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Sexual Violence Perpetration in Georgia: Examining Individual Risk Factors Among
College-Aged Men

By

Danielle Kinsey Smith
MPH

Behavioral Sciences and Health Education

Delia Lang, PhD, MPH
Committee Chair

Laura Salazar, PhD
Committee Member

Kathleen Krause, PhD Candidate
Committee Member

Colleen McBride, PhD
Department Chair

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Danielle Kinsey Smith

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Thesis Committee Chair: Delia Lang, PhD, MPH

An abstract of
A thesis submitted to the Faculty of the
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Abstract

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Sexual violence on college campuses is a pervasive public health problem. This analysis
seeks to examine the potential individual risk factors for sexual violence perpetration
among college-aged men in Georgia. Using wave one survey data, participants from 30
different universities responded to a survey based on their experiences before age 14, and
age 14 up until the year before starting college. Four social learning theory characteristics
(childhood sexual abuse, childhood physical abuse, witnessing violence as a child, and a
high exposure to sexual media) were hypothesized to be predictors of sexual violence
perpetration behavior. The role of negative gender role perceptions as a possible
mediating factor between this relationship was also examined. Using logistic regression
modeling, analyses were conducted with all social learning theory characteristics in one
model with sexual violence perpetration as the outcome and results concluded that
childhood physical abuse, and having a higher exposure to sexual media were
significantly associated with sexual violence perpetration. However, while three out of
the four social learning theory characteristics were significantly associated with sexual
violence perpetration in individual modelling, negative gender role perceptions did not
mediate any of these relationships. This analysis builds upon the literature to support
earlier sexual violence prevention efforts.

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Introduction

Sexual violence perpetrated against women on college campuses is a pervasive public health problem. It affects approximately one-fourth, or 23% of women aged 18-24.[1] While women are more commonly victims of sexual violence, 5.4% of men have also experienced rape or sexual assault.[1] More than 95% of sexual assault crimes are committed by men, with the majority perpetrated against women.[2] The majority of men that commit rape (85%) are known to the victim.[3] Female victimization rates are consistent with male perpetration rates among college students as 31% of men report at least one act of sexual coercion.[4]

The Centers for Disease Control and Prevention defines sexual violence as a "sexual act committed against someone without that person's freely given consent."[34] The health consequences of survivors of sexual violence can be debilitating, with possible feelings of helplessness, powerlessness, anxiety, fear, post traumatic stress disorder, genital injuries, and multiple somatic complaints.[3,10] Risk and protective factors contributing to perpetration behaviors continue to be under examination. Negative gender role perceptions and relationships within the family and friend group aid in developing a man's personality and have the potential to increase his risk for violence.[4]

Many universities are now adopting sexual violence prevention and advocacy protocols to better serve their students, faculty, and staff. Prevention programs focusing on each level of the social-ecological model have shown to be most effective in targeting rape-supportive attitudes and beliefs among participants.[2] However, even with an uptake of prevention efforts, the prevalence of sexual violence victimization over the last 30 years has not decreased.[2] In order to increase prevention efforts within the college

student population, programs must focus on peer and community-level factors, as well as individual level characteristics.[2] An adaptation of the social-ecological model, Bronfenbrenner's model, defines four environmental systems as influences on the individual: microsystems, mesosystems, exosystems, and macrosystems.[36] This model can be used to depict risk and protective factors for sexual violence perpetration.[36] In this analysis, we focus on risk factors for perpetration that occur at the individual level.

Social Learning Theory

    The analysis outlined in this paper uses Social Learning Theory to guide the exploration of the impact of individual level risk factors on sexual violence perpetration. Social Learning Theory, proposed by Albert Bandura, states that learning is a cognitive process that takes place in a social context and can occur through direction or observational learning.[7] Bandura explicitly states that learning can happen through direct experience, and through modeling.[7] These constructs are especially helpful when deciphering how the role of watching violence occur as a child, or experiencing violence in childhood has the potential to influence perpetration behavior in later years. This theory is also helpful when looking at exposure to sexual media (for example, pornography), as prevalence of sex media and later perpetration behaviors will be assessed. Learning through modeling violent behaviors or direct observation of sex media and violence is one particular construct analyzed within this project.

    This study is a secondary data analysis using Dr. Laura Salazar's data regarding risk and protective factors in sexual violence perpetration behaviors among freshmen aged college men in Georgia. This data set is comprised of surveys from 1800 male college students within 30 colleges across Georgia. The data set contains information

from students at four different time points in the span of 18 months. The baseline first-wave survey examines behaviors up until age 14, as well as age 14 until the first year of college.

Research Questions

Baseline data from this study will be used to examine the following research questions:

1) What is the association between social learning theory characteristics and sexual violence perpetration?

 For purposes of the research question proposed, the learned behavior is 'sexual violence perpetration' through direct exposure to violence (childhood sexual abuse, childhood physical violence), exposure to modeling violence as a child (witnessing physical violence as a child), or through life experience (consumption of sex media).

2) Do negative gender role perceptions mediate the relationship between social learning theory characteristics and perpetration?

Hypotheses

The following hypotheses were generated after consulting the literature:

1) Social learning theory characteristics will have a significant association with sexual violence perpetration, and

2) Negative gender role perceptions mediate the relationship between social learning theory characteristics and sexual violence perpetration. More specifically, negative gender role perceptions are developed by experiencing the 'social

learning characteristics,' and these generated negative gender role perceptions are the actual indicator for sexual violence perpetration behavior.

A Review of the Literature

Sexual Violence as a Public Health Problem

One in six women will be victims of sexual assault or rape in their lifespan.[9] Sexual violence affects men as well as women, with a reported one in 33 male victims of sexual assault or rape in the United States.[9] However, men tend to report sexual violence victimization less than women.[5] Child victimization is also a public health problem, as approximately 63,000 children per year are survivors of sexual violence, and the majority of these children were sexually assaulted by one of their parents.[10] The dataset analyzed in this paper surveyed freshmen aged college men on their victimization experiences as children, as well as perpetration behaviors at age 14 up until the year before they start college. Therefore, this literature review focuses on studies about both campus sexual violence, as well as violence experienced in childhood and early adolescence.

Sexual Violence on College Campuses

Media attention has recently highlighted the problem of sexual violence on college campuses, with 23.1% of undergraduate college females reporting sexual assault or rape during their four years in college.[11] Comparatively, 5.4% of males report being sexually assaulted or raped by the end of their four years in college.[11] While female students are less likely than non-students of the same age to be victims of sexual assault or rape, males are more likely than their non-student counterpart to be victims.[12] Students are also at an increased risk of experiencing sexual violence during their first and second semesters in college, as well as 50% more at risk during the first few months in college.[13]

With the expansion of the Title IX policy in 2010, sexual violence on college campuses has come to the nation's attention and has been highlighted through various campaigns and resources.[14] For example, the "It's on us" campaign initiated by former Vice President Joe Biden illustrates that sexual violence is everyone's problem, and we all have the responsibility of stepping up and preventing perpetration, as well as supporting survivors through bystander intervention and community support. While Title IX originally was created to prevent gender discrimination in education and focused on gender equity within athletics on college campuses, the "Dear Colleague Letter" clarifies that the sexual harassment portion of Title IX also pertains to sexual violence.[1] These initiatives are important when deciphering potential research projects, as well as presenting program implementation. To better understand the causes of sexual violence, it is pertinent to look at perpetrators rather than using a form of victim blaming and putting the responsibility on the victim.

Sexual Violence Perpetration

Sexual violence perpetration research has looked at the roots of victimization, but it exhibits many gaps in its findings. One study examined three separate studies on sexual violence perpetration and concluded with the following findings; 1) studies of sexual assault perpetration specifically focusing on men and masculinity are currently rare in the literature, 2) a man's attitudes towards women and violence are strong predictors for perpetration, and lastly, 3) research examining men's perpetration behaviors using psychology constructs are generally underdeveloped and underrepresented.[15]

A national survey found that 24.4% of college men admitted that from age 14 until their current age they have at some point been sexually aggressive towards women.[4]

Out of these men, 7.8% admitted to behaviors that would legally constitute as rape or attempted rape.[4] Sexual violence perpetration is underreported, and is thought to be considerably higher than what many reports suggest.[15] In another study, 35% of men reported that they would commit rape if they knew they would not get caught.[4] This finding in particular is a clear indicator of the importance of surveillance, policy enforcement, and most importantly, prevention efforts.

Many myths portray rape as stranger perpetrated, however, in three out of four cases, the perpetrator is known to the victim.[8] One study found that men thought rape was acceptable if the girl sexually excited them first.[16] Multiple studies have shown that antisociality, sensation seeking, and an extensive history of sexual experiences were strong predictors for sexual coercion.[17] Another study found that men who have an interest in crimes such as robbery, murder, and child sexual abuse have a greater attraction to committing sexual assault.[17] In this particular study, the generalist model of criminality supports the idea that sexual assault and rape perpetrators endorse greater levels of general criminality, sexual violence, and childhood sexual abuse than non-perpetrators.[17] Many men feel that exerting sexual pressure and insistence are important components of being a man.[16] This sense of unhealthy masculinity has the ability to shape gender role perceptions and put one at risk for sexual violence perpetration. Another possible risk factor, negative childhood experiences (such as abuse), have the possibility to shape future behaviors. The social learning theory states that these childhood experiences, such as witnessing or experiencing abuse, may have an effect on later behaviors.[7] Therefore, it is imperative to look at individual-level childhood experiences

and how those affect future perpetration behaviors to possibly guide research and intervention efforts.

Childhood Experiences

Witnessing first hand or experiencing violence as a child has been associated with later delinquency and youth violence, as well as perpetrating violence against women.[4] Approximately one-third of those who experience violence as children, become violent as adults.[4] Studies that focus primarily on childhood sexual assault have found several mental health disorders linked to their experience including; depression, substance abuse, and PTSD.[18] Similarly, adults who were victimized as children are more likely to experience problems with substance abuse, depression, and increased suicide attempts.[16] Substance abuse has been noted as a prominent psychological problem in males who have experienced forced childhood sex.[16] The majority of households in which violence occurs celebrates a patriarchal structure, with traditional gender roles.[4] The men who are raised in these traditional patriarchal households are more likely to become violent than men raised in less traditional homes.[6] General trauma during childhood in men has been linked to perpetration of domestic violence in adulthood.[16]

Childhood sexual abuse is a theorized predictor for sexual violence perpetration. One study found that men who experienced sexual abuse were more likely to be coercive towards women.[6] Men that were forced to have sex as a child are also more likely than men who were not to perpetrate sexual violence during adulthood.[16] Similarly, 75% of juvenile sex offenders and convicted child molesters admitted to being sexually abused as a child.[16] One study conducted by Loh and Gidycz (2005) sought to examine the relationship between childhood sexual abuse and history of sexual assault at baseline

among 325 undergraduate men.[19] This study found that while there is a significant

relationship between childhood sexual abuse and history of sexual assault at baseline,

prospective analyses show that childhood sexual abuse is not a predictor for perpetration

during the follow up period (7 months).[19]All of these findings highlight the importance of

examining the relationship of childhood forced sex and future sexual violence

perpetration, to promote prevention techniques that focus on the causal roots of

perpetration.

Early Sex Media

Exposure to sexual media, such as pornography, at a young age is a theorized risk

factor for sexual violence perpetration later in life. Pornography is defined as, "the

explicit description or exhibition of sexual activity in literature, films, etc. intended to

stimulate erotic rather than aesthetic or emotional feelings."[20] Distinction may be made

between erotica and pornography, as pornography may be described as scenes of sexual

activity where one party may be objectified or non-consenting.[20] While violent

pornography is somewhat rare, it is depicted as sexually explicit material that shows

sexual aggression, and is typically of a man being aggressive towards a woman.[20]

Since the first large scale look into pornography by the U.S. Commission of

Obscenity and Pornography, debate has risen about the potential harmful effects of

pornography.[20] The evidence for a causal link between pornography viewing and sexual

aggression still remains unclear.[20] Technology and sexuality has become a more sought

out topic as different avenues of media have become widely available, and younger

people are using it as a way to help discover their sexual identity.[21] The adolescent age

period is a crucial time for the development of sexual identity.[16] There are two main

opinions on pornography; one of using pornography in a cathartic role as a way of freedom and to express sexuality, and another as a means for accepting sexually aggressive or abusive attitudes.[16] The use of pornography for "cathartic" effects has relaxed laws on restricting the production, sale, and distribution of pornography.[16] Multiple studies have shown the acceptance of sexually abusive attitudes when society portrays it as a norm.[16] In 1999, one study found that women were indiscriminately available to men in 90% of the pornographic scenes.[22] In 2010 another study showed that in about every other clip of 45 different pornographic films, the man exhibited control over the woman through phrases such as, "get down on your knees" and "get back up."[22] Reality tv and men's lifestyle magazines have also recently posed scholarly concern, as they have both shown to completely objectify women for the satisfaction of men.[22]

Feminist theory supports the idea that pornography sexually objectifies women, and this leads to violence against women.[22, 23] However, rape is not depicted in many popular pornography media sources.[22] Portraying women as objects is often normal, appropriate, and rewarding in sexual media.[22] One rape crisis center found that out of the 100 women surveyed at their center, 28% responded that their abuser used pornography, and 12% of women stated that those men imitated the pornography during the abuse.[23] As stated previously, Social Learning Theory reiterates that learning may happen through modeling in this case, through witnessing sexual aggression.[7] While the link between watching or reading pornography and later perpetrating sexual violence is somewhat unclear, the analysis in this paper seeks to examine this relationship, among others.

Gender role perceptions

The analysis of gender role perceptions and its effect on sexual violence perpetration is a valuable construct to consider. Women are often depicted as sexual objects when they are given the role of providing men with sexual pleasure.[22] This perspective reduces a human being to an object, or an entity.[22] And in the case of female objectification, females are reduced to an entity purely for male gratification.[22]

One particular study examined the effect of perceived gender role conflict in adolescent males.[24] Gender role conflict is defined as "the psychological state in which socialized gender roles have negative consequences on themselves or others."[24] It occurs when rigid, sexist, or restrictive gender roles result in personal restriction.[24] Heightened levels of gender role conflict have been paralleled with risk of anxiety, depression, difficulty with intimate relationships, stress, substance abuse, well-being, negative attitudes towards help seeking, poor attachment with parents, and self-esteem.[24] A study by Watts and Borders (2005) found that boys who reported higher gender conflict scores had lower self-esteem and more traditional views on a woman's role in society.[24]

Social perceptions that contribute to sexual violence acceptance include; sexism, right wing authoritarianism, and rape myth acceptance.[19] This notion of "sexism" is complex and consists of both hostile and benevolent elements.[19] While hostile sexism refers to the idea of women seeking to control men, benevolent sexism addresses the idea that women are pure creatures, and their love is needed to make a man complete.[19]

Masculinity is another construct incorporated in deciphering the association between gender role perception and perpetration. Studies on masculinity have incorporated ways to measure a man's degree of masculinity through items that evaluate

the extent at which learned notions of gender are incorporated in one's self-description.[25]
This "trait approach" has shown that men who are violent towards their partners are more
likely to report a more traditional masculine orientation in this measurement than non-
violent men.[25] Another approach used, the "normative approach" looks at examining
men's beliefs about how men and women should think, feel and behave, as well as their
rights and roles in society.[25] This approach scrutinizes further the belief that men who
hold more traditional values and expectations in regards to appropriate gendered behavior
may engage more in partner violence.[25] This may occur when expectations regarding
partner behavior are violated or the man perceives as justifiable commanding the
expectations of male behavior.[25]

Another approach that may aid in understanding the concept of
hypermasculinity's role in violence is that of gender role stress/conflict approach.[25] This
approach states that gender roles are inconsistent, constantly changing, and often violated
by men.[25] This results in negative psychological consequences and over compensatory
behaviors such as violence, to meet expectations of gender roles.[25] This behavior is used
when faced with perceived or actual challenges to their masculine gender role ideology,
and therefore violence is perpetrated to maintain a sense of control and power.[25] The
gender role stress/conflict approach differs from the normative approach in that it focuses
on the degree of conflict and stress men would experience when gender role norms are
challenged.[25] An indirect approach of masculinity focuses on looking at positive attitudes
towards violence and a large need for power and control in relationships.[25] Many factors
contribute to the formation of perceptions on gender roles, as well as how these
perceptions shape likelihood of sexual violence perpetration.

Proposed Study

The proposed study seeks to examine: 1) the association between social learning theory characteristics and perpetration and, 2) do negative gender role perceptions mediate the relationship between social learning theory characteristics and perpetration?

While much of the examined literature focuses on these individual factors, it does not highlight how these individual factors shape gender role perceptions, and the role these perceptions may have in mediating the relationship between individual social learning theory characteristics and sexual violence perpetration. This analysis is needed to understand which risk factors to focus on in future prevention efforts.

Methods

Colleges and Population

The study outlined included 30 different colleges in Georgia. Included in the sampling frame were four year private and public colleges and universities (N=34). PPS, or probability-proportional-to-size, procedures based on male undergraduate enrollment size at Month 1 of the project were used to narrow down 34 of the universities to a total count of 30. For colleges with higher enrollment sizes, a larger proportion of enrollees into the study were recruited. The following schools were excluded from the sample; technical schools, two year colleges, women only colleges, seminary or religious focused universities, art institutes, distance learning colleges, medical or health science colleges, and military schools. These schools were designated "not applicable" and excluded from the sampling frame. Inclusion criteria for individual participants were: matriculated at one of the 30 universities, male, a freshmen, self-reported relationship status as single,

and aged 18 to 24. The analysis outlined in this paper focuses on the first wave of data collection.

Recruitment

Recruitment for the online prospective study occurred during Fall 2013, Spring 2014 and Fall 2014 semesters. Students were recruited through Facebook advertisements, campus events, classroom announcements and peer referrals. Students were directed to a study website that provided information about the study (e.g., "we are interested in finding about your experiences and opinions related to being a new freshmen") and instructions for how to assess their eligibility. Interested students completed a brief screener; eligible students (i.e., male, 18 to 24 years, newly enrolled freshmen at one of the 30 universities) were consented. Students who agreed to participate were asked to provide their institutional email address. Confirmation emails were sent; students who confirmed were enrolled in the study and sent a link to survey. Participants were compensated $25 for completing the Wave 1 survey, although they could earn up to $150 in total. The Institutional Review Board at Georgia State University approved study protocols.

Measures

The survey comprised 156 questions, and asked about a variety of potential risk and protective factors of sexual violence perpetration. Table 1 below lists all variables included in the wave 1 survey that were analyzed in this paper. The constructs from the survey measured in this analysis included; demographics, sex media, childhood experiences/abuse, sexual experiences survey/short form perpetration, hypermasculinity, rape myth acceptance, and hostility toward women. These constructs aid in informing the

variables analyzed; social learning theory characteristics (childhood survivor of forced

sex, witnessing physical abuse as a child, experiencing physical abuse as a child, and

exposure to sex media), gender role perceptions (hypermasculinity, rape myth

acceptance, and hostility towards women), and sexual violence perpetration. Participants

also responded to demographic questions including age, race, relationship status,

religious affiliation, sexual orientation, varsity athletics team member, following sports,

and fraternity affiliation.

Table 1: Summary of Constructs

Construct Name	Coinciding Variable
Demographics	Demographics
Sex Media Scale	Social learning theory characteristics
Childhood experiences/abuse (childhood sexual abuse, childhood physical abuse, witnessing physical abuse as a child)	Social learning theory characteristics
Hypermasculinity	Gender Role Perceptions
Rape Myth Acceptance	Gender Role Perceptions
Hostility towards women	Gender Role Perceptions
Sexual experiences/short survey form perpetration	Sexual Violence Perpetration

Social Learning Theory Characteristics

Exposure to Sex Media

Frequency of exposure to sex media was assessed using a 4-item scale with

answer options ranging from "1=not at all" to "7=more than 10 times." Sample items

include, "thinking about an average week during the last 12 months, describe how often

you look at each of the following media; homemade sex videos, celebrity sex tapes, hidden cameras, etc." The categories of sexual media included; magazines, videos (both showing sexual suggestive material and those that show sexual penetration, violence, or fetishes), homemade sex videos, celebrity sex tapes, or hidden cameras. This scale was computed by summing the responses to all four items, with a higher score relating to a higher frequency of sex media usage. Because the distribution was non-normal, a median split was performed with those receiving a score of "0" for a lower exposure to sex media, and a score of "1" for a higher exposure to sex media. The coefficient alpha for the original scale that was adapted for purposes of this study was .69 for males.[26]

Childhood Experiences

The construct, "childhood experiences/abuse" measures intentional violence by a family member. The variable, childhood sexual violence was examined using the question, "were you ever forced to have sex before age 14?" Participants could respond with a "No," "Yes," "I don't know," or "neutral" response. The following question was used to examine the variable 'childhood physical violence'; "Looking back on your childhood, did you have injuries, such as bruises, cuts, or broken bones, as a result of being spanked, struck, or shoved by your parents or guardians, or their partners? The term 'partners' can include spouses and boyfriends or girlfriends." This question yielded a "yes" or "no" response. The variable, witnessing physical violence as a child was answered with a "yes" or "no" response using the following question, "As a child, did you ever see or hear one of your parents or guardians being hit, slapped, punched, shoved, kicked, or otherwise physically hurt by their spouse or partner?" These questions are from the United States Department of Health and Human Services.[39]

Gender Role Perceptions

The variable "gender role perceptions" incorporates the constructs of hypermasculinity, rape myth acceptance, and hostility towards women. These three constructs aid in informing the variable negative gender role perceptions and its effect on perpetration. Hypermasculinity was assessed using a 26-item scale with answer options ranging from (1) "strongly disagree" to (7) "strongly agree." The questions aimed at evaluating the constructs of hypermasculinity and its correlation with gender-related individual associations with psychological symptomology. Sample items include, "physical strength is no longer an important part of manhood," and "there's too much nonsense talked about so-called sexual harassment." The total hypermasculinity score was computed by summing the responses to all 26 items. Several items were reverse coded. Scores could range from 26 to 182. The distribution was non-normal and was therefore split at the median into a binomial variable with "0" indicating less negative hyper masculine traits, and "1" indicating more negative hyper masculine traits. Cronbach's alpha reliability for this scale was .93, indicating a high internal consistency of scale items.[27]

Rape myth acceptance was assessed using a 22-item scale with answer options ranging from (1) "strongly disagree" to (7) "strongly agree." Sample items include, "if a girl goes to a room alone at a party, it is her own fault if she is raped," and "if a girl doesn't physically fight back, you can't really say it was rape." The total rape myth acceptance score was computed by summing the responses to all 22 items. No items were recoded. Scores could range from 22 to 154, with higher scores indicating a higher acceptance of rape myths. The distribution was non-normal and was therefore split at the

median into a binomial variable with "0" indicating less rape myth acceptance, and "1" indicating more rape myth acceptance. The updated Illinois Rape Myth Acceptance Scale was used for purposes of this assessment. Cronbach's alpha reliability for this scale was .87 suggesting high internal consistency of scale items.[31,32]

Hostility towards women was assessed using a 10-item scale with answer options ranging from (1) "strongly disagree" to (7) "strongly agree." Sample items include, "women are responsible for most of my troubles," and "generally, it is safer not to trust women."[27-32] The total hostility towards women score was computed by summing the responses to all 10 items. Scores could range from 10 to 70, with higher scores indicating greater hostility. The distribution was non-normal and was therefore split at the median into a binomial variable with "0" indicating less hostility towards women, and "1" indicating more hostility towards women. Cronbach's alpha reliability for this scale was .83 suggesting high internal consistency of scale items.[27-32]

To conceptualize 'gender role perceptions,' an indexed score was analyzed. If a participant scored a "0" on all three constructs (hypermasculinity, rape myth acceptance, hostility towards women), they received an overall score of a "0" and therefore have less negative gender role perceptions. If a participant scored a "1" on any of the three constructs (hypermasculinity, rape myth acceptance, hostility towards women) they received an overall score of a "1" and therefore have more negative gender role perceptions. A participant could score up to a "3" on this index scale. All numbers "1" or greater were recoded to "1," or negative gender role perceptions.

Sexual Violence Perpetration

Sexual violence perpetration was assessed using a 14-item scale with "ever" versus "never" perpetration. For purposes of this assessment, sexual violence perpetration is defined as: any sexual contact, attempted coercion, coercion, attempted rape, or rape. Sample items include; "I fondled, kissed, or rubbed up against the private areas of someone's body (lips, breast/chest, crotch, or butt) or removed some of their clothes without their consent (but did not attempt sexual penetration) by: telling lies, threatening to end the relationship, threatening to spread rumors about them, making promises about the future I knew were untrue, or continually verbally pressuring them after they said they didn't want to," and "I had oral sex with someone or had someone perform oral sex on me without their consent by: taking advantage when they were too drunk or out of it to stop what was happening." The total sexual violence perpetration score was computed by summing the frequency of answering "yes" to any of the 14 items. Those who had committed any form of perpetration (with a score greater than '0') received a '1.' Those with a score of '0' have not perpetrated any violence. Cronbach's alpha for this scale was .89, indicating a high internal consistency of scale items.

Data Analysis

The dataset was imported from Excel into SPSS. Demographic variables included; age, relationship status, race, fraternity affiliation, religious affiliation, sexual orientation, varsity athletics team member, and following sports. These demographics were first analyzed using frequency and descriptive statistics. Univariate analyses were conducted on each variable. The exposure to sex media and all three scales within gender role perceptions were non-normal, and were transformed into a binomial variable with a

median split. This allowed the final regression to examine "high" and "low" scores on each of the scales, with "high" scores depicting a greater endorsement of the negative trait in each construct. The gender role perception construct was created as follows; if a participant scored "high" on any of the three scales they were placed into a "high" score of negative gender role perceptions. If a participant scored a "low" score on all three scales, they were placed into a "low" category of negative gender role perceptions. If a participant scored high on any of the three scales (even if they scored low on the others), they were placed in the "high" negative gender role perception construct. The "high" score depicts more negativity of gender role perceptions.

Bivariate analyses were performed to better understand the associations between the following variables and perpetration; exposure to sex media, surviving forced sex as a child, experiencing physical abuse as a child, witnessing physical abuse as a child, negative gender role perceptions, as well as each demographic variable. Bivariate analyses were also conducted between each social learning theory characteristic to gain a preliminary understanding of the relationships between the variables within the construct.

To test the first research question (association between social learning theory characteristics and perpetration), a binary logistic regression was conducted with all social learning theory characteristic variables, controlling for significant demographic variables ($p<0.2$), with sexual violence perpetration as the outcome variable.

For the second research question, 'do negative gender role perceptions mediate the relationship between social learning theory characteristics and sexual violence perpetration?', the steps for determining mediation outlined by Baron and Kenny (1986) were performed.[35] A total of 12 binary regression models were performed to examine

whether 1) the social learning theory characteristics were separately associated with the outcome (sexual violence perpetration); 2) the social learning theory characteristics were separately associated with the proposed mediator (negative gender role perceptions); 3) the mediator (negative gender role perceptions) is associated with the outcome (sexual violence perpetration); and 4) each social learning theory characteristic combined with the mediator attenuated the association between the predictors and the outcome. A Sobel test was performed to assess whether any attenuation observed by the proposed mediator was statistically significant.

Results

Demographics

While there were an anticipated 1800 male undergraduate students recruited for this study, there were 1133 participants included in this survey, and the mean age was 18.33 (sd=0.739). To be eligible for the survey, all participants had to identify as male. The majority of participants stated that they are "caucasian," (51.2%), with the next largest racial group identifying as "African American" (19.8%). Out of the 1144 participants who answered the question "what is your current relationship status," 737 of them stated "single" (65.0%). Out of the 1144 who answered their year in school, 1099 responded that they are "freshmen" (98.7%). While 93.4% of participants identified as heterosexual, 3.6% identified as homosexual, and 3.0% identified as bisexual. Out of the 1130 participants who answered, "how closely do you follow college sports," the majority of them stated an "average" amount (27.1%). When asked, "are you a member of a Varsity athletics team?" the majority of men stated "no" (88.5%).

Table 2: Demographic characteristics of the sample

	N	%
Race		
Caucasian	580	51.20%
African American	224	19.80%
Asian-Pacific Islander	181	16.00%
Hispanic	80	7.10%
Other	68	6.00%
Relationship Status		
Single	737	65%
Casual Dating	131	11.60%
Serious Relationship	252	22.20%
Other	14	1.20%
Fraternity Affiliation		
Yes	88	7.80%
No	1042	91.10%
Religious Affiliation		
Never	271	24.00%
A few times	301	26.60%
Once a Month	96	8.50%
2-3 Times a Month	181	15.80%
Once a Week	187	16.30%
More than Once a Week	94	8.20%
Sexual Orientation		
Heterosexual	1059	93.40%
Homosexual	41	3.60%
Bisexual	34	3.00%
Following Sports		
Far Below Average	221	19.60%
Below Average	253	22.40%
Average	306	27.10%
Above Average	232	20.50%
Far Above Average	118	10.40%
Varsity Athletics Team Member		
Yes	130	11.50%
No	1000	88.50%
Mean Age: 18.33		

Univariate Analyses

Nearly 21% of participants report perpetrating sexual violence in some way from age 14 up until the year before starting college. The majority of the men had negative gender role perceptions (73.3%), a higher exposure to sex media (51.40%), did not experience sexual abuse as a child (95.80%), did not experience physical abuse as a child (89%), and did not witness violence as a child (87.40%).

Table 3: Frequency of variables of interest

	N	%
SV Perpetration		
Yes	237	20.70%
No	907	79.30%
Negative Gender Role Perceptions		
Yes	838	73.30%
No	263	23.90%
Exposure to Sex Media		
High	581	51.40%
Low	549	48.60%
Childhood Sexual Abuse		
Yes	28	2.50%
No	1078	95.80%
I don't know	19	1.70%
Childhood Physical Abuse		
Yes	124	11%
No	1001	89%
Witnessing violence as a child		
Yes	142	12.60%
No	983	87.40%

Bivariate Analyses

Social Learning Theory Characteristics and Perpetration

A Chi Square test of independence was performed to examine the association between self-reported exposure to sex media and sexual violence perpetration among freshmen aged college males, looking retrospectively from age 14 up until the year before starting college. Results suggest that there was a significantly lower proportion (X^2=24.864; df=1; $p \leq 0.001$) among those reporting lower exposure to sex media also disclosing at least one instance of sexual violence perpetration (n=75; 13.7%) compared

to those reporting higher exposure to sex media disclosing at least one instance of sexual violence perpetration (n=148; 25.5%).

A Chi Square test of independence was performed to examine the association between childhood forced sex and sexual violence perpetration. Results suggest that there was a significantly lower proportion (X^2=21.464; df=2; $p \leq 0.001$) among those who were not sexually abused as children reporting at least one instance of sexual violence perpetration (n=199; 18.5%) compared to those reporting sexual abuse as children also reporting at least one instance of sexual violence perpetration (n=9; 32.1%).

A Chi Square test of independence was performed to examine the association between witnessing physical abuse as a child and sexual violence perpetration. Results suggest that there was a significantly lower proportion (X^2=13.755; df=1; $p \leq 0.001$) among those that did not witness abuse as children reporting at least one instance of sexual violence perpetration (n=175; 17.8%) compared to those reporting witnessing abuse as children also reporting at least one instance of sexual violence perpetration (n=44; 31.0%).

A Chi Square test of independence was performed to examine the association between experiencing physical abuse as a child and sexual violence perpetration. Results suggest that there was a significantly lower proportion (X^2=30.216; df=1; $p \leq 0.001$) among those that did not experience physical abuse as a child reporting at least one instance of sexual violence perpetration (n=172; 17.2%) compared to those reporting experience physical abuse as a child also reporting at least one instance of sexual violence perpetration (n=47; 37.9%).

Table 4: Bivariate analyses between predictor variables and demographics with sexual violence perpetration as the outcome

	X^2	df	P-Value
Social Learning Theory Characteristics			
Childhood Forced Sex	21.464	2	p<0.001
Witnessing Abuse as a Child	13.755	1	p<0.001
Childhood Physical Abuse	30.216	1	p<0.001
Exposure to Sex Media	24.864	1	p<0.001
Gender Role Perceptions	18.897	1	p<0.001
Demographics			
Age			p=0.255
Race	2.786	4	p=0.594
Religious Affiliation	11.534	5	p=0.042
Relationship Status	9.507	3	p=0.023
Greek Affiliation	3.424	1	p=0.064
Sexual Orientation	4.353	2	p=0.113
Varsity Athletics Team Member	9.773	1	p=0.002
Following Sports	7.407	4	p=0.116

Chi-square tests between social learning theory characteristics were also examined to understand potential relationships between the individual variables at an alpha level of 0.05. Results suggest that there was a significant relationship between those that experienced childhood forced sex and also experienced childhood physical abuse (X^2=14.343; df=2; p=0.001). There was also a significant relationship between childhood forced sex and witnessing physical abuse as a child (X^2=19.556; df=2; p<0.001). Experiencing physical abuse as a child was also significant with witnessing physical abuse as a child (X^2=96.956; df=1; p<0.001). However, exposure to sex media was only significant with witnessing physical abuse as a child (X^2=5.177; df=1; p=0.023).

Research question #1: What is the association between Social Learning Theory

Characteristics and perpetration?

Chi-square and independent t-tests were conducted between independent variables, demographic variables, and the outcome variable (perpetration) at the bivariate level. All demographic independent control variables except for "age" and "race" were associated with the outcome variable at p<.20 and were therefore included in the binary logistic regression model as covariates. The following demographic variables were included in the model as covariates: relationship status, fraternity affiliation, religious affiliation, sexual orientation, varsity athletics team member, and frequency of following sports. The variables "age" and "race" were excluded from the model.

Binary logistic regression results suggest that those who experienced physical violence as a child were approximately 2.3 times more likely to perpetrate sexual violence than those participants who did not experience childhood physical violence (AOR=2.329; 95% CI=1.482, 3.660; p<0.001). Those who reported a higher exposure to sex media were approximately 2.2 times more likely to perpetrate sexual violence compared to those who reported a lower exposure to sex media (AOR= 2.217; 95% CI=1.591, 3.090; p<0.001). However, experiencing childhood sexual abuse was not significantly related to perpetrating sexual violence (p=0.417). Also in this model, witnessing violence as a child was not a significant predictor for sexual violence perpetration (p=0.084).

Table 5: Binary logistic regression between social learning theory characteristics and sexual violence perpetration

	Exp (B)	P-Value	95 Percent CI
Social Learning Theory Characteristics			
Childhood Survivor of Forced Sex (ref: no)			
Yes	1.437	0.417	(.598, 3.453)
I don't know	5.413	0.001	(1.964, 14.922)
Childhood Witnessing Physical Violence (ref: no)	1.487	0.084	(.949, 2.330)
Childhood Physical Violence (ref: no)	2.329	p<0.001	(1.482, 3.660)
Exposure to Sex Media (ref: low)	2.217	p<0.001	(1.591, 3.090)
Demographics			
Relationship Status (ref: single)			
Casually Dating			
Serious relationship	0.908	0.693	(.563, 1.465)
Other	0.516	0.003	(.335, .797)
Fraternity Affiliation (ref: no)	2.54	0.144	(.728, 8.866)
Religious Affiliation (ref:no)	1.235	0.444	(.719, 2.119)
A Few Times			
Once a Month	1.202	0.42	(.769, 1.879)
2-3 Times a Month	1.901	0.03	(1.063, 3.400)
Once a Week	0.748	0.313	(.426, 1.314)
More than Once a Week	1.198	0.495	(.713, 2.015)
Sexual Orientation (ref: heterosexual)	1.261	0.493	(.651, 2.443)
Homosexual			
Bisexual	1.614	0.21	(.763, 3.412)
Varsity athletics team member (ref: no)	1.449	0.375	(.639, 3.289)
Following Sports (ref: far below average)	1.841	0.01	(1.158, 2.926)
Below Average			
Average	1.071	0.793	(.641, 1.789)
Above Average	1.225	0.425	(.745, 2.014)
Far Above Average	1.474	0.146	(.874, 2.485)
	1.94	0.031	(1.062, 3.544)

Hosmer& Lemeshow Test
X^2: 6.562, df: 8, Sig: 0.585

Research question #2: Do Negative Gender Role Perceptions Mediate the Relationship between Social Learning Theory Characteristics and Perpetration?

To determine possible mediating factors within the construct 'negative gender role perceptions' on the association between 'social learning theory characteristics' and 'sexual violence perpetration,' the following steps associations were examined:

1. Association between social learning theory characteristics and sexual violence perpetration

2. Association between social learning theory characteristics and negative gender role perceptions

3. Association between negative gender role perceptions and sexual violence perpetration (while controlling for social learning theory characteristics)

4. Attenuation of the association between social learning theory characteristics and sexual violence perpetration after including 'negative gender role perceptions' in the model

Each social learning theory characteristic was examined individually, when determining if 'negative gender role perceptions' is a mediator. Therefore, there are a total of 12 models described to define mediation. After the four steps of mediation were performed, a Sobel test of mediation was conducted to determine significance of 'negative gender role perceptions' as a mediator on each individual 'social learning theory characteristic' variable.

Step 1:

In the first mediation analysis step, the following social learning theory characteristics were significantly associated with sexual violence perpetration: witnessing

physical violence as a child (model 2), experiencing physical violence as a child (model 3), and exposure to sex media (model 4). Childhood sexual abuse (model 1) was not significantly associated with sexual violence perpetration. Those that witnessed physical violence as a child were approximately 2 times more likely to perpetrate sexual violence (AOR=2.199; 95% CI= 1.462, 3.308; p<0.001), and those that experienced physical violence as a child were approximately 3 times more likely to perpetrate sexual violence (AOR=2.915; 95% CI= 1.922, 4.421; p<0.001). Those that had a higher exposure to sex media were approximately 2 times more likely to perpetrate sexual violence (AOR=2.153; 95% CI= 1.564, 2.963; p<0.001).

Table 6: Associations between social learning theory characteristics and sexual violence perpetration (Step 1 of mediation analysis)

		Exp (B)	P-Value	95 Percent CI
	Social Learning Theory Characteristics			
Model 1	Childhood Survivor of Forced Sex (ref: no)			
	Yes	1.738	0.198	(0.749, 4.031)
	I don't know	6.782	p<0.001	(2.597, 17.709)
Model 2	Childhood Witnessing Physical Violence (ref: no)	2.199	p<0.001	(1.462, 3.308)
Model 3	Childhood Physical Violence (ref: no)	2.915	p<0.001	(1.922, 4.421)
Model 4	Exposure to Sex Media (ref: low)	2.153	p<0.001	(1.564, 2.963)

Step 2:

In the second mediation analysis step, when assessing 'negative gender role perceptions' as the outcome, none of the 'social learning theory characteristics' were significantly associated with 'negative gender role perceptions' at the p<0.05 level (models 5-8).

Table 7: Association between Social Learning Theory Characteristics and Negative Gender Role Perceptions (Step 2 of mediation analysis)

	Exp (B)	P Value	95 Percent CI
Social Learning Theory Characteristics			
Model 5 Childhood Survivor of Forced Sex (ref: no)			
Yes	1.635	0.339	(.597, 4.481)
I don't know	5.567	0.101	(.715, 43.351)
Model 6 Childhood Witnessing Physical Violence (ref:no)	0.886	0.58	(.578, 1.359)
Model 7 Childhood Physical Violence (ref:no)	1.451	0.135	(.891, 2.363)
Model 8 Exposure to Sex Media (ref: low)	1.279	0.101	(.953, 1.716)

Step 3:

In the third step of the mediation analysis, when controlling for 'social learning theory characteristics,' 'negative gender role perceptions' was associated with sexual violence perpetration in all four models. Four models were generated with negative gender role perceptions (and sexual violence perpetration as the outcome), controlling for one social learning theory characteristic at a time. While the odds ratios for each social learning theory characteristic stayed relatively similar when negative gender role perceptions was added into each model, negative gender role perceptions was significantly associated with sexual violence perpetration in all four models. In all four models presented in table 8, those that had negative gender role perceptions were approximately 2.5 times more likely to perpetrate sexual violence.

Table 8: Association between Negative Gender Role Perceptions and Sexual Violence
Perpetration (Step 3 of Mediation)

		Exp (B)	*P-Value*	95 Percent CI
	Social Learning Theory Characteristics			
Model 9	Childhood Survivor of Forced Sex (ref: no)			
	Yes	1.672	0.238	(.712, 3.924)
	I don't know	5.663	p<0.001	(2.110, 15.200)
Model 10	Childhood Witnessing Physical Violence (ref: no)	2.138	p<0.001	(1.396, 3.276)
Model 11	Childhood Physical Violence (ref: no)	2.837	p<0.001	(1.842, 4.368)
Model 12	Exposure to Sex Media (ref: low)	2.243	p<0.001	(1.605, 3.136)
	Negative Gender Role Perceptions (ref: low)			
	Model 9	2.412	p<0.001	(1.527, 3.812)
	Model 10	2.586	p<0.001	(1.632, 4.098)
	Model 11	2.476	p<0.001	(1.561, 3.929)
	Model 12	2.433	p<0.001	(1.535, 3.855)

Step 4:

As expected based on results from Step #2, after including 'negative gender role perceptions' in the final model, the relationship between 'social learning theory characteristics' and 'sexual violence perpetration' was not attenuated, and therefore 'negative gender role perceptions' was not a mediating variable when deciphering the association between 'social learning theory characteristics' and 'sexual violence perpetration.' All significant associations remained as so when negative gender role perceptions were added into each model, and odds ratios only decrease slightly. Table 9 illustrates a side by side comparison between before and after negative gender role perceptions were added into each model of social learning theory characteristics and sexual violence perpetration.

Table 9: Before and after adding Negative Gender Role Perceptions into models with Social Learning Theory Characteristics and Sexual Violence Perpetration (Step 4 of Mediation)

		Exp (B)	P-Value	95 Percent CI		Exp (B)	P-Value	95 Percent CI
	Social Learning Theory Characteristics							
Model 1	Childhood Survivor of Forced Sex (ref: no)				Model 9			
	Yes	1.738	0.198	(0.749, 4.031)		1.672	0.238	(.712, 3.924)
	I don't know	6.782	p<0.001	(2.597, 17.709)		5.663	p<0.001	(2.110, 15.200)
Model 2	Childhood Witnessing Physical Violence (ref: no)	2.199	p<0.001	(1.462, 3.308)	Model 10	2.138	p<0.001	(1.396, 3.276)
Model 3	Childhood Physical Violence (ref: no)	2.915	p<0.001	(1.922, 4.421)	Model 11	2.837	p<0.001	(1.842, 4.368)
Model 4	Exposure to Sex Media (ref: low)	2.153	p<0.001	(1.564, 2.963)	Model 12	2.243	p<0.001	(1.605, 3.136)
	Negative Gender Role Perceptions (ref: low)							
					Model 9	2.412	p<0.001	(1.527, 3.812)
					Model 10	2.586	p<0.001	(1.632, 4.098)
					Model 11	2.476	p<0.001	(1.561, 3.929)
					Model 12	2.433	p<0.001	(1.535, 3.855)

Sobel Test for Mediation

For further analysis and to verify the findings from the steps of testing for mediation, a Sobel test was performed. After examining a Sobel test for mediation on all four 'social learning theory characteristics' variables, with the anticipated 'negative gender role perceptions' construct as the mediator, none of the tests proved significant (as shown in table 10), and therefore negative gender role perceptions is not a mediating construct between any of the four social learning theory characteristics and sexual violence perpetration.

Table 10: Sobel test of mediation

	Mediator as Outcome		SV as Outcome		
	B	S.E.	B	S.E.	P-Value
Exposure to Sex Media	0.246	0.15	0.889	0.235	p=0.800
Childhood Sexual Abuse	0.492	0.514	0.881	0.233	p=0.588
Childhood Physical Abuse	0.372	0.249	1.043	0.22	p=0.734
Childhood Witnessing Physical violence	-0.12	0.218	0.76	0.218	p=0.876

Discussion

Understanding the relatively high rate of sexual violence perpetration in this population of freshmen aged colleged men is pertinent to frame earlier prevention efforts. The majority of the men also were found to exhibit negative gender role perceptions, and as deciphered from the findings, these negative gender role perceptions were significantly associated with sexual violence perpetration. Because these men were surveyed directly upon entry into college about previous experiences, it is important to target prevention efforts and healthy gender role education as early as possible.

The variables that make up the 'social learning theory characteristics' were hypothesized to predict later sexually violent modeling behaviors. Social learning may happen by direct or observational learning.[7] Experiencing physical violence as a child, exposure to sex media, childhood sexual abuse, and witnessing physical violence were all categorized as 'social learning theory characteristics' for the above reasoning.

Consistent with previous literature, results of this study suggest that those who experienced physical violence as a child were more likely to report sexual violence perpetration compared to those with no history of childhood physical violence. [4] Similarly, those reporting a higher exposure to sex media were more likely to report sexual violence perpetration compared to those with lower exposure to sex media. This finding is useful in building upon the literature that presents an unclear linkage between these variables. While much of the literature does not find an association between exposure to sex media and sexual violence perpetration, this analysis aids in deciphering this relationship. Additionally, this finding is consistent with the social learning theory in

that sexual behaviors may be modeled from exposure to sex media. This may be particularly relevant to sources of sex media that may symbolize non-consensual sex.[7]

Results pertaining to history of childhood sexual abuse before age 14 were less clear. Contrary to prior research, there were no significant differences in sexual violence perpetration between those with and without a history of abuse.[16] However, participants who indicated that they didn't know if they had been abused were significantly more likely to also report sexual violence perpetration compared to those with no history of abuse. This may reflect a spurious result given that over 95% of the sample reported no history of childhood sexual abuse and less than 2% indicated "don't know." This response may be due to an unclear definition of sexual abuse, or a misunderstanding of whether an experience in childhood was sexual abuse. However, further research is needed to examine whether uncertainty about childhood sexual abuse is indicative of participants' resistance to labeling experiences as 'sexual abuse' which may in turn inform their definition of consensual sexual activity as young adults. Lastly, no significant association was detected between witnessing physical violence as a child and sexual violence perpetration when all of the social learning theory characteristics were in the model together. This is inconsistent with the literature in that witnessing first hand violence as a child has been associated with perpetrating violence against women later in life.[4] For purposes of the first research question proposed, the learned behavior was 'sexual violence perpetration' through direct violence (childhood sexual abuse, childhood physical violence), modeling violence as a child (witnessing physical violence as a child), or through life experience (exposure to sex media).

To further understand the complex relationship between each of the social learning factors and sexual violence perpetration, the role of negative gender roles as a potential mediator for each individual predictor was assessed. Findings suggest that this was not the case, and negative gender role perceptions do not mediate the relationship between social learning theory characteristics and sexual violence perpetration. The three constructs that made up 'negative gender role perceptions' were hypermasculinity, hostility towards women, and rape myth acceptance and were significantly associated with sexual violence perpetration in this study corroborating prior research. Specifically, one study showed that those men who hold onto more rigid beliefs about a man and woman's place in society, are more violent compared with those men who see women as more equals.[25] Similarly, other literature suggests that many men feel that exerting sexual pressure and insistence are important components of being a man, and that this sense of unhealthy masculinity has the ability to shape gender role perceptions and put one at risk for perpetrating sexual violence.[17]

While these negative gender role perceptions were significantly associated with sexual violence perpetration in this study, they did not mediate the relationship between the social learning theory characteristics and sexual violence perpetration. This may suggest that negative gender role perceptions are formed through other life experiences that contribute to hypermasculinity and accepting traditional gender role norms, and not formed from these particular childhood life experiences as originally hypothesized. Alternatively, since the current sample was surveyed retrospectively, and asked to report their experiences and perceptions between the ages of 14 and the year before starting college, it may be that gender role norms were still in the forming stages for this

population. Further research is needed to understand the formation of these negative gender role perceptions and their role in sexual violence perpetration.

Limitations

Within the data analysis process a few limitations arose. As many of the variables were non-normal, a median split was necessary to understand the relationship and make assumptions about associations. While these decisions were theory-based, there may be discrepancy as to what "high" and "low" means, etc.

The construct 'gender role perceptions' was achieved through a conceptualization of three constructs, as informed by the literature, to create an overall 'gender role perceptions' construct. To examine associations with sexual violence perpetration, each individual construct was dichotomized based on the median, and an overall index was created. All participants with a "low," or positive score on all three of the perception constructs received an overall 'positive gender role perceptions score.' All participants who had a "high" score in any of the three constructs received an overall 'negative gender role perceptions score.' This conceptualization aided in the data analysis procedure; however, it may have excluded participants who may have endorsed other categories of negative gender role perceptions that is not highlighted in rape myth acceptance, hostility towards women, or hypermasculinity. Also, those who may have scored "high" on only one or two of the scales were classified as having 'negative gender role perceptions.' Therefore, this may have limited the results if, for example, a participant had a high hypermasculinity score, but scored low on hostility towards women and rape myth acceptance.

Limitations to the survey design may include difficulty recalling information regarding childhood experiences, as well as recalling frequency of exposure to sex media. Also, social desirability bias may have been a limitation when responding to gender role perception scales or sexual violence perpetration questions.

Conclusion and Public health action

There are currently very few evidence-based sexual violence prevention strategies. Many of these interventions focus on intervening at the community level, by engaging active bystanders and reiterating that violence is everyone's issue, and that everyone has a role in preventing it. However, only one evidence –based intervention focuses on engaging college-aged men specifically to decrease perpetration, rather than targeting a decrease in victimization. By placing accountability on those most at risk for perpetration, programs like 'RealConsent' take the responsibility and prevention measures off of the victim.[37]

The findings from this paper, as well as relevant literature illustrate that children who are victimized are more at risk for developing perpetration behaviors. Therefore, it is important for public health initiatives to acknowledge this link and further evaluate initiatives that educate caregivers on healthy communication with their child, possible negative consequences of parental behavior towards a child, and how to talk to your child about potentially harmful behaviors, such as increased exposure to pornography.

Future research further examining these individual learning factors on perpetrating sexual violence while in college is needed to further intervention efforts targeted at college-aged individuals. Because this study focuses on perpetration before entering college, the findings from future waves of this study will be helpful in

examining this relationship. Also, while men do perpetrate violence more than women, it is pertinent to look at perpetration at a community level for future studies, and be inclusive with other relationships.

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