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The Role Of Religion In Rape Acknowledgement And Disclosure

Danielle Marie Piggott

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THE ROLE OF RELIGION IN RAPE ACKNOWLEDGEMENT AND DISCLOSURE

by

Danielle Marie Piggott
Bachelor of Science, Central Michigan University, 2019

A Thesis

Submitted to the Graduate Faculty

of the

University of North Dakota

in partial fulfillment of the requirements

for the degree of

Master of Arts

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This thesis, submitted by Danielle Marie Piggott in partial fulfillment of the requirements for the Degree of Master of Arts from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.

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This thesis is being submitted by the appointed advisory committee as having met all the requirements of the School of Graduate Studies at the University of North Dakota and is hereby approved.

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Danielle Marie Piggott
August 27, 2021

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To my parents, Scott and Donna, thank you for being the
greatest examples of faith and compassion.

ABSTRACT

Previous research has demonstrated the dramatic effect trauma can have on religiosity. This study sought to extend this understanding by examining how rape influences religious beliefs and behaviors as well as how religiosity influences acknowledgement and disclosure of rape. The overwhelming majority of the United States population is religious, and religiosity has been associated with several important health indicators, yet very little research has examined the connection between religiosity and specific rape recovery outcomes. A sample of 310 college-aged women completed an online survey with questionnaires about personal religiosity, the religiosity of their surrounding support system, and their sexual history. Results indicated those who experienced rape experienced significantly greater change in their religious belief compared to those who had not been raped and those who experienced trauma other than rape ($p = .015$). The relationship between rape acknowledgement and religiosity was significantly mediated by ambivalent sexism (95% CI [.0016, .0694]) and endorsement of rape myths about women lying about rape (95% CI [.0021, .0691]), such that high religiosity was associated with greater acceptance of these beliefs, which was associated with a lower likelihood of acknowledgement. Finally, disclosure of rape was significantly predicted by greater rejection of rape myths ($p = .014$) and greater blame on the other person ($p = .023$). Nonreligious participants were less likely to disclose when they perceived their friends to be more religious ($r = -.472, p = .010$). In all, rape has the potential to significantly alter one's religious beliefs, and religiosity has a unique influence on how

one understands and communicates a personal experience of rape. Implications for clinical interventions are discussed.

Keywords: religion, rape, sexual violence, acknowledgment, disclosure

The role of religion in rape acknowledgement and disclosure

Rape is the experience of nonconsensual sex facilitated by force, threats, or incapacitation (Basile et al., 2014). More than 1 in 5 American women will experience rape at some point in her lifetime (Black et al., 2011). Rape is pervasive not only in that it affects millions of people, but also in that it has the potential to cause serious negative physical and mental health problems. Indeed, the negative outcomes associated with experiencing rape have been well documented; those who experience rape are more likely to report depressive, anxious, and post-traumatic stress symptoms than those who have not (Resick, 1993). Less is known about the impact of rape on personal beliefs and values, such as the potential influence rape may have on one's religious life. Religion affects the majority of the American population; more than 75% of the United States population aligns with a specific religion and more than 80% of 18-29-year-olds report they believe in God (Pew Research Center, 2014a). The integration of religious teachings and tradition into one's worldview and belief system may promote or hinder positive coping following an experience of rape (Ahrens et al., 2010).

The goal of the current study was to examine the potential influence of religion on rape acknowledgement and disclosure—two important elements in the recovery from rape. More specifically we examined the rates of rape acknowledgement and disclosure across various components of religiosity. The results of this research can address religious barriers to seeking help following an experience of rape by informing religious leaders and support systems as to how to create a space in which healing and religious guidance can be sought without fear or shame. Amstadter et al. (2008) found 40% of those who experience rape do not seek treatment, and those who do often reach out to support

systems other than mental health professionals. This study can benefit religious women who experience rape by equipping religious leaders—who are often viewed as confidants and counselors—with the appropriate resources to aid in the emotional and cognitive processing of an experience of rape.

Religion as a Structure for Core Beliefs and Social Practices

Religiosity has been defined as the commitment to the beliefs and practices established by a sacred institution (Good & Willoughby, 2008). Judeo-Christian religions have historically included teachings reflective of rape myths and traditional views regarding gender and sexuality, which may contribute to the development of rape scripts, or schemas about what a typical rape looks like. Several monotheistic religions hold similar beliefs, but this project reflects research on Judeo-Christian beliefs due to the anticipated religious demographic of the sample and due to the majority focus of past research on this religious sect.

Religious scriptures have presented several themes related to rape myth acceptance including victim-blaming, inferiority of women, and wifely duties to one's husband, suggesting the individual who is raped is at fault for the experience, men are superior and have the right to do as they please with women, and one's role as a wife includes bodily submission to the husband (Franiuk & Shain, 2011; Fortune & Enger, 2005; Freymeyer, 1997; Edwards et al., 2011; Barnett et al., 2018; Prina & Schatz-Stevens, 2020). Scripture and teachings have placed significant emphasis on virginity, purity, and abstinence, particularly of women and girls (Tishelman & Fontes, 2017). Several studies have determined a significant correlation between religiosity and traditional views regarding gender roles and sexuality as well as rape myth acceptance

(Morgan, 1987; Mikolajczak & Pietrzak, 2014; Barker & Galliher, 2017; Navarro & Tewksbury, 2018; Burn & Busso, 2005). However, sexism and rape myth acceptance seem to follow a curvilinear relationship relative to religiosity (Navarro & Tewksbury, 2018; Burn & Busso, 2005). This is consistent with Allport and Ross's (1967) finding of a significant positive relationship between prejudice and extrinsic religiosity (i.e., a shallow embracement of religion) and a negative relationship between prejudice and intrinsic religiosity (i.e., an integration of religion into one's entire life).

Judeo-Christian religious beliefs may also mold one's schema regarding interpersonal discourse regarding sexuality. Individuals who have grown up in religious households or families may develop an understanding that, because of religious beliefs regarding sexuality (e.g., sex is reserved for marriage), it may not be acceptable to talk about sex (Tishelman & Fontes, 2017) or that rape is their "cross to bear" and should not be discussed so as to avoid burdening others (Fontes & Plummer, 2010). Furthermore, a schema for discussing sexuality and sex may be underdeveloped because the words and knowledge to describe sex, and especially sexual violence, may have never been discussed or taught in the home (Tishelman & Fontes, 2017). Indeed, adolescents were significantly less likely to disclose an experience of sexual assault to their parents when inhibiting messages about sex (e.g., sex is dirty or pre-marital sex is a sin) were communicated in their households (Smith & Cook, 2008). Conversely, religious values regarding truth, honesty, and intolerance of harming women and children may promote discussion of sexuality or sexual violence (Tishelman & Fontes, 2017; Fontes & Plummer, 2010).

Information Processing Theory: Rape Acknowledgement and Disclosure

Rape is a traumatic experience, one that is inconsistent with schemas regarding interpersonal interactions and sex. Resick & Schnicke (1992) developed an information processing model to explain reactions to interpersonal trauma. According to their model, when one is confronted with an experience or information that challenges their prior schema, the conflict is typically resolved in one of two ways: either the discrepant information is altered so that it fits within previously established schema (i.e., assimilation) or the schema is changed so as to accommodate the new information (i.e., accommodation; Resick & Schnicke, 1992; Hollon & Garber, 1988). In cases of rape, one may alter their perception of the experience (e.g., “It wasn’t really rape”) so the experience can be assimilated into their pre-existing schema about the safety of the world. Conversely, one who experienced rape may change their view of the world (e.g., “The world isn’t safe”) in order to accommodate their experience of rape. Because rape can be such a dramatic deviation from previously believed schemas, it is common for schematic overaccommodation to occur in order to include their experience (Resick & Schnicke, 1992). Overaccommodation occurs when schemas are altered to be maladaptive or extreme (e.g., “I can never trust anyone again”). Assimilation occurs more often than accommodation (Resick & Schnicke, 1992), which may explain the phenomena of unacknowledged rape.

Rape acknowledgement is the personal assignment of the label ‘*rape*,’ rather than a minimizing label such as ‘*a miscommunication*,’ to an experience that meets the definition of rape (Littleton et al., 2007; Koss, 1985). The majority of individuals who experience rape do not acknowledge their experience, in other words, do not label their

experience as rape. Estimates from meta-analyses indicate approximately 60% of women who experience rape do not acknowledge their experience (Wilson & Miller, 2016). Information processing theory (Resick & Schnicke, 1992) might suggest that acknowledgement is a reflection of accommodation, and lack of acknowledgement is a reflection of assimilation. Indeed, Littleton (2007) found those who assimilated their experience into extant schemas were less likely to acknowledge their experience as rape. Acknowledgement has been associated with increased PTSD symptoms (Littleton et al., 2009) potentially because acknowledgement is an emotional and cognitive processing of rape which is associated with negative emotions and memories. However, this processing leads to improved adjustment in the long term, whereas lack of acknowledgement is associated with several negative health outcomes such as a higher risk for revictimization and depressive symptoms (Layman et al., 1996; Littleton et al., 2017; Wilson & Scarpa, 2017).

As a catalyst of change and recovery, acknowledgement may also precipitate disclosure for some people. Individuals may feel more compelled to discuss a clearly labeled experience of rape than an ambiguous or not fully understood experience. Indeed, those who acknowledge their experience are more likely to disclose (Littleton et al., 2006; Orchowski et al., 2013), and those who engage in avoidance coping (e.g., avoiding emotions and thoughts related to the experience) are likely to delay disclosure (Ullman, 1996). College-age women are more likely to disclose to a female peer than to formal support systems like the police, medical professionals, or religious authorities (Starzynski et al., 2005; Ahrens et al., 2007). Disclosure may also precipitate acknowledgment; a person may describe an unacknowledged experience to which a supportive person may

provide corrective information that eventually leads to acknowledgment. Like acknowledgment, disclosure has been associated with both positive and negative outcomes. Disclosure, when met with negative reactions from others, can lead to negative outcomes such as greater self-blame, PTSD symptoms, and poorer coping (Ullman et al., 2007). Disclosure of trauma can itself be therapeutic because it allows for emotional processing of the event which can lead to decreased distress (Pennebaker et al., 2001). Disclosure has consistently been associated with positive outcomes similar to those resulting from acknowledgement, including receiving social support and resources (Ullman, 1996).

Assimilation to Preserve Religiously Influenced Schemas

An experience of rape may be particularly schema-discrepant when the schema is informed by religious teachings reflective of rape myths and traditional views about gender and sexuality. Indeed, the endorsement of rape myths, like those present in several religious texts, has been consistently associated with a lower likelihood of acknowledgement (LeMaire et al., 2016; Peterson & Muehlenhard, 2004). The likelihood of disclosure is also reduced if an individual's support systems have historically expressed views reflective of rape myths and traditional gender and sexuality ideals due to religious adherence (Ahrens et al., 2007; Patterson et al., 2009). Furthermore, individuals whose rape scripts were reflective of traditional gender and sexuality ideals were less likely to acknowledge their experience (Littleton & Axson, 2003; Koss, 1985) or disclose (Tishelman & Fontes, 2017). Traditional views emphasizing virginity and purity may lead to associating sexual interactions with guilt and self-blame (Tishelman & Fontes, 2017) which is associated with lower likelihood of acknowledgement (Orchowski

et al., 2013). Religious themes of wifely duty, virginity, and women's inferior status may also influence one to believe they deserved to be raped or they are at fault for the loss of their sacred purity (Tishelman & Fontes, 2017), and this self-blame may be associated with a decreased likelihood of disclosure (Campbell et al., 2009).

Accommodation at the Expense of Religiously Influenced Schemas

Labeling an experience of rape as such likely marks the adaptation of schemas to include the traumatic experience. Acknowledgment and accommodation may be a clearer process for some even with religiously informed schemas. If one's experience of rape is consistent with rape scripts or stereotypical rape schemas (e.g., they were raped by a stranger who physically harmed them), they are more likely to acknowledge and disclose as their schema is more easily adapted to include their experience (Bondurant, 2001; Muehlenhard et al., 1992). For those with more ambiguous or schema-discrepant experiences, the process of acknowledging rape and altering firmly established schemas is likely a difficult one riddled with internal conflict. McCann et al. (1988) found that those who have experienced trauma are likely to question their prior schemas regarding safety, trust, power, esteem, and intimacy relative to themselves and their relationships with others. These questions can be very religious in nature, particularly for individuals who find significant importance or value in religion. The unique invasive, relational, and intimate characteristics of rape may be more likely to fuel internal religious conflict compared to that prompted by other civilian trauma.

Consistent with information processing theory, previous research has found trauma often leads to a change in one's belief system. Foa and Rothbaum (2001) and Falsetti et al. (2003) found individuals with histories of traumatic experiences were more

likely to have experienced changes in their religious beliefs compared to those without histories of trauma. Individuals were more likely to become less religious following the first traumatic event in their life, but the directionality of religious change was otherwise inconsistent across participants, meaning some became more religious while others became less religious following a traumatic experience (Falsetti et al., 2003). In a study of Jewish women who had experienced sexual assault, 48% became less religious and 8% became more religious following the assault (Ben-Ezra et al., 2010). Religious views may change dramatically as a result of overaccommodation; the schematic integration of such a traumatic experience may lead one to not only become less religious but have negative or oppositional views regarding their previous religious beliefs. Littleton (2007) found those who experienced rape and overaccommodated were more likely to engage in maladaptive and risky coping compared to those who engaged in accommodation or assimilation.

The Current Study

The goal of the current study was to examine the reciprocal relationship between religion and rape acknowledgment as well as the relationship between religion and disclosure in a sample of college-aged women. Religious influence on acknowledgement and disclosure were investigated as pertaining to the individual, manifested by personal importance of religion and intrinsic and extrinsic religiosity, and pertaining to the individual's surrounding influences, manifested by religiosity of one's parents or guardians, immediate and extended family, community, and friends. Specifically, we hypothesized:

1. Those with histories of rape would report more changes in religious views, specifically changes towards becoming less religious, than those without histories of rape (Falsetti et al., 2003). Of those with histories of rape, acknowledged individuals would be more likely to report changes in religious views, specifically changes towards becoming less religious.
2. After controlling for assault characteristics, those who reported high religiosity would be less likely to acknowledge their experience as rape.
3. Those who were more religious and reported greater religiosity among family, community, and friends would report fewer disclosures.

Method

Participants

Participants were 310 women between the ages of 18-31. Participants were recruited via the University of North Dakota (UND) subject pool and received one research credit in return for their participation in the study. Participants were also recruited from Utah Valley University (UVU) psychology subject pool and received two research credits for participation. Flyers and social media postings were also used to recruit volunteer participants from religious organizations and online forums. College age women were exclusively recruited for this study because this group is at high risk for experiencing rape. In order to participate, individuals had to indicate they identify as a woman, were between the ages 18-30, and consent to participate in the study. As the purpose of the study was to examine differences between those who had and had not experienced rape, after data was collected from approximately 150 participants without

rape histories, inclusion criteria were narrowed to include only those who had experienced rape.

Participants ranged in age from 18-31 ($M = 20.98$, $SD = 3.24$), and 87.1% were college students at the time of the survey. The sample was comprised of mostly White women (93.9%), followed by Native American women (3.2%), Asian or Pacific Islander women (2.9%), and Black or African American women (1.6%), and women who identified as other racial identities (e.g., Middle Eastern; 2.3%). Seventeen women identified as Hispanic or Latina (5.5%). Four participants described their gender identity, in addition to the required alignment with woman, as genderfluid or nonbinary. The majority of the sample identified as heterosexual (81.6%); 11.9% identified as bisexual, 2.9% as gay or lesbian, 1.9% as queer, and 1.9% wrote in a more descriptive identity including asexual, biromantic, pansexual, panromantic asexual, and questioning.

The majority of participants reported a current residence in North Dakota (52.5%), followed by residence in Michigan (15.8%), Minnesota (11.9%), Utah (9.4%), and other states (7.7%). The collected sample reflected the predicted religious landscape of the Midwest (Pew Research Center, 2014a). Prior research found the majority of residents in the Midwest align with a Christian religious denomination (73%): Evangelical Protestant (26%), Mainline Protestant (19%), Catholic (21%), Historically Black Protestant (5%), Mormon or Church of Latter Day Saint (1%), and other Christian denominations each representing less than 1% of the population. Non-Christian faiths represent approximately 4% of the Midwest population and about 22% of the population reports being religiously unaffiliated (i.e., atheist or agnostic). The majority of the Midwest population reports they attend religious services at least once per month, are

absolutely certain God exists, and their faith is very important to them (Pew Research Center, 2014a). The opportunity to recruit in Utah likely altered the sample as Utah differs from the Midwest in that there is a significantly larger Mormon or Latter-Day Saints population (55%); otherwise, the religious breakdown largely mimics that of the Midwest. Religious importance and belief in God are similar between Utah and the Midwest; although frequency of attendance of religious services is higher in Utah with 53% reporting at least weekly attendance (Pew Research Center, 2014b). The following religious affiliations were represented in the sample: Roman Catholic (34.5%), Lutheran (ELCA, Missouri Synod, other; 19%), nonreligious (atheist or agnostic; 18.1%), Christian (no denomination, Christian Disciples, etc.; 9.4%), Mormon and Latter-Day Saints groups (5.2%), Wiccan or ritual magic (1.6%), Evangelical Free Church (1.3%), Spiritualist (1.3%), Non-denominational churches (1.3%), and Islam (1.3%). Additional religions (e.g., Conservative Judaism, Nazarene, Methodist) were endorsed by less than one percent of the sample.

Procedure

Women were invited to complete a compilation of confidential online surveys via the UND psychology subject pool, UVU psychology subject pool, relevant volunteer or religious groups such as Fellowship of Christian Athletes, and flyers in public areas around the University of North Dakota and on social media. The survey was described as a study on religious beliefs and interpersonal relationships. During the second wave of recruitment, study advertisements also included the question “Have you had a negative relationship experience?”. Three screening questions adapted from the SES were used to determine if participants had experienced rape and would continue with the survey. After

data had been collected from 150 participants who had not experienced rape, the screening questions were either embedded in the survey or were utilized within recruitment subject pools so that only those with histories of rape were allowed to participate. Participants could stop participation at any time and counseling resources were visible throughout the duration of the survey by embedding the National Sexual Assault Hotline in the header of the webpage. Following the electronic informed consent process, participants completed questionnaires assessing basic demographic information, religious and spiritual beliefs, sexual victimization history, exposure to trauma, self-blame, shame, sexism, and rape myth acceptance in a randomized order. Additional questionnaires assessing coping, post-traumatic stress, stigma, and reactions to disclosure were administered in relation to a secondary study being simultaneously conducted. These questionnaires are disclosed in the spirit of open science but are not discussed further here.

Measures

Intrinsic/Extrinsic Religious Orientation Scale-Revised

The Intrinsic/Extrinsic Religious Orientation Scale-Revised (Gorsuch & McPherson, 1989) was modeled on the Religious Orientation Scale (Allport & Ross, 1967). Allport and Ross (1967) describe extrinsic religiosity as the light embracement of a religious creed so that it benefits the self, whereas intrinsic religiosity is the full embracement of a religious creed so that it is internalized and followed in all facets of life. In other words, the extrinsically religious person utilizes their religion to their benefit (e.g., praying for comfort in times of pain) and the intrinsically religious person lives their religion (e.g., embraces their religion in all circumstances). The scale consists of 14

items, 8 of which measure intrinsic religious orientation (e.g., *My whole approach to life is based on my religion*) and 6 of which measure extrinsic religious orientation. The Extrinsic orientation scale is further broken down into extrinsic-social (e.g., *I go to church mostly to spend time with my friends*) and extrinsic-personal (e.g., *I pray mainly to gain relief and protection*) motivations. Respondents indicate their agreement with each statement on a 5-point scale from *strongly disagree* to *strongly agree*. Individual scores are produced for the separate subscales. The possible scores for the Intrinsic scale range from 0-8; the possible scores for the extrinsic-personal and extrinsic-social subscale range from 0-3 and are totaled to calculate the Extrinsic scale score ranging from 0-6. The Intrinsic scale has demonstrated adequate reliability with the reliability coefficient being .83. The reliability coefficient for the Extrinsic scale is .65 with the comprising subscales being .57 for the extrinsic-personal subscale and .58 for the extrinsic-social subscale (Gorsuch & McPherson, 1989). Reliability estimates beyond internal consistency ratings have not been documented or are otherwise unknown.

Religion Demographics

Religiosity is comprised of several different conceptual elements (e.g., religious attendance, depth of faith, religious upbringing). Therefore, several different components of religiosity were measured so as to gain a fuller understanding of one's religious identity. See Figure 1 for a detailed grouping of all included measures of religiosity. Because this study aimed to retrospectively document changes in religiosity, questions regarding religious affiliation and behavior were asked relative to three different time periods: the present, adolescence, and childhood. Measuring religiosity in childhood and

adolescence may also provide valuable insight to caregivers' religious views which may have important implications on disclosure of rape.

Participants were asked to indicate their religious affiliation from a list or write a more specific or not included affiliation in an open-ended manner. Frequency of religious behaviors across the lifespan were addressed with questions commonly used in religion research and recommended by the Fetzer Institute's national working group on religion and health research (Fetzer Institute, 1999). Specifically, frequency of attendance of religious services, reading sacred religious texts, and praying and/or meditating were assessed on a 5-point scale anchored with *never* and *very frequently*. Similar questions assessing religious behaviors have used a variety of response scales; a 5-point scale was chosen to reflect the commonly used 4-point scale anchored with *never* and *very frequently* to further include an *almost never* option, to capture greater nuance (Fetzer Institute, 1999). Frequency of attendance of religious services and private religious practices during childhood and adolescence were assessed on the same scale. The three assessed religious behaviors (i.e., attending religious services, reading religious texts, and praying and/or meditating) across the three assessed time periods (i.e., the present, adolescence, childhood) translated to nine individual variables.

The difference between religious behavior across time periods was translated into religious change variables, with higher difference scores reflecting greater change in religious behaviors. Changes in religious views were also assessed using the following question adapted from a study assessing change in belief patterns following a sexual assault: *Have your faith or religious beliefs ever changed?* (Ben-Ezra et al., 2010). Participants rated their response on a 7-point scale with 0 being *not at all* and 6 being

very much. The extent to which one currently considers themselves a religious person was measured on a sliding scale with 0 being *I am not at all a religious person* and 100 being *I am very much a religious person*. The extent to which one views their religion as important was measured on a similar scale with 0 being *religion is not at all important to me* and 100 being *religion is very important to me*. Single-item measurements of aspects of religiosity have been used consistently in previous research and have been shown to be significant predictors of several health outcomes such as longevity, remission of depressive symptoms, and life satisfaction (Hall et al., 2008).

Because disclosure is contingent upon the perception of others, participants' perceptions of potential confidants was assessed. Participants were asked if they were raised in a religious family or household and whether they still practice that religion. Participants were asked to report their perceptions of how religious their parents or guardians, immediate family, extended family, community, and friends are on a 10-point scale anchored with *not at all religious* and *very religious*. Overall religiosity of an individual's microsystemic influences will be calculated by averaging respondent ratings of each influence (i.e., parents or guardians, immediate family, extended family, community, and friends), with higher scores reflecting higher religiosity in the individual's surrounding system of support and influence.

Sexual Experiences Survey-Short Form (SES-SFV)

History of victimization was assessed by the Sexual Experiences Survey-Short Form (SES-SFV; Koss et al., 2007). The SES is the most widely used measurement to assess sexual victimization (Fedina et al., 2018). The 10-item questionnaire assesses several possible experiences of victimization (e.g., sexual contact, sexual coercion,

attempted rape, and completed rape) in the past twelve months and since the age of 14. The first seven items include a behaviorally specific description of a victimization experience (e.g., *Someone had oral sex with me or made me have oral sex with them without my consent by:*) followed by descriptions of five different means by which another person facilitated the victimization (e.g., *threatening to physically harm me or someone close to me*) to which participants indicate how many times (0, 1, 2-5, 6-9, or 10+) they had that sexual experience associated with the specified tactics in the past twelve months and since their fourteenth birthday. The eighth and ninth questions assess age and gender of the respondent and sex of the perpetrator. The final question asks, *Have you ever been raped?* to which respondents may indicate *yes* or *no*. Johnson et al. (2017) found the internal consistency for the SES-SFV items assessing unwanted sexual experiences was .92. When assessing for test-retest reliability, 70% of women answered the survey identically two weeks following the initial administration (Johnson et al., 2017). The short form was significantly correlated with the original SES.

The screening survey to ensure the majority of participants during the second wave of recruitment had experienced rape read *Since the age of 14, how many times has someone used one of the tactics on the list below to have oral sex, anal sex, or intercourse with you without your consent?* and was followed by three tactics (i.e., physical force, facilitation by drugs or alcohol, and threats of physical force). The SES-SFV was still administered in its entirety to all participants to determine the experience of rape.

Those who indicated they had experienced oral, anal, or vaginal sex without their consent (i.e., indicate any response greater than zero to SES-SFV items 2, 3, or 4) were

considered to have experienced rape. Of those who experienced rape, those who indicated *yes*, they had been raped, are considered to have acknowledged their experience and those who indicate *no*, they had not been raped, were considered to not have acknowledged their experience. This strategy has been frequently used to identify acknowledgement status throughout the literature (Wilson & Miller, 2016; Koss, 1985). Those who reported an experience in adolescence or adulthood that meets the legal definition of rape as reflected by an affirmative response to any of the three questions, were forwarded to the Assault Characteristic Questionnaire (see below) which includes items specific to those who have experienced rape.

Assault Characteristics Questionnaire (ACQ)

The Assault Characteristics Questionnaire (ACQ; Littleton et al., 2009) asks about the circumstances of an experience of sexual assault. The initial instructions of the ACQ anchor participants to either the one experience of unwanted sex they have had or the one they consider to be the worst. The questionnaire addresses the types of force the assailant used, the participant's resistance, and their level of awareness during the assault. Relationship to the assailant, alcohol consumption, and drug use are also addressed. Participants were asked to label their experience and report the frequency of disclosure and the sources to which they disclosed. All the aforementioned questions include multiple response options from which the participant can choose to respond. The final questions ask how many times the individual experienced unwanted sexual contact with this specific person, with others, and how long ago the assault occurred.

Because the ACQ items are anchored to a precise incident, additional questions could be added to determine religious views as they are affected by a specific experience

of rape. Religious views before and after an experience of rape were assessed by questions adapted from a previously mentioned study (Ben-Ezra et al., 2010). The following questions will be open-ended: *Before this experience, how did you perceive your religiosity?* and *After this experience, how did you perceive your religiosity?* A final question (*After this experience, has your religion become ____?*) assessed the importance of religiosity as affected by the experience of rape; participants rated their response on a 5-point scale: 0 (*significantly less important to you*), 1 (*less important to you*), 2 (*the same*), 3 (*more important to you*), 4 (*significantly more important to you*).

Life Events Checklist (LEC-5)

In order to control for other traumatic experiences that may be associated with changes in religious beliefs (Falsetti et al., 2003), we screened for exposure to a variety of potentially traumatic experiences. The Life Events Checklist (LEC-5; Weathers et al., 2013) was developed by the National Center for PTSD to assess exposure to an array of potentially traumatic experiences. Respondents are presented with a list of 16 potentially traumatic experiences (e.g., *Natural disaster (for example, flood, hurricane, tornado, earthquake)*) to which they can indicate the event happened to them personally, they witnessed the event happen to someone else, they learned about the event happening to a close friend or family member, they were exposed to the event as a part of their job, they are unsure if the event fits, or the event does not apply to them. The first three responses are scored 1, 2, and 3, respectively; scores are then totaled for an overall measure of exposure to traumatic events. The inventory includes an additional item to which participants can indicate exposure to a stressful event or experience that was not captured in the previous items. For the purpose of this study, the direct exposure category items

were summed for a total between 0-15 because two of the 17 items cannot be directly experienced (e.g., sudden violent death). Higher scores are reflective of exposure to more traumatic experiences. The LEC has demonstrated adequate reliability used as both a direct measure of trauma exposure (i.e., including only personal experiences) with the mean kappa statistic across items being .61, and an indirect measure (i.e., including all responses) with the mean kappa statistic being .47 (Gray et al., 2004). The retest correlation is $r = .82$ (Gray et al., 2004). The LEC has demonstrated convergent validity with other established measures of traumatic experiences (e.g., Trauma Life Events Questionnaire ($r = -.55$; correlations are negative because lower LEC-5 scores indicate more direct exposure), Modified Post-Traumatic Stress Disorder Symptom Scale ($r = -.44$)) and measures of psychopathology associated with trauma exposure (e.g., PTSD Checklist ($r = -.48$), Clinician Administered PTSD Scale ($r = -.39$); Gray et al., 2004).

Childhood Trauma Questionnaire (CTQ-SF)

Childhood abuse, particularly childhood sexual abuse, has shown to have important influences on the acknowledgement process, religious beliefs, and disclosure (Wilson & Scarpa, 2015; Draucker et al., 2011; Ullman, 1996). The CTQ-SF (Bernstein et al., 2003) is a 28-item retrospective, self-report measure of traumatic experiences during childhood. Respondents indicate on a 5-point scale— 1 being *never true* and 5 being *very often*—the degree to which a statement was true for them before the age of fourteen. Items are reflective of different experiences that fall into one of the five clinical scales: physical, sexual, and emotional abuse, and physical and emotional neglect. The following is an example item: *Someone threatened to hurt me or tell lies about me unless I did something sexual with them*. Each subscale includes five items. After correcting for

reverse-scored items, the subscale item responses are summed for a total between 5-25 with higher scores reflecting greater trauma severity of the respective type. The CTQ-SF has demonstrated excellent convergent validity in that the subscale scores significantly predicted therapists' observational reports of abuse (Bernstein et al., 2003). The original CTQ has demonstrated good internal consistency (Cronbach's alpha of .95) and good test-retest reliability (total scale correlation of .88; Bernstein et al., 1998). The CTQ-SF was also validated in a study with a college undergraduate sample, in which they found adequate subscale test-retest reliabilities (.66 - .94) and acceptable subscale alpha coefficients (.70 - .93; Paivio & Cramer, 2004).

Updated Illinois Rape Myth Acceptance Scale (IRMAS)

Because rape myths have been historically endorsed by Judeo-Christian religious teachings, a measurement of rape myth acceptance will be included to determine if religious influence on acknowledgement and disclosure is mediated by rape myth acceptance. The Updated Illinois Rape Myth Acceptance Scale (IRMAS; McMahon & Farmer, 2011) includes 22 items reflective of one of four different overarching rape myths: she asked for it (e.g., *If a girl acts like a slut, eventually she is going to get into trouble.*), he didn't mean to (e.g., *When guys rape, it is usually because of their strong desire for sex.*), it wasn't really rape (e.g., *If a girl doesn't say "no" she can't claim rape.*), and she lied (e.g., *Rape accusations are often used as a way of getting back at guys.*). Respondents indicate their level of agreement on a 5-point scale ranging from *strongly agree* to *strongly disagree*; higher scores are indicative of greater rejection of rape myths. Scores can be totaled for a cumulative score or for subscale scores. The IRMAS has been widely used in research; the test's reliability was .93 and it has been

correlated to similar constructs (e.g., endorsement of traditional sex role stereotypes; Payne et al., 1999). The IRMAS was updated to include current language (McMahon & Famer, 2011).

Ambivalent Sexism Inventory (ASI)

Alignment with traditional beliefs regarding gender and sexuality was assessed with the Ambivalent Sexism Inventory, specifically the benevolent sexism subscale. Benevolent sexism is the belief in stereotypes regarding women and women's restricted roles that, despite being rooted in traditional stereotypes and masculine dominance, may seem positive or prosocial (Glick & Fiske, 1996). The benevolent subscale is comprised of 11 items (e.g., *Many women have a quality of purity that few men possess*). Within the benevolent sexism subscale, items reflect protective paternalism, complementary gender differentiation, and heterosexual intimacy. The remaining 11 inventory items assess hostile sexism (e.g., *Most women fail to appreciate fully all that men do for them*). Items are rated on a 6-point scale with 0 being *disagree strongly* and 5 being *agree strongly*. Following reverse scoring procedures, subscale items are averaged for an indication of benevolent and hostile sexism; an overall measure of sexism can be computed by averaging all items. Alpha coefficients were between .83-.92 for overall sexism, .80-.92 for hostile sexism, and .73-.85 for benevolent sexism across six different samples (Glick & Fiske, 1996). The ASI demonstrated significant correlations with other measures of sexist attitudes including the Attitudes Toward Women Scale (.63), Old-Fashioned Sexism Scale (.42), Modern Sexism Scale (.57), and Rape Myth Acceptance Scale (.54; Glick & Fiske, 1996). This association is thought to be purely caused by the hostile sexism scale as the correlation is non-significant for the benevolent sexism scale alone,

suggesting the benevolent sexism scale measures unique, subtle belief systems and biases.

Rape Attribution Questionnaire (RAQ)

Messages from religious teachings and religiously adherent family and friends may contribute to placing greater blame on oneself for an experience of rape. The Rape Attribution Questionnaire (RAQ; Frazier, 2003) was used to measure respondents' attributions of blame for an experience of rape. The current study included the first two subscales measuring behavioral and categorical self-blame. Five items address behavioral self-blame (e.g., *I used poor judgement*) and five items address blame on the other person (e.g., *The rapist wanted to hurt someone*) to which respondents indicate the frequency with which they experience the listed thoughts on a 5-point scale (1 = *Never*, 5 = *Very Often*). Scores are totaled per each subscale; higher scores are reflective of greater blame. The RAQ was found to be valid and reliable in samples of both female emergency room visitors and those who have experienced sexual assault as identified by a phone survey. The subscales alpha coefficients were both .87 and test-retest reliability coefficients were .64 and .79 for behavioral self-blame and other blame, respectively (Frazier, 2003). Because the current study is addressing rape acknowledgement, the items were adapted so as not to include the words *rape*, *rapist*, or *assault*. For example, items that use the title *rapist* were changed to *person*.

Abuse Related Experiences of Shame Scale

Shame, although largely absent from the acknowledgement literature, likely has important implications for disclosure and acknowledgement, and religion may uniquely contribute to experiences of shame centered around an experience of rape. The Abuse

Related Experiences of Shame Scale (Feiring & Taska, 2005) is an 8-item self-report measure of shame experienced as a result of abuse. Items (e.g., *What happened to me makes me feel dirty*) are rated on a 3-point scale (i.e., *not true*, *somewhat true*, and *very true*). Scores are summed for a total between 0-16; higher scores indicate greater abuse-related shame. Feiring and Taska (2005) suggest using a cutoff score of 6 to create high and low shame groups. The alpha coefficient for the scale is .86. The measure was significantly correlated with an assessment of shame-related postures (.23) and the Test of Self-Conscious Affect for Adolescents (i.e., a measurement of proneness to general guilt and shame; .39; Feiring & Taska, 2005).

Analytic Plan

Power Analyses

A priori power analysis was conducted using G*Power (Faul et al., 2007) to determine the necessary sample size to achieve adequate power. The necessary power was calculated for an independent samples t-test to determine the appropriate sample size in which assault-related religious change would be detectable. Using religious level means and standard deviations of those with and without histories of assault (Ben-Ezra et al., 2010), one tail analysis was selected, the effect size was set to .40, power was set to .80, and the alpha error probability was set to .05. The total sample size reported was 156, suggesting assault-related religious change would be detectable in a group of 156 participants with half having experienced rape.

Very little is known about religiosity's influence on rape acknowledgement; therefore, rape myth acceptance was used as a proxy variable for religiosity to estimate the sample size needed to detect an effect of religion on acknowledgment in those who

have experienced rape. Rape myth acceptance was chosen as a proxy variable because there is a substantial amount of literature on rape myth acceptance and acknowledgement, and because rape myth acceptance has been consistently related with religiosity. Using means and standard deviations of acknowledged and unacknowledged participants' rape myth acceptance (LeMaire et al., 2016), one tail analysis was selected, the effect size was set to 1.08, power was set to .80, and the alpha error probability was set to .05. The total sample size reported was 24, suggesting acknowledgement differences based on values similar to those promoted by religion, would be detectable in a group of 24 participants with histories of rape. However, due to the dearth of research assessing rape acknowledgement related to religiosity and religiosity's historical small effect sizes on other aspects of trauma recovery (Ano & Vasconcelles, 2005), we increased our sample size in order to account for a potentially smaller effect. We aimed to recruit approximately 300 participants with at least 140 having experienced rape.

Data Analyses

Data was analyzed using SPSS Statistics Version 26. Prior to analysis, data was cleaned to check for missing data. Any questions that participants failed to answer were marked 999. Pairwise deletion was used for each analysis. If more than 80% of data was missing for a latent variable (e.g., extrinsic religiosity), that participant's data was excluded from analysis involving the variable. Because an understanding of rape history was critical to all analyses, participants were excluded if they did not complete every SES item, unless their incomplete responses indicated an experience of rape.

To test Hypothesis 1, participants were excluded if they did not answer the change in religious views question or rape acknowledgement question. Participants were

excluded for the directionality of religious change analysis if they did not meet the overarching Hypothesis 1 criteria or did not answer the direction of religious change question. To test Hypothesis 2, participants were excluded if they did not complete the importance of religiosity question or the rape acknowledgement question. To test Hypothesis 3, those who did not answer the disclosure question within the ACQ and/or failed to answer 80% or more of the items assessing religiosity of family, friends, and community members were excluded.

Hypothesis 1 states those with histories of rape will report more changes in religious views, with changes being reflective of becoming less religious, than those without histories of rape. To test the difference between changes in religious views (measured on a 7-point scale with greater values reflective of higher levels of change) mean scores of religious changes were compared between those with and without histories of rape. An ANCOVA was run with the change in religious views entered as the dependent variable, history of rape entered as the independent variable, and exposure to other traumatic events entered as the covariate so as to control for the difference in religious views potentially caused by exposure to trauma other than rape. Mean scores of religious changes were compared between acknowledged and unacknowledged individuals who have experienced rape using an independent samples T-test. A chi-square test of association will be used to determine the directionality of religious change (i.e., becoming more or less religious) among those who have experienced rape. Acknowledgement status was compared to the five levels of possible rape-related religious importance change (i.e., religion became significantly less important, became

less important, remained the same, became more important, or became significantly more important).

Hypothesis 2 states those who report a high importance of religion will be less likely to acknowledge their experience as rape. In order to test this hypothesis, we conducted an independent samples T-test to compare mean importance of religion (measured on a 100-point scale with higher values suggesting greater importance) and all other personal religiosity variables between acknowledged and unacknowledged individuals. A binary logistic regression was also conducted, with acknowledgement entered as the dependent variable and importance of religion and assault characteristics that have historically impacted acknowledgement (e.g., higher degrees of physical force and resistance, time since the assault; Littleton et al., 2006) as possible predictors so as to control for acknowledgement differences caused by assault characteristics.

Hypothesis 3 states there will be a negative correlation between ratings of religiosity among family, community, friends, and authority figures and number of reported disclosures. The religiosity of family, friends, community members, and other support systems (ranked on a 10-point scale with 10 being *very religious*) were averaged to determine overall religiosity of one's potential confidants and support system. Participants were asked to indicate how many people they had told in an open-ended format. Non-number responses (2.2%; e.g., many, my family knows) were excluded; responses that included estimates (3.6%; e.g., probably 3) were coded as the highest included number, and responses that included ranges (1.4%; e.g., 5-6) were coded as the average of the reported range. In order to determine the presence of this association, a

Pearson's r correlation was conducted between the number of reported disclosures and the averaged value of religiosity across family, friends, and community members.

Results

The total sample included 310 participants, the majority of whom (81.9%) reported some organized religious affiliation. Regarding religious practices and behaviors, 25.1% reported they attend religious services frequently or very frequently, 34.2% reported they privately pray or meditate frequently or very frequently, and 11.3% reported they read sacred religious texts frequently or very frequently. Ninety percent of participants reported they grew up in a religious household, with 22.9% labeling it as very religious and 41.9% as moderately religious. The majority of participants (67.1%) continued to practice or align with the religion they were raised.

As intended by specific screening and recruitment strategies, approximately half of the sample (139; 44.8%) had experienced rape. An additional 69 participants had not experienced rape but reported other forms of sexual violence ranging from unwanted sexual contact (7.7%), coercion (9.7%), or attempted rape (4.8%) as the most severe form of nonconsensual sexual experience. The remaining 102 participants (32.9%) reported no history of sexual violence. Because the purpose of this study was to examine religious differences between those who experienced rape and those who did not, the sample was dichotomized to reflect those with rape experiences (44.8%) and those without (55.2%). On average, participants who experienced rape were 17.29 years old ($SD = 2.92$) at the time the rape occurred.

All but one of the 139 participants who experienced rape answered the rape acknowledgement question. A slight majority of those who experienced rape ($N = 82$,

58.9%) fell in the acknowledged category—they answered “yes” they had been raped and indicated an experience on the SES that matched the legal definition of rape. The unacknowledged group included 56 participants (40.3%). Interestingly, five individuals reported they had been raped per the acknowledgement question but did not endorse an established rape description on the SES. Four of these five individuals reported sexual abuse in childhood as indicated by endorsement of any item on the CTQ-SF sexual abuse subscale.

Fifty-seven participants identified as a sexual minority (e.g., bisexual, lesbian); this group was overall less religious than their heterosexual counterparts as evidenced by significantly lower mean scores for all personal religious variables including the extent to which one considers themselves religious, importance of religion, certainty in the existence of God, current religious practices (i.e., attendance of religious services, engagement in private prayer, reading sacred religious texts), number of religious activities, and intrinsic and extrinsic religiosity (p 's < .032). Sexual minority individuals reported experiencing significantly greater change in their religious beliefs and a greater decrease in frequency of religious service attendance across their lifetime compared to their heterosexual peers. No significant differences in personal religiosity variables emerged between sexual minority participants who had and had not experienced rape.

Trauma & Religious Change

To determine the differences in religious changes between those who had and had not experienced rape, an ANCOVA was run to compare mean religious change after controlling for other traumatic experiences as identified by the LEC-5 *Happened to me* subscale. The other subscales measuring secondary exposure to traumatic events (“I

witnessed it” or exposure via one’s job) were not included as covariates. Assumptions of homogeneity of variance were met per Levene’s test of error variances. After controlling for other trauma exposure, those who experienced rape reported significantly more change in religious views than those who did not, $F(1, 307) = 6.038, p = .015, \eta^2 = .019$. See Table 1.

Those who experienced rape were significantly less likely to have remained affiliated with the religion they were raised in, $\chi^2(1) = 17.608, p < .000, \phi = -.238$. Retrospective reports of religious behaviors at various points across the lifespan revealed those who had experienced rape experienced greater change in frequency of attendance of religious services and reading sacred scriptures from childhood to adulthood compared to those who had not experienced rape. When comparing retrospective reports of religious behaviors in adolescence to adulthood, these results remained significant only for change in frequency of attendance (see Table 1).

The number of traumas experienced, as indicated by endorsement on the LEC-5, was significantly correlated with religious change, $r = .179, p = .002$. An additional variable was created to determine differences in religious change between those who endorsed no traumatic experiences ($n = 52$), those who endorsed any traumatic experience other than rape ($n = 119$), and those who experienced rape ($n = 139$). Those who experienced rape, compared to those who experienced other trauma or had not endorsed such experiences, were significantly less likely to remain affiliated with the religion they were raised in, $\chi^2(2) = 20.564, p < .000, \phi = .258$. Of those who reported no traumatic experiences, the overwhelming majority (86.5%) continued to practice the religion in which they were raised compared to 73.1% of those who experienced trauma

other than rape and 54.7% of those who experienced rape. Post hoc tests following a one-way ANOVA (see Table 2) revealed those who experienced rape reported significantly greater religious change compared to both those who experienced no trauma and those who experienced any other type of trauma. Compared to those who had experienced no trauma or any other trauma, those who experienced rape showed a greater decrease in attendance of religious services and reading of sacred scriptures between childhood and adulthood. These results were similarly significant when examining change in attendance between adolescence and adulthood.

Acknowledgement & Religious Change

There were no significant differences in religious change between the acknowledged and unacknowledged groups, $t(136) = -.152, p = .880$. Similarly, no differences in changes in religious behaviors between childhood, adolescence, or adulthood were observed across acknowledgement status. Those who acknowledged experiences of rape were no more or less likely to have separated from the religious affiliation they were in raised in, $\chi^2(1) = .249, p = .618$.

Given there was an additional question about religious change specific to the potential influence of rape, a chi-square test was used to determine any directionality of religious change (i.e., one's religion becoming more or less important to them). Due to small cell sizes (i.e., fewer than five unacknowledged participants reporting significant changes in religious importance indicated by the extremes on either end of the scale), the change in religious importance question scale was truncated to reflect either religiosity becoming less important, the same, or more important following an experience of rape. In both the acknowledged and unacknowledged groups, the majority of participants reported

the importance of their religion remained the same following an experience of rape; 30.4% of the acknowledged group and 21.6% of the unacknowledged group reported their religion had become less important to them, and 20.3% of the acknowledged group and 19.6% of the unacknowledged group reported their religion had become more important. Thus, there was no significant distinction about becoming more or less religious between the acknowledged or unacknowledged groups ($\chi^2 (2) = 1.422, p = .491$), meaning there was no specific directionality of the observed rape related religious change.

However, acknowledged participants were significantly more likely to endorse a polar response (i.e., my religion became *significantly* more or less important to me) than unacknowledged participants, $\chi^2 (1) = 6.890, p = .009, \phi = -.223$. Indeed, 24.4% of acknowledged participants indicated their religion had become either significantly more (7.3%) or less important (17.1%) to them compared to only 7.1% of unacknowledged participants.

Trauma & Personal Religiosity

Those who experienced rape identified as significantly less religious, indicated religion was less important to them, and reported significantly less certainty in the existence of God compared to those who did not experience rape (see Table 1). Those who experienced rape also reported significantly lower ratings of both intrinsic and extrinsic religiosity. Mean frequency of religious service attendance and reading religious texts was significantly lower among those who had experienced rape compared to those who had not experienced rape. There were no differences between groups in retrospective reports of religious behaviors in childhood or adolescence.

Number of experienced traumas was significantly, negatively correlated with the following personal religiosity variables: religious identity ($r = -.149, p = .009$), religious importance ($r = -.203, p < .000$), certainty in the existence of God ($r = -.156, p = .006$), frequency of attendance of religious services ($r = -.170, p = .003$), and intrinsic religiosity ($r = -.165, p = .004$). When comparing those who experienced rape to those who experienced other traumas (see Table 2), mean importance of religion, religious identity, frequency of prayer in adulthood, and attendance of religious services during adolescence were similar between the two groups, but significantly lower compared to those who had not endorsed any traumatic experiences. Belief in God and attendance of religious services in adulthood were significantly lower in those who had experienced rape compared to those who experienced other traumas and those who endorsed no trauma experiences. Those who experienced rape scored lower on measures of intrinsic religiosity and extrinsic religiosity than those who experienced any other trauma and those who had not experienced trauma. In summary, experiencing rape had a more dramatic effect on personal religiosity than any other observed trauma history, suggesting something distinct about the nature of rape and its influence on personal beliefs and relationship to faith and religiosity.

Rape Acknowledgement & Personal Religiosity

There was no observed association between religious affiliation and acknowledgement status, $\chi^2 (1) = .302, p = .583$. Independent samples t-tests revealed no significant differences in identification as a religious person, religious importance, certainty in the existence of God, or intrinsic or extrinsic religiosity between the acknowledged and unacknowledged groups.

Religious factors and assault characteristics hypothesized to predict acknowledgement were entered into a binary logistic regression model. The regression model was not significant, $\chi^2(1) = 7.311, p = .293$. Importance of religiosity did not significantly contribute to the prediction of acknowledgement. Surprisingly, assault characteristics (e.g., use of physical force by the other person, personal use of physical resistance, and time since the assault) were also nonsignificant in predicting acknowledgement status. The current sample differed from previous samples (Orchowski et al., 2013; Littleton et al., 2006; Koss, 1985) in that no significant differences were observed in reports of personal use of resistance or use of force by the other person between the acknowledged and unacknowledged groups, which likely explains the limited utility of assault characteristics in predicting acknowledgement.

Although religiosity did not have a direct influence on acknowledgement, the well-documented relationship and observed correlations between religiosity and other known predictors of acknowledgement (e.g., rape myth acceptance) prompted the investigation of a potential indirect effect. Bivariate correlations between extrinsic and intrinsic religiosity and IRMAS, ASI, RAQ, and ARESS scores among those who experienced rape are presented in Table 3. Those who acknowledged their experiences reported greater rejection of two specific rape myths as indicated by significant mean differences on two IRMAS subscales—men do not mean to perpetrate rape ($t(124) = 2.134, p = .035$) and women lie about being raped ($t(124) = .2506, p = .014$)—compared to the unacknowledged group; total IRMAS scores did not significantly differ between the acknowledged and unacknowledged group. The unacknowledged group's ambivalent sexism scores were higher than the acknowledged group for both the total score ($t(123) =$

-2.519, $p = .033$) and the hostile sexism subscale ($t(123) = -2.243, p = .027$). Per the RAQ and ARESS scores, the acknowledged group placed more blame on the other person ($t(126) = 2.438, p = .020$) and experienced greater shame ($t(125) = 2.114, p = .036$) compared to the unacknowledged group.

Given blame and shame were not correlated to religiosity, these variables were not included in the following mediation models. Hayes' PROCESS was used to determine the existence of extrinsic religiosity's potential mediating effect on acknowledgement via rape myth acceptance and sexism. Adherence to the specific rape myth about women lying about being raped was entered as a mediator because it distinguished the acknowledged from the unacknowledged group and was significantly correlated to extrinsic religiosity. Total sexism scores were entered as the mediator in the second model because it had the highest correlation to extrinsic religiosity. Two separate simple mediation tests were conducted. Results from the mediation models are shown in Table 4 and Figures 2 and 3. Acceptance of the rape myth about women lying, was a significant mediator between extrinsic religiosity and acknowledgement status as determined by the 95% bootstrapped confidence interval, $B = .0225, SE = .0178, CI [.0016, .0694]$. The second model with ambivalent sexism as the included mediator was also significant, $B = .0309, SE = .0170, CI [.0021, .0691]$.

Disclosure & Religiosity

Of those who experienced rape ($N = 139$), 74.1% indicated they had told someone about the experience. The modal response regarding how many people participants disclosed to was zero and the median and non-zero modal response was three. Responses ranged from 0-200 people ($M = 5.30, SD = 18.07$). According to best practices, extreme

outliers in disclosure rates were determined by multiplying the inter-quartile range by three and adding that value to the 75th percentile value (Field, 2009). This method resulted in the identification and alteration of reports of disclosure beyond seventeen (two data points) to the next highest value plus one—sixteen.

Personal Religiosity & Religious Change

Rates of disclosure did not differ across religious affiliations (i.e., nonreligious, Catholic, Mormon, nondenominational Christian), $F(6, 121) = .448, p = .845$. As indicated by numerical differences, those who had not disclosed identified as more religious, indicated religiosity was more important to them, reported greater certainty in the existence of God, engaged in more religious activities, scored higher on both the intrinsic and extrinsic religiosity measures, and attended religious services, prayed or meditated, and read religious texts more frequently than those who had disclosed; however, the differences were not statistically significant. No significant differences emerged across any personal religiosity variables or religious change variables. Similarly, the number of people someone disclosed to was not significantly correlated with any included personal religiosity or religious change variables. An independent samples t test found the acknowledged group reported significantly more disclosures ($M = 4.22, SD = 3.88$) than the unacknowledged group ($M = 2.68, SD = 2.04$), $t(125) = 2.584, p = .011$.

Microsystem Religiosity

The religiosity of the household one grew up in had no effect on overall rates of disclosure of an experience of rape, $F(3, 124) = .922, p = .432$. Disclosure to specific individuals (e.g., parents, siblings, friends) were similarly unaffected by the religiosity of the homes in which participants were raised. Levels of religiosity among participants'

microsystem were averaged into one variable to denote the average religiosity of important people in participants' lives. There was no observed correlation between number of disclosures and the averaged microsystem religiosity ($r = .010, p = .907$). It is worth noting the low rates of disclosure to specific individuals as can be seen in Table 5. One noteworthy correlation emerged when examining individuals who reported a nonreligious affiliation (e.g., atheist or agnostic): The religiosity of one's friends was negatively correlated with overall disclosure ($r = -.472, p = .010$). This relationship was not observed in those who personally aligned with religion.

Higher frequencies of disclosure were associated with greater rejection of rape myths as indicated by higher scores on the IRMAS ($r = .281, p = .002$). Disclosure was also positively correlated with greater blame assigned to the other person as indicated by scores on the RAQ Other subscale ($r = .271, p = .002$). IRMAS total scores, RAQ Other subscale scores, and acknowledgement status were entered as predictors of disclosure in a linear regression model. The regression equation was significant in predicting disclosure, ($F(3, 116) = 7.120, p < .000$) and accounted for 13.4% (R^2) of variance in disclosure. Acknowledgement status, proved to be a nonsignificant individual predictor ($b = -1.076, SE = .609, p = .080$), whereas RAQ Other scores ($b = .083, SE = .036, p = .023$) and IRMAS total scores ($b = .047, SE = .019, p = .014$) were. For each unit increase in blame placed on the other person the number of people someone disclosed to increased by .204. Similarly, for each unit increase in IRMAS scores, representing a movement towards greater rejection of rape myths, disclosure increased by .219.

Discussion

The unique invasive and violating nature of rape translates to heightened risk for several negative physical and mental health problems. Considerable research has been devoted to understanding how rape affects well-being, but one's spiritual and religious well-being has been largely neglected from the prior literature. Because the vast majority of the American population relies on religion and considers it of high importance in their life, it is important to understand how rape, an experience that happens to more than a quarter of American women, influences religiosity and how religiosity might influence mechanisms of recovery from rape. The current study sought to examine the impact of rape on one's religiosity and the influence of religiosity on acknowledgement and disclosure of rape.

Religious Change

The first goal of this study was to investigate change in religiosity influenced by rape. Consistent with prior research documenting changes in religious beliefs following traumatic experiences (Foa & Rothbaum, 2001; Falsetti et al., 2003), we found those who had experienced rape reported significantly greater change in their faith or religious views compared to those who had not experienced rape. Approximately half of those who experienced rape left the religious affiliation they grew up in, compared to only 22.81% of those who had not experienced rape, and those who experienced rape engaged in fewer religious activities than they did in childhood or adolescence in comparison to those who had not experienced rape. Some might suggest those who experience rape are less religious to begin—such hypotheses are typically propelled by the idea that religious women are less likely to engage in binge drinking or casually date which might decrease

their risk of being raped (Mynatt & Allgeier, 1990)—but the present findings suggest that those who were raped were no more religious than those who were not prior to their adult years. Indeed, the sample did not differ in frequency of religious behaviors in childhood or adolescence, but those who experienced rape reported significantly fewer current religious behaviors. The average age that rape was experienced was approximately 17, which is just on the cusp of adulthood and where the observed significant changes in religiosity were reported. Although there are other factors that may influence change in religious beliefs around the onset of adulthood, rape is likely a dramatic influence and was the discriminating variable in this sample.

Not only was the religious change observed in those who had experienced rape significantly greater than that of those who had not been raped, it also exceeded that of those who had experienced other types of trauma in this sample. Prior research suggests religiosity changes as a function of trauma in general (Foa & Rothbaum, 2001; Falsetti et al., 2003), but our findings suggest there is something specific about rape that results in greater questioning of one's religiosity. The violative and relational components of rape and fraught relationship between religiosity and sexuality may be uniquely related to religious conflict in comparison to other trauma, as the results of this study certainly demonstrate that rape is associated with greater change in religiosity in comparison to other traumatic events like a car accident. These results bolster previous findings demonstrating trauma's influence on religion and further clarifies the uniqueness of rape as a factor in religious change.

The information processing model would suggest the observed religious change related to rape is consistent with accommodation; one's schema or understanding of

religion is altered to cope with an experience of rape (Resick & Schnicke, 1992). However, accommodation appears to occur regardless of whether individuals label their experience as rape or not. Indeed, we had anticipated the aforementioned religious change would not only distinguish those who had experienced rape from those who had not but would also differ between those who had and had not acknowledged a personal experience of rape. Yet, results indicated the acknowledged group experienced no more change in their religious beliefs or behaviors than the unacknowledged group. This likely points to the saliency of rape; regardless if one chooses to call their experience rape, the experience itself is influential enough to prompt dramatic inquiry of one's religious beliefs and connection to their faith.

Although change in religious beliefs and behaviors were not significantly different between the two groups, the acknowledged group was significantly more likely to choose a polar response (i.e., significantly less important or significantly more important) when asked how the importance of their religion had changed following an experience of rape. This finding is consistent with Littleton's (2007) research demonstrating a relationship between rape acknowledgement and overaccommodation; the acknowledged group appears to have altered their religious schema more drastically, as indicated by the more severe responses, compared to the unacknowledged group. Furthermore, more definitive responses or greater clarity of one's position on their religious stance following rape is likely suggestive of more direct coping and less cognitive and emotional avoidance of the experience, which is associated with a higher likelihood of acknowledgement (Littleton, 2007). In essence, acknowledgement does not appear to be associated with any more religious change than what is prompted by the

initial rape experience but likely contributes to stronger feelings and greater clarity about that religious change.

Prior research has relied mainly on self-reports of subjective religious change and documented that trauma definitely causes changes in religious beliefs, but the directionality is unclear (Falsetti et al., 2003; Ben-Ezra et al., 2010). The current study found similar results in that when participants were asked if they felt they had become more or less religious after experiencing rape, no consistent direction emerged. However, the difference between retrospective reports of religious behaviors indicates those who experienced rape, not only experienced significant change in religiosity, but they became less active in their religion. These results provide insight into participants' perceptions of their religion following rape. This discrepancy between responses on subjective perception of religious change and more objective reports of religious behaviors might demonstrate a lack of insight into the extent of rape-related influence on religiosity, which may be specifically powered by a lack of acknowledgment. In other words, those who do not acknowledge their experiences might be less likely to fully comprehend the extent to which their religiosity has been influenced by rape because they have not fully processed the experience itself.

Predicting Acknowledgement

Rape may have a more powerful effect on religious beliefs than religious beliefs have on the emotional processing of rape. To illustrate, rape was associated with greater religious change, less importance of religiosity, less certainty in the existence God, and lower frequency in religious behaviors, but the labeling of an experience of rape appears less directly influenced by religion as the unacknowledged and acknowledged group

reported similar personal religiosity and religious change. We had originally hypothesized importance of religiosity would reflect a religious schema that was rigidly constructed and inhospitable for conceptualization of a personal rape experience forcing an assimilation of the experience, but no such direct relationship to unacknowledgement was found. Several assault characteristics like personal use of resistance and physical force on the part of the other person were also nonsignificant predictors and did not differ across acknowledgement status suggesting this sample differs from others described in previous literature. It is unclear why this relationship was not observed, but the robust connection between rape myth acceptance and sexism and acknowledgement suggest similar attitudinal mechanisms are at play in this sample as those documented in the literature (LeMaire et al., 2016; Peterson & Muehlenhard, 2004; Littleton & Axsom, 2003; Koss, 1985). Indeed, the observed indirect effect of religiosity via attitudes on traditional gender roles and specific rape myths on acknowledgement argues that religious schemas still have considerable influence on the information processing of rape. The schemas that force assimilation of an experience, or labeling of an experience of rape as something other than rape, are those that are constructed by specific religious views connected to rape myths and sexism.

Extrinsic religiosity, the shallow embracement of religion to procure personal benefits, was significantly correlated with the idea that women lie about being raped and ambivalent sexism. When examining those who had experienced rape, these factors were not correlated with intrinsic religiosity, consistent with the previously observed curvilinear relationship between intrinsic and extrinsic religiosity and discriminatory beliefs (Navarro & Tewksbury, 2018; Burn & Busso, 2005; Allport & Ross, 1967).

However, it is worth noting that in the overall sample, intrinsic religiosity was significantly correlated with sexism, potentially indicating a stronger relationship between religion and sexism in comparison to rape myth adherence or a difference in beliefs about traditional gender roles between those who experienced rape and those who had not. To wit, ideas about traditional gender roles may be more readily accepted than the more obviously harmful or uncomfortable myths about rape. Extrinsic religiosity did not differ between the acknowledged and unacknowledged group, but sexism and adherence to the idea that women lie about rape significantly mediated the relationship between extrinsic religiosity and acknowledgment. In other words, as extrinsic religiosity increased, adherence to this specific rape myth increased which was associated with a lower likelihood of acknowledgement. Similarly, as extrinsic religiosity increased, ambivalent sexism also increased translating to a lower likelihood of acknowledgement. Both findings align with the information processing model. Acknowledgement, or the alteration of one's schema to accommodate a personal experience of rape, is easier when that schema is not characterized by rape myths or sexist attitudes or such beliefs must be changed; hence, the likelihood of acknowledgement is increased when adherence to rape myths and sexist beliefs is lower. On the other hand, unacknowledgement, or the alteration of a personal rape experience to assimilate within a pre-existing schema, occurs when one's schemas are strictly informed by rape myths and sexist attitudes; therefore, higher reports of rape myth adherence and sexist beliefs were associated with lower likelihood of acknowledgement.

Extrinsic religiosity's and acknowledgement's specific connection to the myth about women lying about rape is important to examine further. There is a story in the

early books of the Hebrew Bible, about Potiphar's wife who falsely accuses the prophet Joseph of rape, for which he is imprisoned (New American Bible (Revised Edition), 1970/2010, Genesis 39). This specific tale has been recreated in children's books and movies and has been used repeatedly in attempts to discredit those who bring forward allegations of sexual assault such as Christine Blasey Ford (Calvin, 2018; Vaught, 2018). In addition, several messages exist throughout Judeo-Christian teaching about the scheming and seductive nature of women (e.g., New American Bible (Revised Edition), 1970/2010, Proverbs 5-6). These messages likely contribute to the specific connection between extrinsic religiosity and adherence to this myth about rape. Religious women who experience rape likely experience dissonance as a result of the conflict and fear of labeling their experience rape in light of the religiously driven belief that women's allegations of rape are false and not taken seriously.

Just as the relationship between this rape myth and extrinsic religiosity can be illustrated in religious messages and current culture, so can the connection to ambivalent sexism. The Ambivalent Sexism Inventory includes several items consistent with the patriarchal beliefs promoted by Judeo-Christian religions (Edwards et al., 2011), making its high correlation with extrinsic religiosity unsurprising. For example, one item reads "Many women have a quality of purity that few men possess" which mimics religious emphasis on purity and virginity; indeed, although several verses throughout the Hebrew Bible reference sexual morality of both men and women, the term virginity is exclusively used to refer to women and their worth (e.g., New American Bible (Revised Edition), 1970/2010, Genesis 24:16, Exodus 22:15, Leviticus 21:13, Deuteronomy 22:14-28, Judges 19:24). Some of these beliefs are not inherently harmful and help many religious

individuals navigate their role and gender in a positive way. Still, these themes emphasizing the importance of sexual morality of women and the entitlement of men as head of the household, likely contribute to a mindset that frames several variations of rape as acceptable or unworthy of such a label.

Rape myths and sexism were related to religiosity potentially because these constructs are enmeshed with an overall, religiously influenced culture, but other factors like shame and blame were not, perhaps because of the more intimate, personal nature of such emotions. In other words, the effects of religiosity may be best highlighted when they are objective messages endorsed globally in comparison to subjective messages about personal feelings. These results are encouraging in that blame and shame were not associated with religion but daunting in that the more serious block to acknowledgement and potential emotional processing is the much more nebulous rape culture shaped in part by decades of misused religious teachings. Consistent with prior research, acknowledgement was associated with greater blame on the other person (Orchowski et al., 2013). Surprisingly, the acknowledged group reported greater shame than the unacknowledged group. There has been limited research documenting the relationship between acknowledgement and shame, but given the robust relationship between shame and self-blame (Weiss, 2010) and self-blame's association with unacknowledgement (Orchowski et al., 2013; Bondurant, 2001), many posit shame would also be associated with unacknowledgement. One other study was found to have examined the relationship between shame and acknowledgement and found the opposite association of that observed in the current study; those who did not label their experience as rape reported

more frequently that they did not disclose to others about their experience because they felt ashamed (Alvarez, 2020).

Disclosure

Across the sample, rates of disclosure were generally low. Indeed, the most commonly reported number of people one disclosed to was zero. Participants were most likely to disclose to their closest friends in comparison to other sources of support like their parents, religious figures, or the police. Very few people disclosed to extended family members like their grandparents, aunts, or uncles. Contrary to our hypothesis, religiosity appeared largely unrelated to disclosure. Religious change and personal religiosity (e.g., importance of religion, extent to which one considered themselves a religious person) were not correlated with rates of disclosure and those who were raised in a religious household reported similar disclosure rates as those who had not been raised in a particular faith. Similarly, the religiosity of a potential confidant was unrelated to the choice to disclose to them. However, among those who identified as nonreligious, the more religious one's friends were, the fewer disclosures the participant reported. This is telling of the reaction a nonreligious person anticipates from a religious individual when disclosing a personal story involving rape. Just as the relationship between rape myth acceptance and religion is clear in the research literature, it is also likely well known by the public. Nonreligious individuals are likely hesitant to disclose when they expect to be met with religious messages consistent with blame or disbelief. As this correlation was nonexistent for religious individuals, we might infer that a shared religious ideology mitigates the fear of a potentially religious reaction to disclosure.

Past studies have found that individuals are less likely to disclose about rape when negative messages about sexuality are promoted or discussed by potential confidants (Smith & Cook, 2008). Although these messages can definitely be associated with religious beliefs (e.g., premarital sex is a sin), it appears that just being perceived as religious is not enough to discourage disclosure on a widespread scale, unless the discloser is nonreligious. Judeo-Christian religions' emphasis on trust, honesty, and forgiveness might encourage disclosure or at least balance out any existing negative messages about sexuality so that disclosure is not directly influenced by their personal religious conviction or that of those around them. Furthermore, one of the greatest documented benefits of religious affiliation is the incorporated social support (Kucharska, 2020). Even if individuals are hesitant to discuss a personal rape experience with a religious person for fear of their reaction, the bond of religious community might counter this fear. This might explain the nonsignificant relationship between the religiosity of one's microsystem and disclosure particularly for religious women.

Both the rejection of rape myths and blame on the other person significantly predicted rates of disclosure. Acknowledged participants also reported greater rejection of rape myths and greater outside blame in addition to being more likely to disclose in comparison to the unacknowledged group. Rejection of rape myths likely indicates a greater ease with discussing rape experiences. For example, if one rejects rape myths regarding victim blaming, rape suddenly becomes easier to discuss in a personal manner because the fear and ambivalence regarding responsibility for the experience is lessened. Furthermore, placing blame outside of oneself is likely associated with disclosure

because it easier to tell someone about something negative that happened to you versus something negative you believe you brought on yourself.

Clinical Implications

Several studies have confirmed the negative effect rape has on physical and mental health, and this study further indicates rape has even further reaching implications into one's attitudes and beliefs. Interventions for rape recovery should include options for religious and spiritual counseling, particularly for religious women, because rape causes dramatic changes in one's understanding of their religious identity. Indeed, internal religious conflict and doubt is associated with significant distress (Krause, 2006), so addressing religious pain caused by rape may be just as important as addressing emotional symptoms like depression and anxiety. Given religiosity is associated with decreased PTSD and depressive symptoms in general (Kucharska, 2020), religious women in particular may seriously benefit from religious interventions to indirectly manage other mental health symptoms influenced by rape. Religious and spiritual care should be more wholly integrated in several interventions, but specifically following traumatic experiences and when the individual regards their religion as important.

In addition to incorporating a religious or spiritual element in trauma recovery programs, there should be greater funding and resources allocated to rape recovery interventions. There is substantial amount of support and relief offered to those who experience other traumatic experiences (e.g., natural disasters), but our nation is slow to provide resources to better understand and help those who have experienced rape. However, the results of this study communicate that those who experience rape experience more dramatic attitudinal changes than those who experience other types of

trauma. The limited allocation of resources to rape prevention and recovery programs is likely due to the distinct stigma surrounding sexual assault and rape. Unfortunately, that stigma is likely only heightened in religious communities, where individuals managing rape related religious conflict might hope for support. Religious communities should look to create support groups for those who have experienced rape and sexual assault.

Furthermore, as mental health clinicians are not spiritual directors, specific interventions and trainings for religious leaders should be developed and implemented so that leaders of religious communities can appropriately respond to disclosures of rape and help individuals manage the religious conflict that results in dramatic belief changes for so many. In doing so, mental health clinicians can also develop a referral relationship with religious and spiritual leaders with the confidence that the individuals they refer are going to be accepted and not met with messages of blame, doubt, or shame.

Finally, the results of this study provide further clarity to the influence of rape culture. Several messages from Judeo-Christian religions have been used and twisted to promote rape myths, sexism, and an overall discreditation of those who say they have been raped. Although the path towards redefinition of societal norms is unclear, this research identifies religiosity as an important element to address along the journey. Religious leaders can play an important role in this task. Those who lightly embrace religion were more likely to endorse negative beliefs about women and rape in comparison to those who reported a fuller devotion to their religious creed. This relationship suggests that fuller understanding of one's religion is associated with rejection of these harmful beliefs, as the core message of all Judeo-Christian religions is to love one another. Religious leaders can set an example by openly rejecting harmful,

discriminatory beliefs and encouraging an intrinsically motivated religious lifestyle and fuller understanding of religious teaching.

Limitations

There may have been a recruitment or self-selection bias to participate in this research as the latter half of circulated advertisements encouraged those with negative relationship histories to participate and those without rape histories were excluded. This may explain the higher proportion of acknowledged individuals in comparison to other samples (Wilson & Miller, 2016). Inferences about acknowledgement in this sample may be further limited by the unexpected lack of relationship to assault characteristics. Furthermore, this sample was comprised almost entirely of White women. Racially minoritized women often report a unique connection to their religion and spirituality (Jones et al., 2011) and also experience rape at a higher rate than White women (Bryant-Davis et al., 2009). Future research on the relationship between rape and religiosity should look to include a more diverse sample. Similarly, the overwhelming majority of the included sample aligned with a Christian religious affiliation. More diverse religious groups communicate different messages about rape and are important to include in our understanding of rape's influence on religious beliefs. Additionally, rates of disclosure following rape are often so low that some statistical analyses are difficult to complete. Finally, this study sought to operationally measure religiosity which is an extremely subjective experience. Although this study included a more systemic battery of religiosity questions, these likely did not capture one's religiosity in the way that an interview or other research modalities might. This study also measured retrospective reports of religiosity via self-report, which may not be the most reliable interpretation for religiosity

across the lifespan; however, when examining religious change, the perception that religiosity has changed may actually be more important than the objective change.

Conclusions

The current study demonstrated the important relationship between rape and religiosity. Those who experienced rape were more likely to experience religious change compared to those who had not experienced rape and those who had experienced other traumas. Rape not only related to significant changes in religiosity, but religiosity was shown to play an important role in important elements of recovery from rape: acknowledgement and disclosure. Sexism and rape myth acceptance significantly mediated the relationship between extrinsic religiosity and rape acknowledgement, and nonreligious individuals were less likely to disclose to their friends when they perceived them to be highly religious. As religiosity is clearly influenced by experiencing rape, interventions for recovery should address religious doubt and change, particularly if individuals consider their religion important. Furthermore, rape-recovery interventions should be implemented within religious communities where religious women might be more likely to seek support following traumatic experiences.

Tables

Table 1

Religious Differences Between Those With and Without Rape Histories

Religiosity Variables	No Rape History (N = 171)		Rape History (N = 139)		t	Cohen's d
	M	SD	M	SD		
Religious Change Variables						
Overall change	3.91	1.87	4.59	1.96	-3.136***	.355
Change in attendance (childhood to adulthood)	0.88	1.36	1.56	1.45	-4.267***	.484
Change in prayer (childhood to adulthood)	0.04	1.28	0.31	1.24	-1.863	.214
Change in reading (childhood to adulthood)	0.27	1.23	0.73	1.49	-2.958***	.337
Change in attendance (adolescence to adulthood)	0.60	1.12	1.04	1.24	-3.300***	.372
Change in prayer (adolescence to adulthood)	-0.04	0.93	0.13	1.17	-1.428	.161
Change in reading (adolescence to adulthood)	0.24	1.00	0.43	1.16	-1.564	.175
Change in engagement in religious activities	3.10	2.34	3.37	2.69	-0.912	.107
Personal Religiosity Variables						
Identity	52.16	29.58	42.92	31.66	2.641***	.302
Importance	59.43	33.62	46.81	35.38	3.190***	.366
Certainty of existence of God	77.20	29.64	60.80	35.82	4.396***	.499
Current frequency of attendance	3.00	1.20	2.36	1.22	4.628***	.528
Current frequency of prayer	3.12	1.26	2.91	1.23	1.517	.169
Current frequency of reading	2.28	1.06	2.00	1.15	2.235*	.253
Childhood frequency of attendance	3.88	1.15	3.92	1.30	-0.313	.033
Childhood frequency of prayer	3.16	1.22	3.22	1.32	-0.361	.047
Childhood frequency of reading	2.55	1.15	2.73	1.33	-1.251	.145
Adolescence frequency of attendance	3.60	1.19	3.40	1.34	1.343	.158
Adolescence frequency of prayer	3.08	1.23	3.04	1.31	0.317	.031
Adolescence frequency of reading	2.52	1.18	2.43	1.33	0.622	.072
Engagement in religious activities	1.21	0.73	1.20	0.71	0.170	.014
Past engagement in religious activities	4.37	2.53	4.59	2.72	-0.723	.084
Intrinsic Religiosity	23.76	6.52	21.28	6.69	3.288***	.375
Extrinsic Religiosity	17.05	5.46	14.67	5.49	3.792***	.435
Social Extrinsic Religiosity	7.03	3.16	5.85	2.88	3.391***	.390
Personal Extrinsic Religiosity	10.02	3.24	8.82	3.61	3.027***	3.50

*** $p < .01$, * $p < .05$

Table 2*Religious Differences Across Trauma Histories*

Religiosity Variables	No Trauma or Rape History (N = 52)		Trauma History (N = 119)		Rape History (N = 139)		F	η^2
	M	SD	M	SD	M	SD		
Religious Change Variables								
Subjective change	3.79	1.87	3.96	1.88	4.59	1.96	5.047***	.032
Change in attendance (childhood to adulthood)	0.88	1.29	.87	1.40	1.56	1.45	9.077***	.056
Change in prayer (childhood to adulthood)	0.02	1.28	0.05	1.28	.31	1.24	1.740	.011
Change in reading (childhood to adulthood)	0.15	1.19	0.32	1.25	0.73	1.49	4.638***	.029
Change in attendance (adolescence to adulthood)	0.73	1.27	0.54	1.05	1.04	1.24	6.032***	.038
Change in prayer (adolescence to adulthood)	-0.02	0.98	-0.05	0.91	0.13	1.17	1.032	.007
Change in reading (adolescence to adulthood)	0.25	0.93	0.24	1.03	0.43	1.16	1.223	.008
Change in engagement in religious activities	3.60	2.40	2.88	2.28	3.37	2.69	1.840	.012
Personal Religiosity Variables								
Identity	64.19	24.94	46.86	30.00	42.92	31.66	9.641***	.059
Importance	76.56	24.46	51.82	34.41	46.81	35.38	15.272***	.092
Certainty of existence of God	89.31	19.29	71.86	31.83	60.80	35.82	15.314***	.091
Current frequency of attendance	3.25	1.03	2.89	1.26	2.36	1.22	12.389***	.075
Current frequency of prayer	3.48	0.98	2.97	1.34	2.91	1.23	4.293*	.027
Current frequency of reading	2.52	1.00	2.18	1.07	2.00	1.15	4.290*	.027
Childhood frequency of attendance	4.13	0.97	3.76	1.21	3.92	1.30	1.718	.011
Childhood frequency of prayer	3.50	1.11	3.02	1.24	3.22	1.32	2.743	.018
Childhood frequency of reading	2.67	1.06	2.50	1.19	2.73	1.33	1.153	.007
Adolescence frequency of attendance	3.98	1.00	3.43	1.23	3.40	1.34	4.452***	.028
Adolescence frequency of prayer	3.46	1.00	2.92	1.29	3.04	1.31	3.461***	.022
Adolescence frequency of reading	2.77	1.21	2.41	1.15	2.43	1.33	1.686	.011
Engagement in religious activities	1.20	0.67	1.21	0.75	1.20	0.71	0.021	.000
Past engagement in religious activities	4.85	2.69	4.17	2.43	4.59	2.72	1.487	.010
Intrinsic Religiosity	25.98	5.91	22.78	6.56	21.28	6.69	9.893***	.061
Extrinsic Religiosity	18.19	4.94	16.54	5.62	14.67	5.49	8.903***	.055
Social Extrinsic Religiosity	7.35	3.08	6.89	3.20	5.85	2.88	6.152***	.039
Personal Extrinsic Religiosity	10.85	2.87	9.65	3.34	8.82	3.61	6.973***	.044

*** $p < .01$, * $p < .05$

Table 3*Correlations Between Attitudinal Measures, Religiosity, and Disclosure*

	1	1a	1b	1c	1d	2	2a	2b	3	4	5	6	7
1. IRMAS	-												
1a. She asked for it	.876**	-											
1b. He didn't mean to	.822**	.585**	-										
1c. Wasn't really rape	.807**	.723**	.506**	-									
1d. She lied	.854**	.650**	.581**	.632**	-								
2. ASI	-.470**	-.400**	-.363**	-.199*	-.551**	-							
2a. Hostile Sexism	-.482**	-.395**	-.332**	-.193*	-.630**	.889**	-						
2b. Benevolent Sexism	-.299**	-.273**	-.282**	-.140	-.265**	.809**	.449**	-					
3. RAQ Self	-.119	-.111	-.199*	-.062	-.003	-.118	-.051	-.163	-				
4. RAQ Other	.205*	.176	.218*	.058	.192*	-.137	-.141	-.086	.346**	-			
5. ARESS	-.055	.004	-.119	-.058	-.010	-.041	-.060	-.003	.356**	.346**	-		
6. Extrinsic Religiosity	-.183*	-.123	-.134	-.057	-.268**	.402**	.333**	.357**	.027	-.005	.132	-	
7. Intrinsic Religiosity	-.068	-.095	-.013	-.025	-.087	.157	.147	.118	.099	-.026	.014	.392**	-
8. Disclosure	.289**	.231**	.272**	.157	.280**	-.133	-.155	-.060	.031	.267**	.134	-.049	-.081

Note: IRMAS = Illinois Rape Myth Acceptance Scale; 1a-1d = IRMAS subscales; ASI – Ambivalent Sexism Inventory; 2a-2b = ASI subscales; RAQ Self = Rape Attributions Questionnaire self-blame subscale; RAQ Other = Rape Attributions Questionnaire categorical blame subscale; ARESS = Abuse Related Experiences of Shame Scale.

*** $p < .01$, * $p < .05$

Table 4
Indirect Effect of Extrinsic Religiosity on Rape Acknowledgement

Mediator	Mediation model path			BMED	SE	Confidence Interval	
	α	β	τ			95% LL	95% UL
Rape Myth – She lied	-.24*	-.09*	-.003	.02	.02	.0016	.0694
Ambivalent Sexism	.06*	.53*	-.01	.03	.02	.0021	.0691

Note. The bootstrapped effect was based on 5,000 bootstrap samples; α = path from extrinsic religiosity to the mediator; β = path from the mediator to acknowledgement; τ = unmediated path from extrinsic religiosity to acknowledgement; BMED = bootstrapped mediated effect; SE = standard error of bootstrapped mediated effect; LL = lower limit; UL = upper limit.

* $p < .05$

Table 5
Rates of Disclosure to Specific Confidants

Confidant	Number of Participants <i>N</i> = 139
Mother or stepmother	30 (21.6%)
Father or stepfather	15 (10.8%)
Other parental figure(s)	5 (3.6%)
Sister(s)	19 (13.7%)
Brother(s)	8 (5.8%)
Grandmother(s)	2 (1.4%)
Grandfather(s)	2 (1.4%)
Aunt(s)	3 (2.2%)
Uncle(s)	2 (1.4%)
Cousin(s)	10 (7.2%)
Closest friend(s)	76 (54.7%)
Friends	42 (30.2%)
Significant other	59 (42.4%)
Police	7 (5.0%)
Doctor/nurse/health care provider	10 (7.2%)
Therapist/counselor	29 (20.9%)
Priest/minister/rabbi	4 (2.9%)
Stranger or someone you just met	7 (5.0%)

Figures

Figure 1

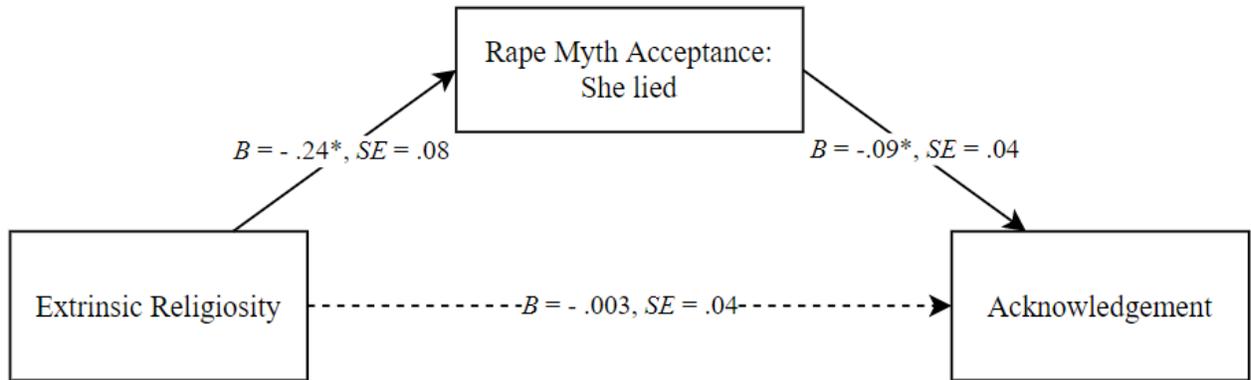
Grouping of Religiosity Variables

Religious Change	Personal Religiosity	Microsystem Religiosity
<ul style="list-style-type: none">• Subjective change: <i>Have your faith or religious beliefs ever changed?</i>• Change in frequency of behaviors from childhood to adulthood• Change in frequency of behaviors from adolescence to adulthood• Change in religious affiliation from that which one was raised in• Change in engagement in religious activities	<ul style="list-style-type: none">• Affiliation• Importance• Identity• Certainty in existence of God• Current religious behaviors• Religious behaviors in adolescence and childhood• Engagement in religious activities• Prior engagement in religious activities• Intrinsic Religiosity• Extrinsic Religiosity	<ul style="list-style-type: none">• Religiosity of one's household growing up• Religiosity of parents, immediate family, extended family, friends, community

Figure 1. Measurements and created variables for religiosity were grouped into three categories: religious change, personal religiosity, and microsystem religiosity.

Figure 2

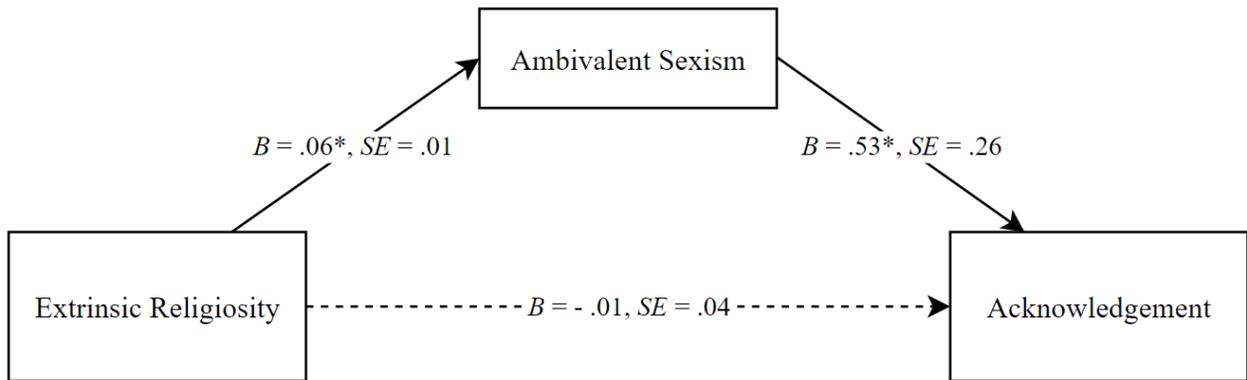
Indirect Effect of Religiosity on Acknowledgement via Acceptance of the “She Lied” Rape Myth



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

Figure 3

Indirect Effect of Religiosity on Acknowledgement via Ambivalent Sexism



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

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