate increased sexist language and sexism than the neutrally primed, higher ranking intrinsically motivated participants. The results demonstrated opposite effects of the religious prime on the behavior of the participants. The religiously primed participants expressed less sexism and sexist language; and a significant interaction was found between exposure to a religious prime and intrinsic religious motivation level. Exposure to a religious prime affected intrinsic religious motivation, in that those ranking higher in intrinsic religious motivation expressed less sexism and sexist language than those lower in intrinsic religious motivation with a religious prime.

Religious Motivation, Priming and Their Effects on Sexist Language

Christianity, operating within the U.S. American context, has historically equated maleness with the divine. God is viewed as being masculine in nature, and women, historically have not been elevated within the Christian theological context (Holdsworth, 1999). This understanding of the divineness of being male is rooted in the language used within Christian liturgies, prayers, and hymns. This language regularly uses male pronouns in reference to God, as well as uses male pronouns to refer to all of humanity. This type of language becomes problematic when it is used in a light, nonchalant way, as it is today (Routley, 1979). This language extends out from the Christian church, as it's congregates interact with the secular world. Within America, and around the world, gender roles have been heavily influenced by religious experiences and understandings of God as male. When God is understood as male, the attributes of God, such as power and strength, are assumed to be attributes of men in general. If power and strength are attributes of men, then logically they would not be attributes of women (Johnson, 1984). Therefore, it is preached that women must inherently be different from God and possess different attributes, or at least different strengths than God or men.

As with any religion, the messages and teachings are taught through language, both spoken and written. Both forms of language within the Christian context depict God as male and all-powerful. This subtle assumption and historical use of sexist language is expected to impact peoples' individual attitudes and behaviors. Ehrlich & King (1994) argue that language is not a neutral means of communicating, as many may assume. They argue that language is a social institution that favors higher classes and dominant cultures. This argument makes sense, as it would be the dominant culture that has the privilege of forming the acceptable language in the ways that they see to be most fit. Within the current study, the dominant culture would be one

that is male, and the current sexist language that is used in the Christian context utilizes masculine generics. By exclusively using masculine generics in religious language, the implication is communicated that humanity is male, and that women are inherently deviations from the norm (Ehrlich & King, 1994).

Additionally, Ehrlich & King (1994) highlight the societal norm to know the gender of any individual one may address. People will replace masculine generics with simply names that continue the stereotypes of the roles that men play in society. Additionally, if someone does begin using the term “chairperson” they will use it to refer to a woman who is the chair of a department. But if the chair is a man, they will call them the “chairman.” This type of behavior demonstrates the deeply rooted need to communicate gender in identifying others, including God in a Christian religious context. God is not to be confused with a woman but must clearly be male in order to maintain power.

Throughout the history of the Christian church, people have attempted to check the sexist language use of the church. Most notably Julian of Norwich wrote about God as Mother in 1373 (“About Julian of Norwich,” 2014). Yet, sexist language within the Christian church has continued until recent years. One reason for this lack of questioning could be system justification. Individuals depend on social systems for wealth, security, and structure in their lives. The expectation is that the institutions that people rely on will be inherently fair, or else they could not be reliable (Douglas & Sutton, 2014). The church is a source of security and structure that goes unquestioned from its justified position. Men score higher on scales of system-justification and a major part of a system is the language that is used within it. Sexist language used within churches is justified by the men and women who are part of those churches.

Psychological studies have demonstrated that there is a connection between having a Christian, religious background and experiencing sexism in a personal, subconscious way. Specifically, in a study by, Eliason, Hall, Anderson, & Willingham (2017), they found that when biblical beliefs become more hierarchical, gender role identities became more traditional and career aspirations of women are lowered and their body shaming increased. Additionally, it has been shown that women who viewed themselves in a more masculine light had more positive evaluations of their self-worth (Mason, Mason, & Mathews, 2016). If hierarchical biblical beliefs ultimately lead women to lower their aspirations for themselves, then this is not only a personal problem, but a societal problem. American society relies on women to be a part of their work force and to be active members in society; businesses owned by women employ over 9 million people in the United States (National Association of Women Business Owners, 2017). The hierarchical biblical beliefs that can set this problem into motion may be exacerbated by the language that assumes God is male and women are, therefore, subtly thought of as powerless.

Despite the magnitude of this problem, there is a lack of empirical research conducted concerning the effects of religious sexist language on the attitudes and behaviors of individuals. Currently, the only other psychological study to experimentally examine the effects of religion on individuals' attitudes and behaviors was conducted by Haggard, Kaelen, Saroglou, Klein, & Rowatt (2018). All other studies concerning the effects of religion on individuals' attitudes or behaviors has been correlational. The general consensus from previous work is that religion has been shown to affect individual attitudes and behavior.

The Christian religious community has historically used sexist language and, therefore, laid the foundation for sexist attitudes towards women through gender roles and stereotypes. According to Swim, Aikin, Hall, & Hunter (1995), as sexist attitudes increase, sexist language

use also increases. Therefore, if the general consensus is that God is male and all-powerful, and the language reflects as much, then individuals who see men as more closely related to God and made in God's image, will express increased sexism and use similar sexist language.

Additionally, individuals must have motivation to participate in religion. If an individual's primary motivation to participate in a religious context is to be part of a religious community, then these individuals would be especially prone to using sexist language, and expressing sexism, as they are exposed to these practices more frequently than one who does not participate within the religious community.

Priming

In order for participants to activate the parts of their brain associated with religion, a technique called priming was used. Priming is a method of subconsciously exposing participants to a stimuli, and then measuring the effects that this exposure has on the participant's behavior. Before priming can be proven as a useful technique in this context, an establishment of the dual-process theory will be necessary. The dual-process theory states that the human brain has two separate types of mental processing, the reflective and the automatic (Posten, Ockenfels, & Mussweiler, 2014). The reflective takes a great amount of mental energy and requires time and contemplation. It is also heavily influenced by many different societal factors surrounding us, such as our gender roles.

The automatic processing system works like a heuristic. It is a short, immediate, gut response to a situation. Both types of processing are influenced by priming sessions, but the automatic responses are what is being looked at within this experiment. The automatic responses are also characteristically working with less information than the reflective processing, which means it is far more susceptible to the influences of priming. When one context is activated, it

can influence other cognitive content as well as our independent judgement and decisions. This is because, if one can manipulate the content of the very limited amount of information that the automatic processing is working with, then the impacts of this manipulation will be clearly seen, as there is little information to counteract the manipulation.

Essentially, the result of exposing a participant to a prime causes the automatic processing to show researchers the connections that they have made within the participant's mind. Participants show this not only in their behavior but also, literally, in their brains. In a study conducted by Naccache (1991), priming is being used to accomplish new neuroimages. Priming is creating the opportunities for new imaging because it highlights neural networks that may not have been activated without a specific prime. Basically, as Naccache explains, priming is used to investigate the coding of mental representations and the associations connected to each one. Associations then come to be seen in behavioral responses. In essence, priming can be used to demonstrate a mental representation that occurs from a particular stimulus affecting behavior after receiving the prime. Within the current experiment, the prime is being used to demonstrate the mental representation of experiences with religion, by using a stimuli of religious words with the intention of the behavioral output being an increased use of sexist language.

The only other psychological study researching the influences of religion on people's behaviors and attitudes utilizes a religious prime and was conducted by Haggard, et. al. (2018). The religious prime consists of 10 religious words that are subconsciously shown to participants while they complete a lexical decision-making task. This type of religious priming should be activating the part of the brain associated with religious language. Then behavior is measured to determine whether the prime had an effect on them or not. They found that a religious prime significantly increased benevolent sexism and had no effect on hostile sexism. Hostile sexism is

open discrimination against women, whereas benevolent sexism is a subtle, camouflaged discrimination against women. A total of four experiments were performed with U.S. American and Belgium citizens; two were held at Christian universities, one was conducted online with public school undergraduates, and one was conducted online with any U.S. residents.

Both Haggard, et. al. (2018) and the current work used a religious priming method derived from Johnson, Megan, Rowatt, & LaBouff (2010), who demonstrated a connection between religious priming and racism. Therefore, the religious prime has been shown to be reliable in affecting people's behavior and attitudes.

The current study is unique from the previous research in several different ways. It uses sexist language as an outcome measure. Haggard, et. al. (2018) delved deeper into the differences between types of religious primes to gain better understandings of their effects on sexist attitudes. Similarly, the current work has extended into examining religious motivation and measured its effects on uses of sexist language. According to Hoge (1972), intrinsic religious motivation is expressed by people who view religion as being the ultimate part of their life. Those ranking lower in intrinsic religious motivation, or extrinsically motivated, would view religion as being instrumental to their life. Additionally, extrinsically motivated individuals practice religion for the social aspect of going to church. Whereas, intrinsically motivated individuals practice religion for the spiritual, personal experience of religion.

Hypothesis

In order to determine whether religious sexist language was influencing peoples' behavior, participants were randomly assigned to receive either a religious prime or a neutral

prime. Immediately after, their use of sexist language, degree of sexism, and their religious motivation type were measured.

The hypothesis is that participants who are exposed to a religious prime will express more sexist language and sexism than participants who are exposed to a neutral prime. This should be a result of the exposure to sexist language used in a Christian context. Additionally, participants who are extrinsically motivated will be more likely to express more sexist language, with the religious prime, because they surround themselves with the social atmosphere of their religion more than intrinsically motivated participants. If the language that is used within a Christian church context, including Bible studies and Sunday services, is sexist, then the extrinsically motivated participants will have had more exposure to this language than their intrinsically motivated counterparts.

If, as hypothesized, the extrinsically motivated participants express more sexist language with the religious prime, then the assumption that this behavior is stemming from the personal experiences of people exposed to the Christian church would be supported. Specifically, the religious prime should have the greatest effect on religious motivation because of the activation of religious concepts within the participants. The neutral prime should not demonstrate a significant effect on participants' religious motivation.

Methods

Participants

This study was conducted using students from both lower and upper level psychology courses, as well as one class from a general education religious studies course, required of all students at Bellarmine University. Bellarmine University is a predominantly female school with

68% reporting as female and 32% reporting as male in 2017. It is a private, independent Catholic university in the middle of Louisville, Kentucky. The majority of students identify as Christian or Catholic. There were 93 participants within the study and all completed an IRB approved consent form and debriefing session after the study.

Materials

Priming Session. The religious and neutral priming sessions were developed using PowerPoint from Office 365. The slides were formatted to perform a lexical decision-making task. Within this task, words and non-words were flashed in front of participants and they were asked to decide and record whether they had seen a word or non-word. Examples of words include, “chair,” “past,” “bag,” “words.” Examples of non-words included, “scoe,” “tourb,” “thorm.” A complete list of words used can be found in Appendix A. Priming words were embedded within each slide, for both the neutral and the religious priming condition. These priming words were flashed at a speed of approximately 20 milliseconds, as to be subconscious to the participants. For the neutral priming condition, the priming words were the same as the neutral words used within the lexical decision-making task, as exemplified above. For the religious priming condition, the priming words were, “Bible,” “sermon,” “prayer,” “faith,” “Christ,” “church,” “gospel,” “heaven,” “Jesus,” and “Messiah.” The priming words were obtained from a previous study conducted by Johnson, et. al. (2010).

Detection of Sexist Language Task. The detection of sexist language task was also developed by McMinn, Williams, & McMinn (1994). This task is used to determine whether or not participants are identifying sexist language within text written by someone else. Participants were asked to specifically mark any grammar, spelling, or discriminatory language errors within twelve sentences provided to them on a sheet. Instructions were provided on the sheet, as well as

verbally explained to each participant. Participants were asked to simply circle, underline, or mark in some way any errors that they found within the sentences. Participants were scored on the amount of sexist language that was identified within the task. The maximum number of errors to be detected was 21. All detection of sexist language task questions can be found in Appendix B.

Production of Sexist Language Task. The production of sexist language task was used to measure the amount that the participants were producing sexist language within their own, unique responses. This task was developed by McMinn, et. al. (1994). The task involves three prompts with which the participants were asked to write approximately 5 sentences or less in response to their various scenarios. The first prompt was written about a business executive, the second about a nurse, and the third about a university professor. Each were in some sort of dilemma and the participants were to respond with how the character in each prompt should behave. The responses were scored based on the number of times that participants referred to the business executive as male, the nurse as female, and/or the professor as male. Additionally, if the participants referred to the student or the co-workers within the prompt as male for the business related and university related prompt, and female for the nursing related prompt, this was also included in their score. The complete prompts can be found in Appendix C.

Modern Sexism Scale. An inventory of explicit or implicit sexism was gathered from Swim, et. al. (1995). This measure was used to determine whether the participants were expressing hostile sexism, or the more likely, subtle sexism that can normally be detected within someone's language if they express subtle sexism. The content of this inventory can be found in Appendix D.

Religious Motivation. Additionally, an inventory task was used from a study conducted by Hoge (1972), to determine the participants' intrinsic religious motivation. This scale was used to determine whether the participants expressed higher degrees of intrinsic religious motivation or lesser degrees of intrinsic religious motivation, indicating that they would be identified as extrinsically motivated. The most reliable scale used specific questions as cited in Hoge (1972); these questions can be found in Appendix E.

Procedure

Participants were encouraged to participate in the experiment as part of their general education class, and prior to the experiment, completed an IRB approved consent form. Mild deception was used with the participants to limit the amount of expectation bias in the experiment. The participants were told that the experiment was about influences on decision making.

Participants were brought to a typical computer laboratory classroom and were asked to sit at any of the computers with a small number tag attached to it. The number tags were used to determine who was receiving the neutral prime, and who was receiving the religious priming. The odd numbered computers and participants received the religious prime, and the even numbered computers received the neutral priming session. The priming session consisted of students guiding themselves through the slides created by Dr. Tom Wilson and Bridget Bard from the same structure used in the experiment by Johnson, et. al. (2010). The students receiving the religious prime subconsciously were exposed to words such as, "church," "prayer," or "sermon." The students receiving the neutral prime were exposed to neutral words such as, "door," or "chair."

After the priming session was completed by each of the students, they received the detection of sexist language task. This task consisted of 12 sentences that had grammatical, spelling, and discriminatory language errors. The instructions for the participants was written on their detection task sheet, as well as verbally explained to them. They were asked to identify each of the errors within the sentences. This served as a determiner of whether participants were sensitive to passive sexist language in what they were reading.

Immediately following the completion of the detection task, participants were asked to complete an online survey developed on Google Forms. This survey began by asking the participants to write the number on the number tag at their computer; in this way, we could track which priming they had received. The first three questions on the survey were the production task questions. They are short prompts in which the participants responded in at least 4-5 sentences. This was used to determine whether the participants were actively using sexist language in their speech. Sexist language would come in the form of assuming that the nurse in the first prompt was female, or the CEO or professor in the second and third prompts were male.

When the production task was completed, participants were asked to complete the Modern Sexism Scale. Then participants were directed to the intrinsic religious motivation scale. This scale allowed us to determine the intrinsic religious motivation level of each participant. Following these inventories, participants were asked to complete basic demographics questions about age, gender identity, ethnicity, and religious affiliation.

As soon as each of the participants had completed the survey, they were debriefed on the true nature of the study. They had been told that the study was about influences on decision making, but in the debrief, they were encouraged to ask questions about the potential connections between religious priming and motivation on the uses of sexist language, and how we were

hypothesizing to find this connection. Each participant also received class credit that day for their attendance and participation in the study.

Results

Linear regression tests were used to determine the main effects and interactions between the priming conditions and intrinsic religious motivation for each of the outcome measures.

Sexism

There was a marginally significant main effect for priming condition, $B = -0.96$, $t = -1.82$, $p = 0.072$. This indicated that exposure to the religious prime led participants to express less sexism. However, intrinsic religious motivation had no significant effect on sexism, $B = 0.07$, $t = 0.66$, $p = 0.514$. Furthermore, there was a marginally significant priming condition x intrinsic religious motivation interaction, $B = 0.23$, $t = 1.62$, $p = 0.108$, as seen in Figure 1. Post-hoc testing indicated that the level of intrinsic religious motivation significantly predicted reported sexism for participants exposed to a religious priming condition, $B = 0.07$, $t = 0.65$, $p = .520$. Level of intrinsic religious motivation did not significantly predict reported sexism for participants exposed to a neutral priming condition, $B = 0.301$, $t = 3.23$, $p = 0.002$. Specifically, those lower in intrinsic religious motivation expressed more sexism than those higher in intrinsic religious motivation.

Sexist Language

Production. The first two prompts intended to measure the production of sexist language did not produce any significant main effects or interactions. Therefore, the subsequent analysis will focus on the nurse production prompt. For this question there was a marginally significant main effect for the priming condition, $B = -0.552$, $t = -1.77$, $p = 0.080$, such that exposure to a religious

priming condition ($M=0.13$, $SD=0.34$) led participants to produce less sexist language than neutral ($M=0.23$, $SD=0.63$). There was not a statistically significant effect for intrinsic religious motivation, $B=-0.070$, $t=-1.12$, $p=0.267$. There was a marginally significant priming condition x intrinsic religious motivation, $B=0.131$, $t=1.56$, $p=0.122$, as seen in Figure 2. For religious prime, intrinsic religious motivation predicted decreased production of sexist language, $B=0.061$, $t=1.65$, and $p=0.106$. Such that those lower in intrinsic religious motivation produced more sexist language, than those higher in intrinsic religious motivation with the religious prime. For the neutral prime, intrinsic religious motivation had no effect on the production of sexist language, $B=-0.07$, $t=-0.90$, and $p=0.371$.

Detection. Finally, there was a marginally significant main effect for priming condition, $B=2.50$, $t=1.64$, and $p=0.105$, such that exposure to the religious priming condition ($M=2.24$, $SD=2.76$) led participants to detect increased amounts of sexist language compared to participants exposed to the neutral priming condition ($M=1.46$, $SD=2.21$). The main effect graph can be found in Figure 3. However, there was not a statistically significant main effect for motivation, $B=0.34$, $t=1.11$, $p=0.27$. There was not a statistically significant interaction, $B=-0.49$, $t=-1.18$, $p=0.24$.

Correlation

Correlations between each of the dependent variables was analyzed. Sexism was not significantly correlated with sexist language detection, $r(93)=-0.016$, $p=0.87$, or sexist language production, $r(93)=-0.08$, $p=0.4$. Sexist language detection was also not significantly correlated with sexist language production, $r(93)=-0.087$, $p=0.41$.

Discussion

There were a number of significant effects in the study, but they tended to run counter to predictions and did not coincide with previous research. The religiously primed participants overall generated less detection and more production of sexist language, as well as expressed decreased sexism. While previous correlational studies and Haggard, et. al. (2018) found that religious priming increased sexism, here the opposite pattern occurred.

The question remains as to why exactly this result has occurred with the current work, but several characteristics of the participants used suggest some reasoning for these results. The first characteristic is that these participants were between the ages of 17 and 25. This age group has objectively less experience with the Christian church than a middle-aged participant. With less experience, means different mental associations between religion and anything that may accompany the mental representation of religion. This could lead to the results seen in the current work; that young people simply do not make the same mental associations between religion and sexism as a middle-aged individual might. Although, Haggard, et. al. (2018) did perform three out of four experiments using undergraduate college students as well.

Literal age is not the only way that the results of the current study could have been affected. Age in terms of which stage of faith a participant is in could have a strong effect on the results of an experiment like the current study. Fowler (1981), writes about six stages of faith that do not necessarily occur within chronological age order. The participants within this study would likely be within Stages 3 or 4 of Fowler's Stages of Faith. This would lead to behavior that is idle in their faith, or slowly transitioning into more questioning of faith. An older population may be between Stages 4 or 5. Within Stage 5, people become more aware of the deep mysteries of life and of faith, that people within lower Stages will not be able to notice or comprehend. Performing the same research method within the context of Fowler's Stages of

Faith could support a connection between Fowler's stages and changes in sexist language use of participants over their lifetimes.

Another characteristic of these participants is that they were all from Bellarmine University; a small, independent Catholic, private institution in Louisville, Kentucky. Every student is required to take two general education theology courses. The theology department at Bellarmine is distinct in that it focuses on using inclusive language and presenting theology from a non-traditional perspective. Every student within this study has experienced at least one theology course at Bellarmine, and this exposure to a new way of experiencing the Christian religion may have also affected participants and their responses. Potentially, the exposure to gender inclusive language within a Christian context may have "rewired" the participants mental representations making the religious prime become associated with inclusion instead of sexism.

The participants in this study were also not controlled for their religious affiliations. If there was a significant variety of religious affiliations within the study, then this may have affected the results. Not every religion has the same historical use of sexist language within their respective religious contexts. A religious context that uses non-sexist language may lead to results similar to what was found within the current study, whereas, a religious context that uses sexist language may be reflective of the predicted results of this study.

The main effect for the religious prime was qualified by an interaction with intrinsic religious motivation. Specifically, when a participant received a religious prime and they were low ranking in intrinsic religious motivation, they would express increased sexism and sexist language, in comparison to the medium to high ranking intrinsically motivated participants with the religious prime. Participants who received the neutral prime did not demonstrate any significant interaction with the intrinsic religious motivation level. Essentially, only the religious

prime had an effect on the intrinsic religious motivation levels. This supports the prediction that religious prime would affect the intrinsic religious motivation level because of the activation of religious concepts in the participants.

It is important to remember that, the main effect of the religious prime was a decrease in production of sexist language and sexism. While this main effect runs contrary to the hypothesis, the relationship between the religious prime and intrinsic religious motivation level did relate as predicted. The extrinsically motivated participants did produce more sexist language and sexism than the intrinsically motivated participants. Additionally, it was only the religious prime that had a significant effect on the intrinsic religious motivation level. Therefore, the interaction between the religious prime and intrinsic religious motivation came the closest to supporting the hypothesis.

Again, religious motivation is about religion either being the ultimate or instrumental in someone's life. If religion is the ultimate in someone's life, they would be classified as highly intrinsically motivated. If religion is instrumental in someone's life, they would be ranked low on intrinsic religious motivation. The participants who ranked lower on intrinsic religious motivation did express more sexism and sexist language than the highly intrinsically motivated participants, however only occurred within the specific limit of the religious priming condition and was not a significant main effect. Lower intrinsically motivated people, who view religion as being instrumental in their lives, were expected to be more influenced by the language used in their Christian religious contexts, specifically as they gravitate to more social church gatherings. The social norms within these groups would have more influence on the lower intrinsically motivated people than the raw Biblical, religious messages. Additionally, these associations

would be engrained in their mental representations and if sexist language is the norm, then they would express more connections between religion and sexism.

An additional detail is that within the production task, only one of the questions produced a statistically significant relationship between intrinsic religious motivation and being in the religious priming condition. This prompt was written about a nurse, whereas the others were about a business executive and a professor. It is important to note a stronger tendency for participants to hold women tightly to the role of nurses and not consider men to be part of that field; but for the roles business executive and professor, there is more fluidity between genders within that field. For future studies based in measuring sexist language, updated prompts may be necessary to achieve more consistent results.

Limitations

The current study does contain several important limitations that can be remedied or examined further in future research. The most important limitation to this study is the sample used. The participants represented a younger population who may not be as affected by Christian religious experiences as middle-aged people would be. Additionally, Bellarmine is a small, predominantly white, independent Catholic university, so the sample used is not reflective of the collective population. The participants in this study have also had significant exposure to inclusive language used in a Christian religious context, and these experiences may have altered the effects of the prime on the participants. It would also be important to study different Christian congregations and denominations to determine any key differences in experiences and responses from varied denominations.

Additionally, the intrinsic religious motivation, which would apply to any religious affiliation, was measured after receiving the prime. This could have affected the participants' responses, but further analysis showed that exposure to the prime before the intrinsic religious motivation scale did not significantly affect the responses.

Two other important limitations may have been the type of religious prime used, and the length of time between receiving the prime and completing the measurement tasks. The religious prime may have had a different effect if it contained images instead of words, or if it was a hands-on task with a religious text. The types of words used in the religious priming sessions may have also had an affect on the responses of the participants. If the words used in the prime were exclusively Biblical words, this may cause a different reaction than words that are used in the liturgy, or study of Christianity as a whole.

As for the timing of receiving the religious prime, and then completing all of the measurement tasks for the experiment, the intrinsic religious motivation scale is the most likely to have been influenced by this timing. Essentially, it is not understood whether or not receiving a religious prime has a specific timeline of effectiveness. The assumption is that the sooner that the measurement tasks can be completed after exposure to a prime, the more effective it will be. The production of sexist language task, as well as the detection of sexist language task immediately followed the priming session, and then the Modern Sexism Scale was given to participants. Therefore, there is a possibility that by the time they completed the sexist language tasks, the effects of the priming session had begun to diminish.

Future Directions

As this study is contrary to previous research, it presents opportunities for further questioning and better experimental designs to reach the true cause of what might be causing the behavior displayed in this study. Most importantly, this study should be conducted again with a sample that is more representative of the general American population. First, the techniques used in this study can be used to gain a better understanding of how a middle-aged, or older, population has been influenced by the language used in the Christian religious context.

One of the most significant limitations of the study was the sample of only Bellarmine students that were used. Further research could be conducted within the Bellarmine community to determine if there is a difference between first year and fourth year Bellarmine students. The idea being that the fourth years have experienced a year's worth of inclusive religious language use, and the first years have likely not experienced as much inclusive language in a religious context. If the fourth years demonstrate behavior similar to what was found in this study, then inclusive language use in a religious context may be a powerful tool for altering sexist language use and sexism.

To take the experiment one step further. Future research should also be conducted with a completely different community. The same experiment could be conducted with a sample from a community that is known to use sexist language in a Christian religious context and vice versa; the same experiment with a community known to use inclusive language. Additionally, for any further research, there should be a control for religious affiliation implemented.

An exploration into other types of religious priming methods would also be beneficial. Including the current work, all research on the experimental effects of religion on individual attitudes has utilized the same type of priming method with words, and a lexical decision-making task. Future researchers may be able to find a different priming method that produces similar, or

even better effects than received from the current priming method of using words. Priming could be completed using images, activities, or even music.

According to previous research, participants exposed to a religious prime should have expressed increased sexism and sexist language use. This assumption was made with the understanding that Christian religious experiences included a heavy use of sexist language. If the sexist language component of this assumption is removed from the equation, the results seen in this study would be expected. Therefore, if the theology department at Bellarmine impacted participants and their behavior then a solution to the problem of sexist language has been experimentally supported. Using inclusive language within a religious context can decrease sexism and sexist language, and this can empower women in both their religious and secular communities.

References

“About Julian of Norwich.” (2014). The Julian Centre. Retrieved from

<http://juliancentre.org/about/about-julian-of-norwich.html>

Douglas, K.M., Sutton, R.M. (2014). “A giant leap for mankind” but what about women? The role of system-justifying ideologies in predicting attitudes toward sexist language.

Journal of Language and Social Psychology, 33(6), 667-680.

Ehrlich, S., & King, R. (1994). Feminist meanings and the (de)politicization of the lexicon.

Language in Society, 23(1), 59-76.

Eliason, K.D., Hall, M.E.L., Anderson, T. & Willingham, M. (2017). Where gender and religion meet: differentiating gender role ideology and religious beliefs about gender. *Journal of*

Psychology and Christianity, 36(1), 3+.

Fowler, J. W. (1981). *Stages of faith*. New York, NY: HarperCollins Publishers

Haggard, M.C., Kaelen, R., Saroglou, V., Klein, O., & Rowatt, W.C. (2018). Religion’s role in the illusion of gender equality: Supraliminal and subliminal religious priming increases

benevolent sexism. *Psychology Of Religion And Spirituality*, doi:10.1037/rel0000196

Hoge, R. (1972). A Validated Intrinsic Religious Motivation Scale. *Journal for the*

Scientific Study of Religion, 11(4), 369-376. doi:10.2307/1384677

Holdsworth, J. (1999). Theology and psychology: ecclesiology and gender. *Journal Of Empirical*

Theology, 12(2), 17-22.

Johnson, E. A. (1984). The incomprehensibility of God and the image of God male and female.

Theological Studies, 45(3), 441-465.

Johnson, Megan K., Rowatt, Wade C., & LaBouff, Jordan. (2010). Priming Christian religious concepts increases racial prejudice. *Social Psychological and Personality Science*, 1(2) pp. 119 – 126. doi: 10.1177/1948550609357246

Mason, C., Mason, K., & Mathews, A. (2016). Aspiring to lead: An investigation into the interactions between self-esteem, patriarchal attitudes, gender, and Christian leadership. *Journal Of Psychology And Theology*, 44(3), 244-256.

McMinn, M. R., Williams, P. E., and McMinn, L. C. (1994). Assessing recognition of sexist language: Development and use of the gender-specific language scale." *Sex Roles*, 31(11). 741.

Naccache, L. (1991). The priming method: Imaging unconscious repetition priming reveals an abstract representation of number in the parietal lobes. *Cerebral Cortex*, 11(10), 996.
ISSN: 1047-3211

National Association of Women Business Owners. (2017). *Women business owner statistics*.

Retrieved from: <https://www.nawbo.org/resources/women-business-owner-statistics>

Posten, A., Ockenfels, A., & Mussweiler, T. (2014). How activating cognitive content shapes trust: A subliminal priming study. *Journal of Economic Psychology*, 41, 12- 19. doi: 10.1016/j.joep.2013.04.002.

Routley, E. (1979). Sexist language: a view from a distance. *Worship*, 53(1), 2-11.

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. 199-214. doi: 10.1037/0022-3514.68.2.199

Figure 1

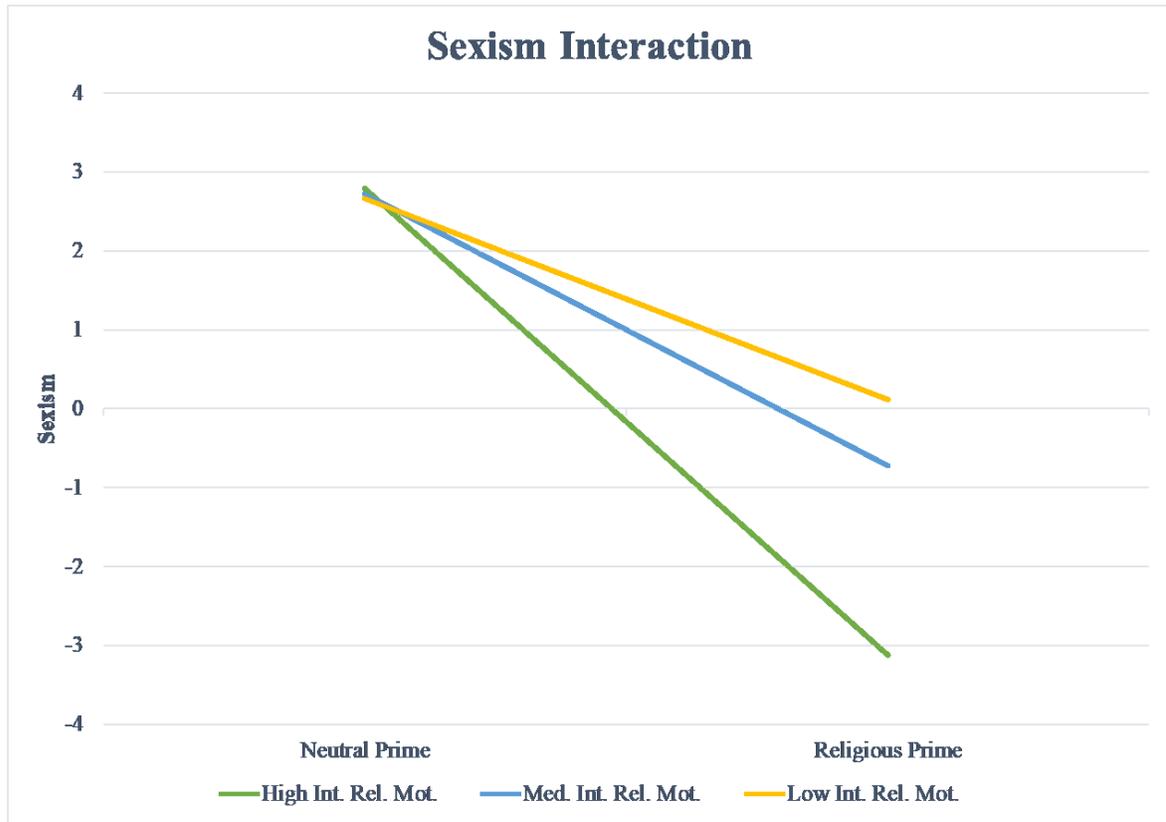


Figure 2

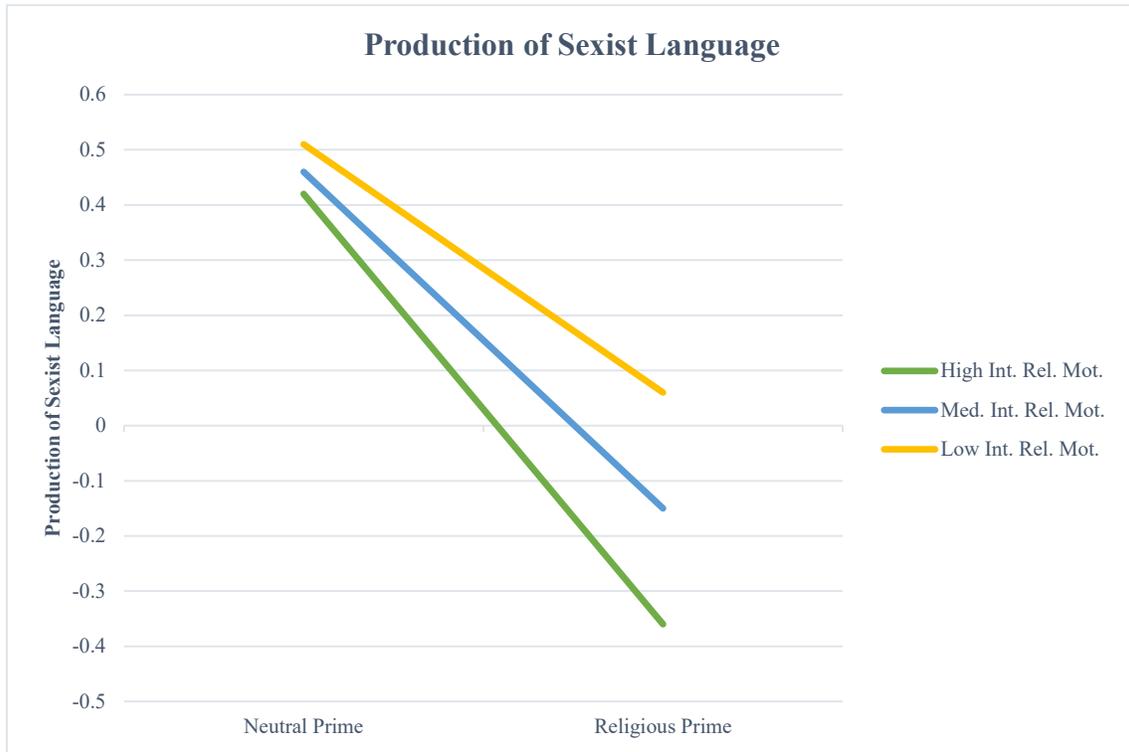
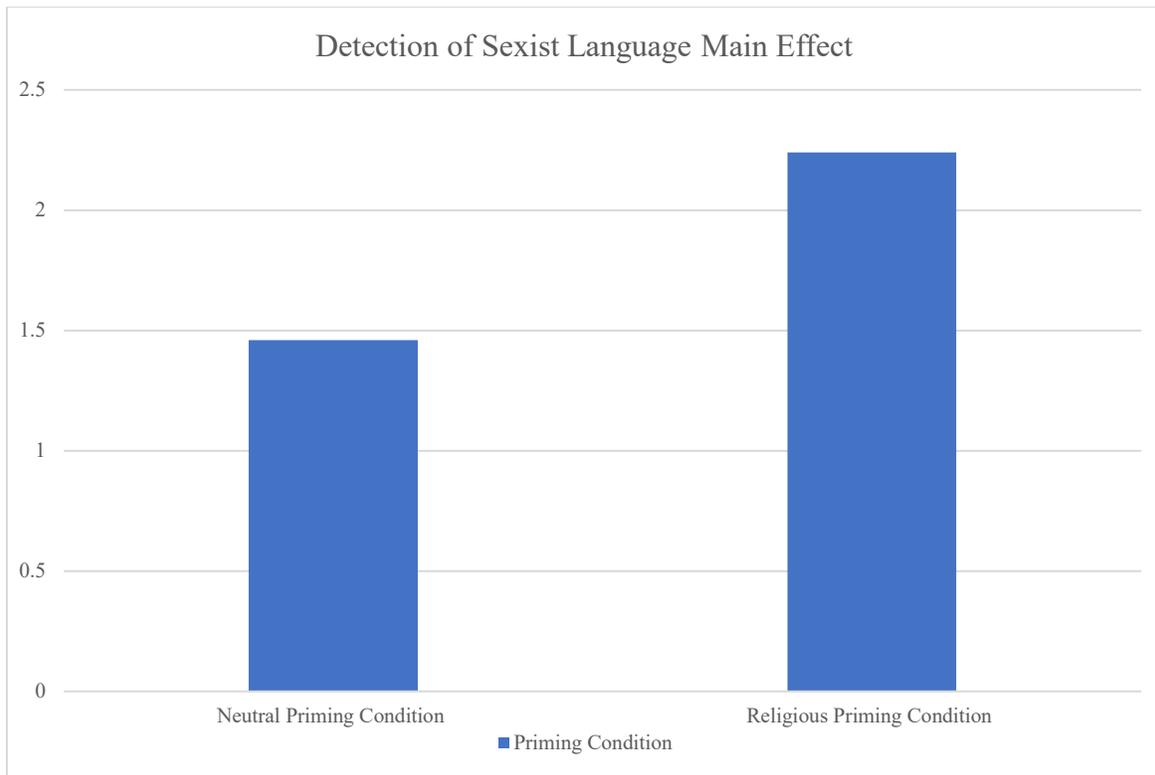


Figure 3



APPENDIX A

Non-words for all priming sessions: *gluck, tourb, scoe, thorm, falck, boum, scawe, vihe, moir, bult, plaim*

Neutral words for all priming sessions: *window, door, cloud, blank, view, chair, past, bag, words, cloth, ice,*

Religious words for only religious priming sessions: *Bible, sermon, prayer, faith, Christ, church, gospel, heaven, Jesus, Messiah*

APPENDIX B

Detection of Sexist Language Task

- 1.) Each persons' alertness was measured by the diference between his obtained relaxation score and his obtained arousal score.
- 2.) The use of experiments in psychology presupposes the mechanistic nature of man.
- 3.) The business executive's learned about domestic tasks from the homemakers.
- 4.) When making an important decision one must first determine how other's will be affected and if the outcome is worth the cost.
- 5.) The chairman of the board precided over the meeting.
- 6.) The mailman wasn't never late, no matter how bad the whether.
- 7.) She said she would ask her husband if she could go on the weekend trip with us.
- 8.) The supervisor talked individually with the employees who were to be layed off.
- 9.) The fire fighters' maintained composure when comfronted by the large dog.
- 10.) First the individual becomes aroused by violations of personal space and then he attributes the cause of this arosal to other people in his environment.
- 11.) Evolutionary theory proposes that the human species is evolving through a process of survival of the fittest.
- 12.) Much has been written about the effect that a child's position among his siblings has on his intellectual development.

APPENDIX C

Production of Sexist Language Task

1.) A business executive discovers a long time employee has been stealing from the company.

What should the executive do first?

2.) A nurse discovers a hospital patient has been given blood contaminated with the AIDS virus.

What should the nurse do first?

3.) A professor discovers a student has cheated on an exam. What should the professor do first?

APPENDIX D

Modern Sexism Scale

1. Discrimination against women is no longer a problem in the United States.
2. Women often miss out on good jobs due to sexual discrimination.
3. It is rare to see women treated in a sexist manner on television.
4. On average, people in our society treat husbands and wives equally.
5. Society has reached the point where women and men have equal opportunities for achievement.
6. It is easy to understand the anger of women's groups in America.
7. It is easy to understand why women's groups are still concerned about societal limitations of women's opportunities.
8. Over the past few years, the government and news media have been showing more concern about the treatment of women than is warranted by women's actual experiences.

APPENDIX E

Intrinsic Religious Motivation Scale

1. My faith involves all of my life. (I)
2. One should seek God's guidance when making every important decision. (I)
3. In my life I experience the presence of the Divine. (I)
4. Nothing is as important to me as serving God as best I know how. (I)
5. I try hard to carry my religion over into all my other dealings in life. (I)
6. My religious beliefs are what really lie behind my whole approach to life. (I)
7. It doesn't matter so much what I believe as long as I lead a moral life. (E)
8. Although I am a religious person, I refuse to let religious considerations influence my everyday affairs. (E)
9. Although I believe in my religion, I feel there are many more important things in life. (E)

