PREDICTION OF BYSTANDER INTERVENTION BEHAVIOR IN A SEXUAL ASSAULT SITUATION: THE ROLE OF RELIGIOSITY, EMPATHY, AND GRATITUDE

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ABSTRACT

Bystander intervention in potential sexual assault situations is a common method of helping to address sexual violence on college campuses. Although numerous variables have been shown to mediate bystander intervention behavior, the pool of potential correlates is limited. The present study used regression analysis to determine the relationship between bystander behavior and three predictors: religiosity, gratitude, and victim empathy. Consistent with prior research, both religiosity and gratitude significantly predicted bystander behavior. Contrary to prior research, the relationship between victim empathy and bystander behavior was negative. Findings are discussed relating to potential bystander intervention programs, and future research, particularly on gratitude, is suggested.

D ESPITE DECADES OF EFFORTS BY COLLEGE CAMPUSES to reduce rates of sexual assault, incident rates remain high. A recent study found that the overall rate of nonconsensual sexual contact by physical force or inability to consent since the student enrolled at the school is 26% for women and 7% for men (Cantor et al., 2019). Men are overrepresented as the perpetrators of sexual violence; however, most men do not commit sexual violence (Flood, 2019). A number of factors have been shown to increase the likelihood that a man will commit sexual violence, including frequent alcohol consumption, membership in traditionally male groups, and the hypersexualization and objectification of women (Morris & Ratajczak, 2019). Colleges have a vested interest in successfully preventing sexual violence, given its link to survivor trauma and negative academic outcomes (Banyard et al., 2020; Henin & Black, 2021; Potter, Howard, Murphy, & Moynihan, 2018).

Most successful rape prevention programs have in common a focus on bystander intervention (Banyard, 2015; Bell, Coker & Clear, 2019; Foubert, 2011; Jouriles, Krauss, Vu, Banyard, & McDonald, 2018). Encouraging bystander intervention is the prevailing prevention approach used on college campuses for sexual assault education, with a wide variety of programs demonstrating attitude and behavior changes (Foubert, 2011; Katz, Heisterkamp, & Fleming, 2011; McMahon & Banyard, 2012; McMahon, Treitler, Peterson, & O'Connor, 2019). Researchers credit adding bystander intervention elements to their programs for reducing sexual assault an academic year post-intervention (Foubert et al., 2007). One reason for the success of the bystander intervention approach is that it identifies positive roles for many people to play to end violence instead of limiting conceptualizations to men as perpetrators and females as victims (Banyard & Hamby, 2022). Of course, for bystander intervention to work, a bystander must be present in the first place, which is less likely in the case of sexual violence than in other types of interpersonal violence; thus, bystander intervention is not a panacea when it comes to ending sexual violence (Hamby, Weber, Grych, & Banyard, 2016). Still, a meta-analysis shows that college students trained in bystander intervention were more likely to intervene to prevent it and, in fact, did intervene more frequently, with program impact lasting several months (Jouriles, Krauss, Vu, Banyard, & McDonald, 2018).

As researchers have sought to identify what leads college students to intervene in a potential sexual assault situation, several variables have been identified. When deciding whether or not to intervene, bystanders weigh the costs and benefits of the intervention relative to how they believe it will affect their status in a reference group (Banyard et al., 2004). Several other variables factor into the individual calculus potential interveners use to decide whether or not to interrupt a possible sexual assault. These factors include making a prior commitment to help, having a sense of responsibility for the situation, believing the victim has not caused the situation, having a sense of self-efficacy about what to do, seeing others modeling bystander behavior, and perceiving that the victim is a member of the same group as the bystander and potential perpetrator (Banyard et al., 2004).

Although much has been learned about what makes bystander intervention more likely, the picture is not yet complete. What other variables might lead college students to intervene in potential sexual assault situations? The present study sought to identify additional factors that make intervention more likely by determining whether variables that are not often measured in bystander intervention studies but have potential linkages to prosocial behavior might help predict bystander intervention. Specifically, the present study used a regression analysis to predict bystander intervention behavior from three predictor variables: extrinsic religiosity, empathy, and gratitude. If these predictor behaviors help predict bystander intervention, we can better understand the mechanisms of bystander intervention and hopefully become more effective at encouraging college students to intervene to prevent sexual assault.

LITERATURE REVIEW

While studying campus sexual assault, researchers vary in their focus on whether social contexts, individual characteristics or both should be the primary focus in addressing sexual assault and violence. Some argue that social contexts should be the primary focus (Barnett et al., 2005; Donovan, 2000; Heise, 1998; Lawson, 2012; Levy, 2008). Other researchers have broadened the discussion by examining both individual-level and contextual variables to increase explanatory and predictive power

(Adams-Curtis & Forbes, 2004; Cass, 2007; Hines, 2007; Mustaine & Tewksbury, 2002). Two theoretical approaches—routine activities theory (Adams-Curtis et al., 2004) and male peer support theory (DeKeseredy & Schwartz, 2013)—offer examples of how individual and contextual variables can provide fuller explanations for factors related to sexual violence.

Routine activities theory suggests that although college campuses are contexts that put women at higher risk for sexual assault, differential rates of victimization can be attributed to differences in women's daily activities. Following this argument, researchers have identified groups of activities that put women at greater risk of being sexually victimized, including proximity (e.g., higher frequency of contact with males and higher frequency of attendance at events where males are present) and recreational and leisure activities (e.g., frequency of attending parties, frequency of going to bars or pubs, frequency of attending athletic events; Adams-Curtis & Forbes, 2004; Cass, 2007; Mustaine & Tewksbury, 2002).

Similarly, *male peer support theory* focuses on male perpetrators by identifying particular contexts and activities that increase the risk of men victimizing women, particularly those in all-male groups, which are similar to the high-risk contexts identified in routine activities theory (DeKeseredy & Schwartz, 2013). They look to the social and social psychological influences on the behavior of all-male groups with respect to men's violence against women. These include social patriarchy, courtship patriarchy, male peer social support, a narrow conceptualization of masculinity, group secrecy, heavy use of alcohol, and the sexual objectification of women. Specifically, male peer support theory suggests that these reinforce patriarchal values and condone—even reward—men's violent and abusive behavior toward women (Schwartz et al., 2001).

Both routine activities theory and male peer support theory suggest that explanations of sexual violence require a greater understanding of how social contexts operate to reinforce, constrain, or encourage activities and behaviors that place women at risk for sexual victimization (Adams-Curtis et al., 2004; DeKeseredy & Schwartz, 2013). Although this literature clarifies that college and university campuses are risky contexts, these theories do not fully account for individual characteristics that might lead a student to intervene as a potential bystander.

One promising line of inquiry related to different campus contexts has been exploring religion as both an individual and a contextual characteristic. The religious life of college students has been a concern of higher education in the United States since its very foundation (Thelin, 2019). The topic of religion has gained increased attention within higher education. Nash (2001) believes that there "appears to be a virtually insatiable need for religious exploration in the academy" (Nash, 2001, p. 3) and that this revival of interest in religion represents the most vibrant aspect of pluralism on college and university campuses today. This increased interest is evidenced by the amount of research that has recently been conducted about the religion of college and university students (DeSoto, Tajalli, Pino & Smith, 2018; Hu, Cheng, & Hu, 2021; Kumar, Sahoo, Lim, & Dana, 2022).

Several studies demonstrate that religious involvement is a protective factor for various maladaptive behaviors, including criminal activity, drug use, sexual violence, and alcoholism (Foubert et al., 2020; Geppert et al., 2007; Koenig, 2015, 2012). Meanwhile, moral development researchers and theologians have identified religiosity as contributing toward prosocial behavior and moderating the effects of harmful influences, such as pornography use (Baltazar et al., 2010; Hardy & Carlo, 2005). Finally,

Foubert and Rizzo (2013) demonstrated that a connection between religiosity and bystander intervention might exist.

One type of religiosity is termed extrinsic religiosity. Extrinsically religious people tend to take an instrumental approach to religion; in other words, "What's in it for me?" would be a phrase someone with extrinsic religiosity might say. Extrinsically religious people tend to focus on going to church to meet potential business partners, socialize, and go to heaven. Essentially, an extrinsic orientation is a utilitarian perspective on religion (Hohenschue, Riegel, & Zimmermann, 2022). Extrinsic religiosity has been associated with permissive sexual attitudes, a greater likelihood of having had sexual relations outside of marriage, and greater sexual experience (Hood, Hill, & Spilka, 2009). Another potential individual characteristic that may impact whether a person chooses to intervene is empathy.

Empathy is a deep level of feeling whereby one may imitate another person's emotional state. When seeing the emotional state of another, the empathetic person's system tends to imitate the target's emotional cues resulting in similar reactions in the observer. Empathy is an active attempt to understand another person (Davis, 1994). One kind of empathy is having feelings of concern and compassion when witnessing the suffering of another.

One kind of empathy is termed behavioral empathy. It includes understanding others and sharing feelings, along with motivation to take action and help. The behavioral component involves verbal and nonverbal communication to indicate an understanding of emotional resonance with the other person (Bariso, 2020; Lam et al., 2011).

Empathy is a habit we can cultivate to improve our quality of life (Krznaric, 2012). Empathy begins to develop at an early age, but the brain regions used for these skills may not fully develop until late adolescence (Van Berkhout et al., 2015). Empathy is stronger the more similar the observer is to the target (Davis, 1994). Not surprisingly, research has shown that women are generally more empathetic than men (Allemand, Steiger, & Fend, 2015; Chng & Burke, 1999).

Empathy is both something for which people have a capacity and for which there is a situational context (Davis, 1994). Davis notes that "strong displays of negative emotion, especially by weak or helpless targets, are particularly able to engender powerful observer responses. In fact, faced with such extreme situations, other variables, both situational and dispositional, may recede in importance" (p. 15, Davis, 1994).

Research has shown that empathy is essential for having healthy relationships with other people. Research has also shown that when people feel empathy toward another individual, they experience motivation to help alleviate another person's suffering (Eisenberg & Miller, 1987; Marshall & Marshall, 2019). In particular, empathy leads people to want to help others in danger (Cassels, Chan, Chung & Birch, 2010; Batson, Duncan, Ackerman, Buckley, & Birch, 1981). Furthermore, cross-cultural research reveals that when a country's population is more empathetic, they are more likely to help others (Chopik, O'Brien, & Konrath, 2017). A state of empathy can be manipulated in that people who are asked to focus on feeling empathy for another person are much more likely to help them (Batson & Moran, 1999; Van Lange, 2008).

Research suggests that empathy is decreasing in today's society (Persson & Kajonius, 2016). Research has also shown that when people have less empathy, they are more likely to act out aggressively (Vachon et al., 2014). In particular, men with lower

levels of empathy are more likely to commit sexual assault (Abbey, 2005; Fernandez & Marshall, 2003; Rau et al., 2010). Conversely, men with high levels of victim empathy are much less likely to commit sexual assault (Abbey et al., 2006). Thus, it seems advisable to measure the potential predictive value of empathy in predicting bystander intervention behavior. Another variable that could influence bystander intervention is gratitude.

Though its relationship to bystander intervention has not been studied, the influence of gratitude seems to be a variable with the potential to increase bystander intervention given its prosocial nature. As an emotion, gratitude is an attribution-dependent state (Weiner, 1985) that results from a two-step cognitive process: Recognizing that one has obtained a positive outcome and recognizing that there is an external source for the positive outcome. Lazarus & Lazarus (1994) argued that though different from empathy, gratitude has roots in the capacity to empathize with others (Emmons & McCullough, 2003). McCullough et al. (2001) proposed that gratitude possesses three psychological features relevant to processing and responding to prosocial behavior. It is a benefit detector and both a reinforcer and motivator of prosocial behavior.

Research has confirmed that having a sense of gratitude motivates prosocial behavior (Allen, 2018; McCullough, Kimeldorf & Cohen, 2008). In fact, research suggests that gratitude motivates altruism (Berber, 2022). Gratitude has also been found to promote conflict resolution and increase reciprocally helpful behavior (Wood et al., 2010). Thus far, gratitude has not been measured in research on bystander intervention in sexual assault programs, nor in the research on bystander intervention writ large. Given the sophisticated and growing research on the prosocial effects of gratitude, it seems natural to integrate gratitude into the research on bystander intervention so that its positive effects can be understood and applied to scholarship and practice. The ultimate potential for adding gratitude induction prevention programs, including those that encourage bystander intervention, holds promise. Therefore, the present study sought to determine the relationship between religiosity, empathy, and gratitude on bystander intervention behavior using the following research question.

- Hypothesis 1: Religiosity will positively and significantly predict bystander behavior.

- Hypothesis 2: Empathy will positively and significantly predict bystander behavior.

- Hypothesis 3: Gratitude will positively and significantly predict bystander behavior.

METHOD

PARTICIPANTS
Participants were 221 students from a large public university in the Mid-West who were enrolled in courses within the College of Education and participated in the SONA system. The SONA system is an online system designed to match potential participants with research studies for class credit. The system is open to undergraduate and graduate students who take courses in which faculty either encourage student participation or offer credit for participation as an option for meeting a research requirement. Participants who signed up for the study through the SONA system completed an online survey using Qualtrics software. Participant data was anonymous, and no personally identifying information (name, code numbers, social security numbers, etc.) was collected.

Participants in this study were 43% male, 57% female, 78% Caucasian, 6% Native American, 7% African American, 4% Asian, and 3% Hispanic/Latinx. Participants were evenly distributed between first-year students, sophomores, juniors, seniors, and graduate students. The mean age was 20.2. Demographic characteristics of the sample closely mirrored the population from which the sample was taken. The institution from which participants were drawn is located in a politically conservative state known for being part of the "Bible Belt."

MEASURES

Measures used in the present study were as follows.

Religious Orientation Scale

The religious orientation scale contained three subscales: intrinsic religiosity, extrinsic religiosity, and doctrinal orthodoxy (Allport & Ross, 1967; Burris, 1999a; Burris, 1999b). Extrinsic orientation is a measure of utilitarian motives for religious behavior, such as attending church to achieve social standing in the community and praying to be happy. An intrinsic orientation is characterized by living out one's religion by attending church, reading about one's faith, joining Bible study groups, and keeping one's religious beliefs central to a whole approach to life. Doctrinal orthodoxy measures the degree to which participants subscribe to specific Christian beliefs like God created the universe, that one must accept Jesus Christ as Lord and Savior to be saved from sin, and the belief that Jesus is the Messiah. Each scale contains nine to 12 items and is measured on a 5-point Likert scale. Alpha reliability studies of the ROS Intrinsic scale have been reported in the mid .80s; the extrinsic scale in the .70s. Test-retest reliability has been reported at .84 for Intrinsic and .78 for extrinsic. Some evidence is reported for the validity of the intrinsic and extrinsic religiosity scale through correlations with measures of related constructs. The present study used the extrinsic religiosity portion of this scale.

The Gratitude Questionnaire-6

The Gratitude Questionnaire-6 measures an individual's degree of trait gratitude. It is composed of 6 statements answered on a Likert scale, such as "I have so much in life to be thankful for" (p. 127, McCullough et al., 2002). Good validity is supported by the fact that the measure was created by conducting an exploratory factor analysis of 39 items, resulting in one factor explaining 27% of the total item variance. A scree plot suggested one factor composed of the six items on this scale. The internal consistency reliability of the scale was .82, showing good reliability.

Rape Empathy Scale

Empathy was measured by the Rape Empathy Scale (Deitz, Blackwell, Daley, & Bentley, 1982). This 19-item scale measures belief in paired items on a continuum of 1 (agree more with the first item) to 7 (agree more with the second item), for example, "In general, I feel that rape is an act that is provoked by the rape victim," and "In general, I feel that rape is an act that is not provoked by the rape victim." As determined by coefficient alpha, the internal consistency of the items was shown to be .89 for a pool of 170 potential jurors and .84 for 639 college students. Positive correlations showed the scale's validity with the Attitudes Toward Women Scale. The discriminant validity of the scale was supported by its lack of correlation with the Marlowe Crown Social Desirability Scale. Predictive validity was shown by significant correlations with participants' attributions of responsibility toward rape survivors and rapists.

Bystander Behavior Scale

Bystander behavior was measured using the Bystander Behavior Scale (Banyard et al., 2014). Participants were asked whether or not they had engaged in several different types of bystander behaviors. Response choices were 0 (no) to 1 (yes). Participants' scores on the measure consisted of the number of bystander behaviors engaged in. Cronbach's alpha on this scale for the sample was .971. Participants were asked if they engaged in the selected behaviors during the last two months. Sample items include "I encouraged others to learn more and get involved in preventing sexual or intimate partner violence/abuse" and "I talked with a friend about sexual and/or intimate partner violence as an issue for our community."

Procedure

Participants were recruited through a human subjects pool of students taking courses in the College of Education. The study was set up in a survey format using the online site Survey Monkey. This company employs multiple layers of security to ensure data privacy and security, including daily independent audits of security measures, firewall, and disk redundancy. The Survey Monkey account was password protected as additional protection; only one researcher had access to the account. Data were deleted off the remote server after being downloaded. No personally-identifying information was requested. Once data collection was complete, we downloaded responses onto a password-protected computer.

RESULTS

A stepwise regression analysis was done with bystander behavior as the criterion variable and included the following predictor variables: gratitude, extrinsic religiosity, and rape victim empathy. A stepwise estimation procedure was conducted to maximize the incremental variance at each model building step (Hair et al., 2010).

The first step, the estimation, produced Model 1 that included only *extrinsic religiosity. Extrinsic religiosity alone* significantly predicted *bystander behavior, (R^2 = .05, $F_{(1, 220)}$ = 11.54, p = .001). Extrinsic religiosity* accounted for 5.0% of the variance in *bystander behavior.*

The second step in the estimation process produced Model 2 that included *extrinsic religiosity* and *gratitude* that significantly predicted *bystander behavior, (R^2 = .077, $F_{(2, 219)}$ = 9.15, p < .001). Extrinsic religiosity* and *gratitude* together accounted for 7.7% of the variance in *bystander behavior*. Extrinsic religiosity (β = .27) was a relatively stronger predictor than gratitude (β = .20).

Finally, stepwise estimation resulted in Model 3 which included *extrinsic religiosity*, *gratitude*, and *rape victim empathy*, together statistically predicted *bystander behavior (R^2 = .091, $F_{(3, 218)}$ = 8.41, p < .001). Extrinsic religiosity*, *gratitude*, and *rape victim empathy* together accounted 10.4% of the variance in *bystander behavior*. *Extrinsic religiosity* (β = .24), was the highest predictor followed by *gratitude* (β = .20), then *rape victim empathy* (β = -.17).

Based on these results, Model 3 is most parsimonious with three statistically significant predictors, together explaining 10.4% of the variance in *bystander behavior*. *Extrinsic religiosity* and *gratitude* have a positive relationship with *bystander behavior,* suggesting that as these two predictors increase, so does *bystander behavior.* However, *rape victim empathy* has a negative association with *bystander behavior*, suggesting that as *rape victim empathy* scores increase, *bystander behavior* decreases.

DISCUSSION

Research has shown that a number of variables correlate strongly with bystander behavior in sexual assault situations, most notably, bystander efficacy and bystander willingness to intervene (Moschella-Smith, Potter, & Moynihan, 2022). The present study sought to help identify a larger pool of predictors of bystander behavior to more completely inform the scholarship on bystander intervention. Using a regression design, three variables helped predict over 10% of the variance in bystander behavior.

Consistent with hypothesis 1, extrinsic religiosity emerged as a significant predictor of bystander behavior in our regression model. Extrinsic religiosity is a variable that includes primarily self-centered reasons for participating in religious activities—for example, going to church to make good business contacts. Thus, a part of the motivation to intervene as a bystander may be self-serving, such as wanting to appear to others as a responsible individual. It could also be that from a religious perspective, people who intervene wish to be rewarded by God for doing so. Future research should tease out these issues to determine why religiosity helps predict bystander behavior.

A quite different variable, gratitude, emerged as a second predictor of bystander behavior, consistent with hypothesis 3. Gratitude consists of feeling thankful for others' roles in one's life. Thus, in addition to a desire to look good to others, a major part of bystander behavior also includes a feeling that others have helped one and that intervention may be one way to pay it forward.

Contrary to our expectations, empathy toward rape victims was negatively related to bystander behavior, contradicting hypothesis 2. Thus, it may not be a feeling toward the person who might suffer that motivates an intervening bystander, but rather a desire to look good to others and help pay back others who may have helped them in the past.

Earlier research has shown that religiosity contributes toward prosocial behavior (Baltazar et al., 2010). The present study is consistent with this finding in that religiosity predicted bystander behavior in a potential sexual assault situation. Prior research has shown that gratitude motivates prosocial behavior (Allen, 2018; McCullough, Kimeldorf & Cohen, 2008). Thus, the present study helps to extend this research on gratitude to include positive effects on intervening as a bystander in a potential sexual assault situation.

Prior research suggests that empathy has a positive relationship with helping behavior (Eisenberg & Miller, 1987; Marshall & Marshall, 2019). Yet, in the present study, this effect did not emerge. It may be that once we know the religious orientation and degree of gratitude one feels toward others that victim empathy decreases in importance as a potential motivator of bystander intervention. Given the conflict between prior research on empathy and the present study results, we suggest that future research be done to help tease out the relationship between victim empathy and bystander behavior.

As our culture is increasingly shaped by and engaging in online activities, bystander intervention online is likely to become an interesting area for study. An initial study found that over half of college students have experienced some sort of online harassment, cyberstalking, or cyberbullying (Leukfeldt & Yar, 2016) and that a majority of college students intervened during the last year when they had the chance to confront such behaviors (Henson, Fisher, & Reyns, 2020). Future research involving

the variables measured in the present study might identify the online atmosphere as a potential area for bystander intervention.

An implication of the present study that has not been studied before relates to the relationship between gratitude and bystander intervention. Given the positive relationship between these variables, it could be of value to promote bystander intervention to enact gratitude induction programs on college campuses to help encourage bystander intervention. Research has shown that it is possible to increase an individual's overall sense of gratitude (Allen, 2018). Future researchers should study this relationship between gratitude and bystander intervention and help determine whether gratitude induction has an effect on bystander intervention, as may be the case given the findings of the present study.

The results of this study should be considered in light of its limitations. First, the participants came from only one conservative college campus known for being more religious than most in the Midwest. A broader sample of participants would benefit the generalizability of these results. Second, as with all self-report measures, participants may or may not have told the truth about their opinions. Third, the percent variance accounted for by our regression was 10%, leaving 90% of the variance in bystander behavior unaccounted for.

On the whole, this study helps broaden the pool of variables that may predict bystander behavior. In particular, the importance of gratitude is suggested as one that may have a critical relationship to bystander intervention in potential sexual assault situations. Future research relating to the relationship between gratitude and bystander intervention thus seems to hold promise.

AUTHOR BIOGRAPHIES

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Pamela Pittman-Adkins completed her master's degree at OU-Tulsa in Human Relations with a Concentration in Applied Behavior Research with Honors, as the faculty nominated Graduate Student of Academic Excellence recognized by the O.U. President at Commencement. She completed her Ph.D. at OSU-Tulsa in the inaugural Education, Administration, Curriculum, and Policy Studies cohort. As a graduate student at OSU, she received the Teacher of the Year Greek Award in the College of Education, a student-nominated process. She thrives on mentoring students from diverse socio-economic backgrounds and bridging the pathway from high school to college for all students.

RECOMMENDED CITATION

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