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Understanding the Effects of Empathy and Masculine Gender Role Stress on the Relationship Between Gender and the Understanding of Consent in adolescents: A Moderated Mediation Framework

Kate Degenhardt

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Understanding the Effects of Empathy and Masculine Gender Role Stress on the Relationship
Between Gender and the Understanding of Consent in adolescents: A Moderated Mediation
Framework

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A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
in
Clinical Psychology
Seattle Pacific University
School of Psychology, Family, & Community

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DEDICATION

I dedicate this dissertation to Dr. Lynette Bikos, whose patience, kindness, support, and grace made it possible for me to complete this project.

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ABSTRACT

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This research examined the relationship between masculine gender role stress and empathy in youths ages 11-19 and their ability to understand the concept of consent. I examined a moderated mediation model where the effect of gender on the understanding of consent via masculine gender role stress was permitted to differ as a function of levels of empathy. The moderated mediation was evaluated in a stepwise fashion. A simple mediation examining the degree to which MGRS mediated the relation of gender on consent revealed all effects were significant, including the indirect effect ($B = 0.561$, $SE = .29295$, $CI 0.100, 1.234$). There was significant direct effect of gender on consent such that females are more likely to demonstrate understanding of the components of consent. This relationship was partially mediated by MGRS, such that females have a higher endorsement of MGRS; in turn higher levels of MGRS lead to greater understanding of consent. A second simple moderation predicted consent from gender, empathy, and its interaction. All effects were statistically significant, including the gender *empathy term. At only 1SD below the mean for empathy, females had higher valuation of consent than males. A simple moderation to predict consent from empathy, MGRS, and its interaction revealed all effects were significant. There was significant moderation at the mean and 1SD below the mean levels of empathy. When empathy was at or below the mean, there was a significant positive relationship between MGRS and consent. The final moderated mediation model predicted understanding of consent (Y) from gender (X) mediated by masculine gender role stress (MGRS[M]). Empathy (W) was predicted to moderate the b path (MGRS to consent) and the direct path, c' (gender to consent). With the addition of the moderators, the conditional indirect

effects were significant at and below the mean. Regarding the other paths in the model, gender had a significant effect on MGRS and consent. Empathy had a significant effect on consent. This research underscores the potential strength of empathy as a bolstering agent for consent interventions in the context of sexual assault prevention, especially for adolescent males.

CHAPTER I – INTRODUCTION

The King County Sexual Assault Resource Center (KCSARC), serving the Seattle area, developed a series of Violence Prevention Sessions (VPS) intended for youth in middle and high schools. The focus of these sessions is to educate adolescents about consent as it relates to sexual activity.

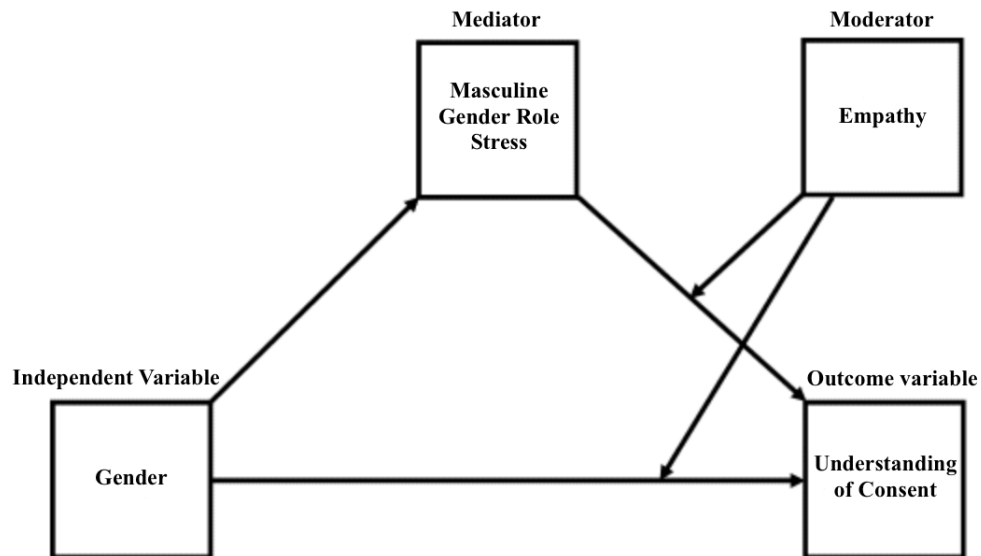
The purpose of this research was to:

1. Examine the relationship between masculine gender role stress and empathy upon the adolescents' understanding of the concept of consent.
2. Expand our understanding of the factors that influence consent education.
3. Explore how these factors might predict the understanding of consent.
4. Contribute to research that will guide continued intervention programs aimed at preventing sexual harassment and assault.

Measuring the participants at the beginning of their exposure to the KCSARC VPS provided unique insight into the process of sexual assault prevention and consent education by providing a more nuanced understanding of the participants as they begin the intervention.

The focus of this research was to study the role of masculine gender role stress and empathy. I hypothesized a moderated mediation wherein the effect of the independent variable (gender) on the outcome variable (understanding of consent) via a mediator variable (masculine gender role stress) differs depending on levels of a moderator variable (empathy). See Figure 1.

Figure 1. Hypothesized moderated mediation model



Prevalence and Consequences of Sexual Assault

Sexual violence is defined by the CDC as sexual activity that occurs without freely given consent (Centers for Disease Control and Prevention [CDC], 2014). Amongst high schoolers 15% of female students and 4% of male students encountered sexual violence over the course of a year (Kann et al., 2018). Some data suggests that by the time students have completed secondary school, 81% have experienced some sort of sexual harassment or assault (AAUW, 2001). Additionally, approximately half of all victims are under age 18 (Langan & Harlow, 1992). Regarding gender, women and girls experience sexual violence at the highest rate. Reports indicate that 82% of adolescent victims are female, and 90% of adult victims are female (Department of Justice, 2000). Students who face sexual harassment often experience negative psychosocial effects consistent with acute stress such as low mood, nightmares and sleep problems, low self-esteem, and negative emotions such as guilt, fear, and sadness. Additionally, these students tend to perform poorly in school (Gruber & Fineran, 2007, Hand & Sanchez, 2000). The consequences and cost of sexual violence are wide-ranging and enormous. Some

effects are more immediate (e.g., 94% of women who experienced rape reported symptoms of PTSD for two weeks afterwards, (Riggs et al., 1992)), while other effects are long-lasting (e.g., 30% of women experience symptoms of PTSD over the nine months following the rape), and still other effects are chronic (e.g., people who have been sexually assaulted are 10 times more likely to engage in illegal drug use, Kilpatrick & Edumuds, 1992). The psychological toll on survivors is staggering, with 33% of women who experience rape reporting suicidal ideation and 13% attempting to die by suicide (Kilpatrick et al., 1992). Furthermore, those who experience sexual assault experience more distress compared to the victims of any other type of crime—nearly 70% of people who experience sexual assault undergo moderate to severe distress (DOJ, 2014). Overall, the prevalence and gravity of consequences that result from sexual assault are far-reaching, and sexual assault prevention deserves extensive evidence-based research so that prevention practices can be evaluated, amended, and implemented. Identifying groups at risk for perpetration and the processes that moderate the understanding of consent can help diminish the prevalence of this enduring, tragic violation of human rights that disproportionately affects women; transgender and genderqueer individuals; nonconforming; and black, indigenous, people of color (Cantor et al., 2015; DOJ, 2004).

Generally, consent is understood as permission for something to happen (i.e., informed consent in the context of therapy or consent to release medical information), but consent within the context of sexual assault prevention education for middle and high students is a recent concept that deserves further study.

Targeting Consent Education to Prevent Sexual Assault

The legal definition of consent differs depending on location and circumstance. However, the overall concept is the same: consent is a continual process of communicating boundaries. KCSARC's prevention efforts aim to "change beliefs, attitudes, and behaviors about sexual violence to stop the violence before it occurs" (KCSARC, 2021). The process of changing beliefs, values, and norms that accede violence is termed primary prevention, and this is the goal of KCSARC's in-class sessions held in Renton public schools. Primary prevention differs from KCSARC's secondary or tertiary prevention efforts, which focus on treating the long-term effects on populations who have already experienced sexual assault (e.g., treating trauma, other mental health outcomes, and risks associated with experiencing a sexual assault). KCSARC's primary prevention program sessions were created utilizing the same violence prevention framework as the World Health Organization (WHO) and Center for Disease Control (CDC), the Social-Ecological Model (Dhalberg & Krug, 2002). The Social-Ecological model explores the relationship between four intersecting and interacting factors: individual level, relationship level, community level, and societal level. The goal of the model is to shed light on the vast array of risk and protective factors that may influence whether individuals experience or perpetrate violence. The individual level of the model identifies risk factors such as age, social economic status, and substance use. The relationship level focuses on a partner or partners, family relationships, and peer groups. The community level examines the conditions within schools, workplaces, and neighborhoods. The societal level explores factors that create an environment in which violence is encouraged or inhibited. Within the societal level are sociocultural norms that encourage violence as a means of addressing or solving conflicts, as well as other social factors that might maintain inequality between groups. Oftentimes, common "interventions" targeting

sexual assault prevention have placed responsibility on the victims (e.g., don't walk alone, carry pepper spray, don't dress provocatively, use the buddy system). These interventions are examples of interventions done on the individual level within the ecological system approach of prevention. However, these kinds of interventions place the burden of prevention on the potential victim and using them communicates acceptance of cultural norms of violence instead of trying to change them from the societal level.

Understanding the social norms and constructs entrenched in gender stress and inequality will provide useful information, especially as the program developers consider findings from outcome evaluation. The CDC recognizes societal risk factors that make it more likely for people to experience or perpetrate violence. These include detrimental gender and cultural norms that maintain aggression toward others.

The subject of sexual consent is increasingly the focus of debates in sex education across the Western world (Gilbert, 2017). Sex education campaigns teach young people that consensual sex means both parties must affirmatively communicate their willingness to participate in the proposed activity (Gilbert, 2017). This change reflects a growing concern that sex education must recognize that the risks of sex reach beyond disease and unplanned pregnancy and include assault. Studying the characteristics of the participants entering the KCSARC VPS may help shed light on questions about whether adolescences can be educated in and develop new attitudes towards sexual relations. Most importantly, this research may provide supporting evidence for the possibility of curing sexual violence through education. Currently, more than half of Washington state schools teach age-appropriate sex education in kindergarten through fifth grade. As of Sunday, March 27, 2020 a Washington state legislature bill concerning comprehensive sexual health education was passed. The bill, SB 5395, mandates that school

districts' comprehensive sexual health education needs to include information about affirmative consent defined as "conscious and voluntary agreement to engage in sexual activity." Studying middle and high school students whose schools have independently agreed to work with KCSARC and to receive KCSARC VPS could yield valuable data to help inform policy and curriculum development. The notion of affirmative consent is contested and considered gendered by some due to its entrenchment within the norms of active men and passive women who give or withhold a "yes" (Halley, 2016). My research could help illuminate some of the gendered attitudes of middle and high students as they begin KCSARC VPS. Gathering data from middle and high students who receive this education in affirmative consent is important because it will allow us to examine and evaluate the KCSARC VPS that ultimately intends to eliminate assaultive, coercive and exploitative sex by replacing it with enthusiastic and voluntary relations. Simply put, the KCSARC VPS is intended to support the prevention sexual assault.

This research focuses on the relationship between gender and the understanding of consent. I predict that this relationship will be mediated by masculine gender role stress and moderated by empathy. The next sections review understanding of consent, gender, masculine gender role stress, and empathy.

Consenting as a Function of Gender

Throughout this text, I will use language to refer to subjects' gender that matches the language used in the research discussed. There is variation in the way that sex and gender are described and categorized in past and present research, for example sometimes there is not a distinction made between sex and gender. Subjects in this study were asked to select their gender, no data was collected on their biological sex. Past studies have found gender-role

orientation (particularly feminine and masculine orientations) predicted empathetic concern far beyond gender alone (Andrews et al., 2021).

As previously noted, studies show female-identifying youths report experiencing more than double the number of sexual assaults than male-identifying youths report (AAUW, 2001). Gender stereotype has been found to have significant influence on students' self-concept that benefits male, but not female students (Igbo et al., 2015). Consent involves the process of a person being able to set boundaries and understand others' boundaries; effectively enforce or respect boundaries; and decide where, when, and with whom the boundaries are relaxed. Setting and enforcing boundaries is a skill that girls and boys learn through different socialization processes. As students learn from KCSARC VPS about this social process of establishing personal boundaries, changing their minds, and revising how much of themselves they wish to share with another person, they learn about the concept of consent. The Assessment of Boundaries and Assessment of Components of Consent questionnaires were developed by KCSARC to measure students understanding of consent with the goal of preventing sexual assault.

Masculine Gender Role Stress

Masculine gender role stress is a male's subjective appraisal of achieving (or failing) to meet society's expectations connected to traditional male norms (Thompson & Pleck, 1995). Research suggests that the mental stress of maintaining strict conventional male gender roles predicts multiple harmful behaviors, including substance use, intimate partner violence, low mood, marital stress, heart problems, and reduced rates of help-seeking among men (Eisler, 1995; Eisler & Skidmore, 1987).

Research reveals that men who follow society's "antifemininity norm" report experiencing stress in contexts where they are in subordinate positions to women (Smith et al., 2015). This masculine gender role stress is linked to sexual aggression and perpetration through adherence to norms surrounding sexual dominance, and this may lead to future sexual aggression perpetration as well as coercion aimed at intimate partners in order to maintain relational dominance (Smith et al., 2015). It is important to note that merely experiencing gender role stress is not what intensifies the expression of sexual violence, but rather the decision to adhere to these harmful standards is related to sexual aggression. This decision-making process includes the choice to violate another person's boundaries and a failure to appreciate and respect other's boundaries, both of which are essential components of the understanding of consent. By examining empathy's role in boosting or buffering the understanding of consent, I hope to shed light on the larger process by which masculine gender role stress (which can exist any time a person identifying as male is not meeting society's masculinity norms) impacts the pervasive and harmful phenomenon of sexual violence perpetrated largely by men (nearly 99% of perpetrators are male (US Department of Justice, 2002)). Furthermore, there is evidence that masculine gender role stress as experienced by heterosexual males may explain the positive relationship between adherence to antifemininity norms and aggression toward women (Gallagher & Parrott, 2011). Researchers suggest that heterosexual men's hostility towards women develops via pathways linked to hegemonic masculinity norms (Gallagher & Parrott, 2011). Overall, there is evidentiary support for examining masculine gender role stress in a developing population and attempting to shed light on the consent-learning process in order to optimize prevention on the societal level. There are empirical and clinical benefits to examining masculine gender role stress within violence prevention programs (Moore et al., 2010).

Masculine gender role stress might interfere with the understanding of the consent-giving process for males, who are generally more likely to perpetrate. However, it is important to mention the complexity of gender and gender identity, which, along with masculine gender role stress, can fluctuate and change over time. Furthermore, examining masculine gender role stress might shed light on how the pressures of masculinity play into the initial understanding of consent and how that sets the stage for outcomes related to the KCSARC VPS.

Empathy

Empathy is a multidimensional construct attributed to several interrelated processes. Based on past research empathy can broadly be defined as “the ability to recognize the emotions of others and to share in those emotions while maintaining a self-other distinction” (Uzefovsky and Knafo-Noam, 2016). Empathy can be divided into two components— emotional empathy and cognitive empathy. Emotional empathy is also referred to as experience sharing and encompasses the ability to actively experience and share another human’s emotions. Cognitive empathy (also called affective perspective taking) refers to “recognition, understanding, and mentalizing of others’ emotions” (Davis, 1980; Uzefovsky and Knafo-Noam, 2016). Cognitive empathy exists when a person accurately perceives and creates a representation of another human’s emotion. Emotional and cognitive empathy differ in their developmental trajectories. Cognitive empathy develops steadily from early childhood to adolescence or early adulthood, while emotional empathy remains relatively stable. Research has found that emotional empathy is more heritable than cognitive empathy, likely because cognition continues to develop in the brain over a longer time period, whereas the structures involved in emotional empathy are mostly fully formed since birth. Both are influenced by the environment and there are exercises and

interventions that teach empathy. For example, empathy enhancing interventions exist for physicians, and empathy teaching and training interventions exist for people with autism.

Empathy is a relevant and burgeoning topic in psychological research and moral development theory (Broidy et al., 2003). Research indicates that empathy functions as a protective factor against sexual violence (Broidy et al., 2003; Wheeler et al., 2002; Ybarra & Thompson, 2018). Therefore, an assessment of empathy is included in this research to examine how these factors might enhance or explain the understanding of the social interaction of consent. There is evidence that affective processes fixed in empathetic responses are integral to moral development in a way that is similar to the development of rational thinking skills and social-cognitive skills (Kohlberg, 1976). Deficits in the ability to respond to others with empathy either emotionally or behaviorally seem to be connected to multiple antisocial behaviors and externalizing psychopathologies, such as aggression and conduct disorder (Cohen & Strayer, 1996; Miller & Eisenberg, 1988). Additionally, gender differences in psychopathology may be connected to gender differences in empathy and expressions of empathic concern (i.e., empathy behaviors) for the feelings of others (Cohen & Strayer, 1996).

As previously mentioned, there is ample evidence and theory that describes the gender differences in crime engagement, specifically the phenomenon of males engaging in crime more often and engaging in crime that is more serious and violent, while females are thought to demonstrate higher levels of concern for others and higher affiliative ties compared to males (Broidy et al., 2013). Notably, research indicates that substantial gender differences in empathy and criminal behavior emerge in adolescence (Broidy et al., 2013). This emergence reflects a pattern of females exhibiting significantly higher empathy levels and males exhibiting significantly higher criminal behaviors. This research could bolster empirical work that assesses

the degree to which gender differences in empathy among adolescents can influence the understanding of consent and perhaps future rates of offending. Again, this research could provide information that could ultimately enhance preventative interventions that are integrated into school curricula. By examining the subtle differences in how empathy might interact with masculine gender role stress to affect the understanding of consent, this dissertation could add to the growing research suggesting that empathy acts as a protective factor for individuals along the gender spectrum for future offending.

Purpose of This Dissertation

The purpose of this dissertation is to understand how the pressures of masculinity interact with empathy to contribute to the initial understanding of consent. In this cross-sectional set of data, I tested a moderated mediation wherein the effect of independent variable (gender) on an outcome variable (understanding of consent) via a mediator variable (masculine gender role stress) differs depending on levels of the moderator variable (empathy). Figure 1 provides an illustration of this model. This dissertation is a cross-sectional snapshot using time-one data to examine students' understanding of consent in order to provide valuable information and help to identify risk factors or bolstering factors for individuals grasping the concept of consent and highlight the importance of sexual assault prevention and the nuances of consent education. I hypothesized that empathy might enhance the understanding of the social interaction of consent in participants who experience masculine gender role stress. Consent involves the process of a person being able to set boundaries and understand others' boundaries, effectively enforce or respect boundaries, and decide where, when, and with whom the boundaries are relaxed. As students learn from KCSARC VSP about the social process of establishing personal boundaries, changing their minds, and revising how much of themselves they wish to share with another

person, they learn about the concept of consent. Setting and enforcing boundaries is a skill, and girls and boys learn this skill through different socialization processes. Because the KCSARC VPS targets prevention, and research indicates that sexual violence perpetration emerges earlier for males than females, it makes sense to focus on gender as a predictor of understanding of consent when studying participants in the adolescence of their developmental trajectories (Ybarra et al., 2013). This dissertation aims to contribute to prevention research by focusing on consent, which is taught as part of intervention efforts to reduce sexual assault, a crime associated with serious psychological consequences that is overwhelmingly perpetrated by men. By examining the way gender interacts with empathy to predict the understanding of consent, research could shift from the common practice of victim blaming to sexual assault prevention and accountability. Furthermore, any work that can help to enrich and explain gender disparities could also help reduce harmful stereotypes that serve to perpetuate and uphold power imbalances between gender identities.

Considering the prevalence of sexual violence, there is a critical need for school programs that provide consent education and for schools and other organizations and communities to encourage bystander intervention and policies that increase the likelihood that perpetrators are identified (Ybarra et al., 2013). Studies suggest hostile masculinity and sexual promiscuity combine and interact with situational opportunities to predict likelihood of violent sexual behavior of men against women (Hall, 1993). While there are evolutionary explanations as to why men might be more likely to display antisocial behavior and perpetrate (Nedelek & Beaver, 2012), exploring evolutionary psychological explanations for gender differences in criminal perpetration is not the focus of this research. Rather, I examined the role of empathy as a bolstering predictor of consent understanding, rather than focusing on antisocial behavior as

buffering variable. This research focuses on masculine stress and empathy and a consent intervention that aims to understand the processes by which males may grasp the complex social construct of consent with a goal of preventing perpetration through structured educational sessions administered during adolescence. There is evidence that the most valid time to explore empathy is during adolescence, when individuals are developing their identities and initiating their dating and intrasexual strategies (Nedelek & Beaver 2012).

Intimate partner violence has been shown to be somewhat predicted by antisocial behavior, but high rates for men and women of sexual assault suggest perhaps a lack of empathy might show more nuance. There is a need for the study of perpetration, too much of the research has been completed with victims and treating trauma without taking a preventative stance. This is a major health and quality of life issue, a humanitarian issue and an issue for people who identify as male, female, nonbinary and/or genderqueer, and all those who are sexual minorities.

CHAPTER II – METHOD

Participant Characteristics

Participants were students who received KCSARC VPS from 2021 onward. Participants included in the data analyses were ages 11-19, with a median age of 13. A total of 531 students took the survey. From the participants that provided ethnic, racial, and gender information, a majority identified as White, Caucasian, Anglo, or European Americans (not Hispanic) (37%), followed by Black or of African descent, including African American and others (44%), followed by Hispanic or Latino, including Mexican American, Central American, and others (43%), followed by Asian or Asian American (30%), followed by Mixed or Biracial (parents are from two or more different groups; 14%), American Indian or Native American (0%), or Other (0%). The participants identified as male (53%), female (47%).

Sampling Procedures

Participants were not recruited, rather they were the students who would be receiving the KCSARC VPS as part of their approved school curriculum. Participants were from private and public middle and high school in the Seattle metropolitan area. Students were required to answer a questionnaire regarding the content of the KCSARC VPS and their understanding of topics including consent, bullying, and relationships for KCSARC's administrative and program evaluation purposes. At KCSARC's request, the Bikos RVT developed a questionnaire to include psychometrically sound items, attitudes, and feelings related to consent. We have approval to use the data collected through the KCSARC VPS for this research.

The data was collected by online surveys on students' smart phones or school provided tablets. The students utilized a QR code to access the surveys, and they completed surveys at the beginning of the KCSARC VPS. The first page of the survey asked for assent to allow their

answers to be used for research. A KCSARC VPS instructor was in the room while the students took the survey, and the assent reminded the students that they could reach out to the instructor if they had any issues or needed support during the survey. At the end of the survey, students were thanked for their time and given a list of resources and help lines. The data was captured and stored in an online Qualtrics survey.

Sampling Size, Power, and Precision

I conducted a power analysis using the `wp.regression` function in the R package WebPower (v.0.5.2). We specified a power analysis with four predictors, a medium effect size (i.e., $f^2 = .15$), $\alpha = 0.05$, and $P = 0.80$. The results suggested a minimum sample size of 84. Our final sample of 531 well-surpassed this minimal requirement.

Measures and Covariates

Consent

Both the Assessment of Boundaries and Assessment of Components of Consent questionnaires were developed by KCSARC to assess students' understanding of consent with the goal of preventing sexual assault. The Assessment of Boundaries scale includes seven items assessed on a 100-point Likert scale ranging from 0 (very unlikely) to 100 (very likely). A stem inquires, "How likely are you to..." and the items include actions such as, "borrow something without asking" and "touch another without asking."

The Assessment of Components of Consent (six items) includes six items on a 100-point Likert scale ranging from 0 (not important) to 100 (extremely important). A stem inquires, "How important are each of the following in the consent-giving process?" Examples of the items include, "Being old enough to make that choice" and "Giving an enthusiastic Yes!" No

psychometric evaluations were performed on the participants. This revised version of the scale has not been subjected to psychometric evaluation. In my study, the Cronbach's alpha was .84.

Masculine Gender Role Stress

The Abbreviated Masculine Gender Role Stress scale (AMGRS; Swartout et al., 2015) is a shortened adaptation of the Masculine Gender Role Stress Scale (MGRS; Skidmore, 1988, 2008). Relative to the original 40-item MGRS scale, the total score of the AMGRS demonstrated comparable convergent validity using the measurement domains of masculine identity ($\alpha = .90$), hyper-masculinity ($\alpha = .82$), trait anger and anger expression (comprised of three subscales: Anger-Out; $\alpha = .80$, Anger-In; $\alpha = .74$, Anger Control; $\alpha = .84$), and alcohol involvement ($\alpha = .89$ for AMGRS sample; Swartout et al., 2015). Additionally, Fisher z-transformations showed there were no significant differences between the 40-item MGRS and the 15-item AMGRS in the magnitude of associations between the constructs of interest.

Although the AMGRS included only 15 items total, I reduced the scale to only seven questions in the AMGRS domains of emotional inexpressiveness, intellectual inferiority, and physical inadequacy. There were 5 items aiming to assess subordination to women from the AMGRS that were omitted from the KCSARC VPS survey because they are inapplicable to the population that will be surveyed. These included items such as "Being married to someone who makes more money than you," "Being with a woman who is more successful than you," and "Being outperformed at work by a woman." Interestingly, these omitted items were also the items that received the lowest level of endorsement during reliability testing in the development of the AMGRS, with a third to over half of the sample giving these items the lowest endorsement possible.

I further adapted the AMGRS to include items that could pertain to people anywhere on the gender continuum. Specifically, items that assumed masculine gender in their wording were eliminated or revised to be more inclusive. For the purposes of this research and to test the hypothesis (and given the age and development of the participant population), gender data will be gathered from participants as a categorical variable. However, the wording of some items from the AMGRS items were modified for the KCSARC VPS so that everyone taking the survey (whether they are conforming or nonconforming, genderqueer, or identify as being located anywhere on the gender continuum at the time of the survey) will not be misgendered or excluded in the language of the questions that they are asked. For example, the item from the AMGRS “Being compared unfavorably to other men” was omitted, and the item “Having your children see you cry” was rewritten as “Having a friend see you cry.” The result was a seven-item scale rated on a 7-point Likert type scale ranging from 1 (not at all stressful) to 7 (extremely stressful). Example items included “Admitting that you are afraid of something,” and “Having others say that you are too emotional.” This revised version of the scale has not been subjected to psychometric evaluation. In my study, the Cronbach’s alpha was 0.76.

Empathy

Two brief scales were selected to be included in the KCSARC VPS survey. The first scale, the Adolescent Empathy Scale Part I (Lippman et al., 2014), is four items xxx, $\alpha=0.84$, CFI=1.000, TLI=0.999, RMSEA=0.0336. In the KCSARC VPS survey, the Adolescent Empathy scale response categories were modified from a five-point Likert response to a 100-point continuum ranging from 0 (not at all like me) to 100 (exactly like me). Example items include, “I feel bad when someone gets their feelings hurt” and “I understand how those close to me feel.”

Part II of the empathy assessment is adapted from the Teen Conflict Survey (Bosworth & Espelage, 1995) from the Centers for Disease Control and Prevention's Measuring Violence-Related Attitudes, Behaviors, and Influences Among Youths: A Compendium of Assessment Tools. The Teen Conflict Survey is a 5-item scale ($\alpha = 0.62$) includes items such as "I can listen to others" and "Kids I don't like can have good ideas," and the scale response categories were modified from a four-point Likert response scale to a 100-point continuum ranging from 0 (never) to 100 (often). This revised version of the scale has not been subjected to psychometric evaluation. In my study, the Cronbach's alpha was .81.

Research Design

Participants were students enrolled in the KCSARC VPS. Data was collected from the VRT questionnaire (taken on the students' smartphones via a Qualtrics survey accessed by a QR code) taken during the first session of the VPS. Due to the COVID-19 pandemic, data collection was delayed, resulting in the decision to use pre-test observations only (I.e., a cross-sectional snapshot of students prior to receiving the VPS). Furthermore, the workshops will take a variety of forms in the future, such as single presentations, or two sessions. Specifically, a path analysis explored moderated mediation wherein the effect of the independent variable (gender) on the outcome variable (understanding of consent) via a mediator variable (masculine gender role stress) differs depending on the levels of the moderator variable (empathy). See Figure 1.

In conducting the proposed moderated mediation, I followed Hayes (Hayes, 2022) recommendation by first examining the three simple mediation and moderation models within the more complex model. Understanding these simpler components made it easier to interpret the full model. The first model was a simple mediation examining the effect of gender on consent through MGRS. The second was a simple moderation examining the moderating effect of

empathy on the relationship between gender and consent. The third was a simple moderation examining the moderating effect of empathy on the relationship between gender and consent. All models were examined using the Lavaan package, an open-source R package.

CHAPTER III – RESULTS

All analyses were completed in R Studio (v. 1.4.1106) with R (v. 4.0.4).

Missing Data Analysis and Treatment of Missing Data

Available item analysis (AIA; Parent, 2013) is a strategy for analyzing and managing missing data that uses available data for analysis and excludes cases with missing data points only for analyses in which the data points would be directly involved. Thus, we utilized Parent’s recommendations to guide our approach to managing missing data. Missing data analyses were conducted with tools in base R as well as the R package psych (v. 1.0.12).

The study was at least opened by 896 participants. Guided by Parent’s (2013) AIA approach, scales were scored if 80% of the items were nonmissing. Once scored, there were 562 cases eligible for inclusion in the analyses.

Data Diagnostics

Of the 562 cases there were six missingness patterns. The most common was non-missing data (N = 531). We assessed univariate normality by examining the skew and kurtosis for the continuously scaled variables. Regarding skew, values greater than 3.0 are generally considered “severely skewed.” Regarding kurtosis, “severely kurtotic” is argued to be anywhere greater than 10 (Kline, 2016). Each of these skew and kurtosis values fell below these areas of concern. We assessed multivariate normality of the continuously scaled variables with the Mahalanobis test. The Mahalanobis distance values increased in a consistent manner (i.e., no extreme “jumps” so we retained all the cases. Means and standard deviations are found in Table 1.

Table 1. Means, standard deviations, and correlations

Variable	M	SD	1	2
MGRS	3.05	0.98		
Empathy	67.61	14.39	.22*	
Consent	85.90	16.17	.15	.23*

Primary Analyses

I approached the mediated moderation in a piecewise fashion, first conducting three simpler analyses. The first was a simple mediation examining the degree to which MGRS mediated the relation of gender on consent. Results suggested that 5% of the variance in MGRS and 2% of the variance in consent were accounted for in the model. As shown in Table 2, all effects were significant, including the indirect effect ($B = 0.561$, $SE = .292$, CI 0.100, 1.234).

There is a significant direct effect of gender on consent such that females are more likely to demonstrate understanding of the components of consent. This relationship is partially mediated by MGRS, such that females have a higher endorsement of MGRS; in turn higher levels of MGRS leads to greater understanding of consent.

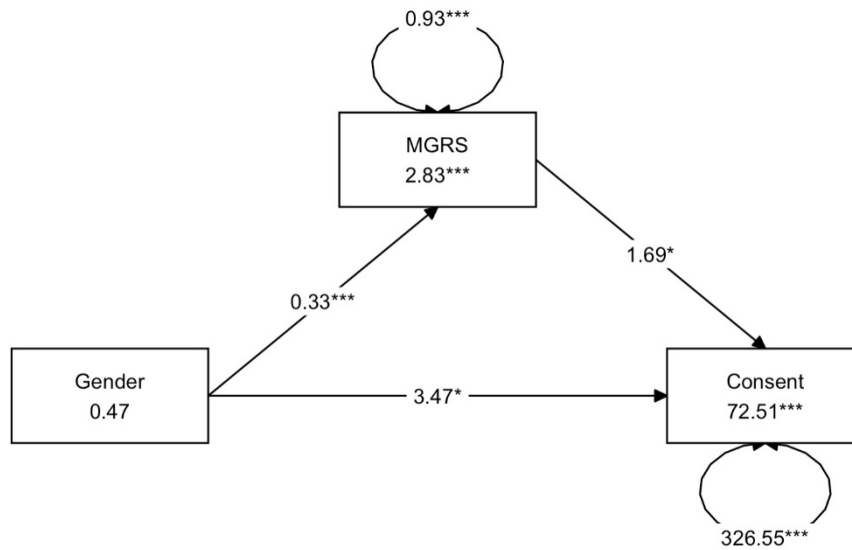
Table 2 Mediating effect of MGRS on the relationship between gender and consent

Antecedent		Consequent						
		M (MGRS)			Path	Y (Consent)		
		Coeff.	SE	<i>p</i>		Coeff.	SE	<i>p</i>
Gender	<i>a</i>	0.332	0.084	0.000	<i>c'</i>	3.470	1.587	0.029
MGRS					<i>b</i>	1.692	0.802	0.035
Consent	<i>i_μ</i>	2.825	0.059	0.000	<i>i_Y</i>	72.514	2.696	0.000
$R^2 = 0.029$				$R^2 = 0.201$				

Note. $N = 517$. Regarding the value of the indirect effect ($B = 0.561$, $SE = .292$), the $p = 0.054$

value and bootstrapped confidence intervals ($CI_{95}[0.100, 1.234]$) both indicated statistical significance.

Figure 2. Mediation examining how MGRS mediated the relation of gender on consent



The second was a simple moderation to predict consent from gender, empathy, and its interaction. Again, as shown in Table 3, all effects were statistically significant, including the gender *empathy term. Evaluation of the simple slopes, secondary to the significant interaction term, suggested significance at only 1SD below the mean for empathy. At this level, females have higher valuation of consent than males. This model accounted for 26% of the variance in consent.

Table 3 Moderation to predict consent from gender, empathy, and its interaction

Variable	<i>B</i>	<i>SE</i>	<i>p</i>
Constant	38.487	5.169	0.000
Gender (X)	19.367	7.256	0.008
Empathy (W)	0.628	0.078	0.000
Gender*Empathy (XW)	-0.283	0.103	0.006
Evaluation of Simple Slopes (Consent from Gender by Empathy)			
1 SD below (Empathy)	5.271	2.471	0.033
Mean (Empathy)	0.996	1.513	0.510
1 SD above (Empathy)	-3.278	1.815	0.071

Figure 3. Moderation to predict consent from gender, empathy, and its interaction

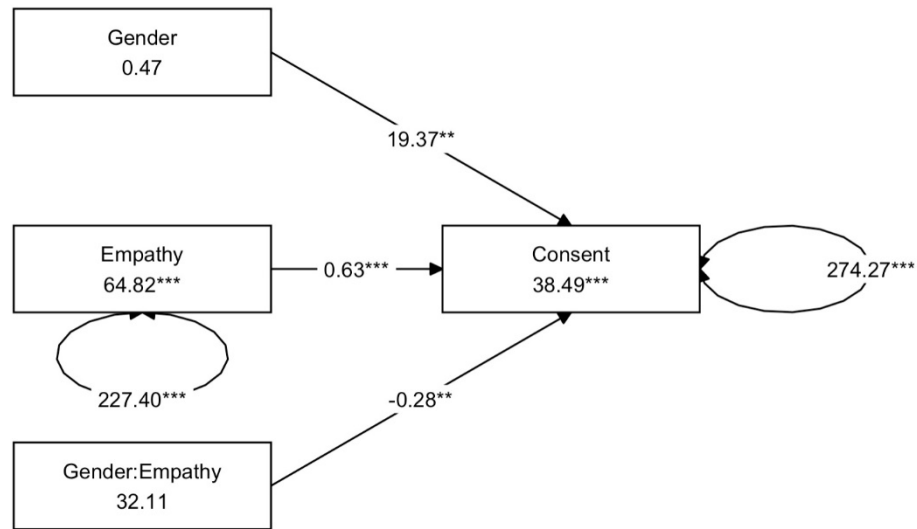
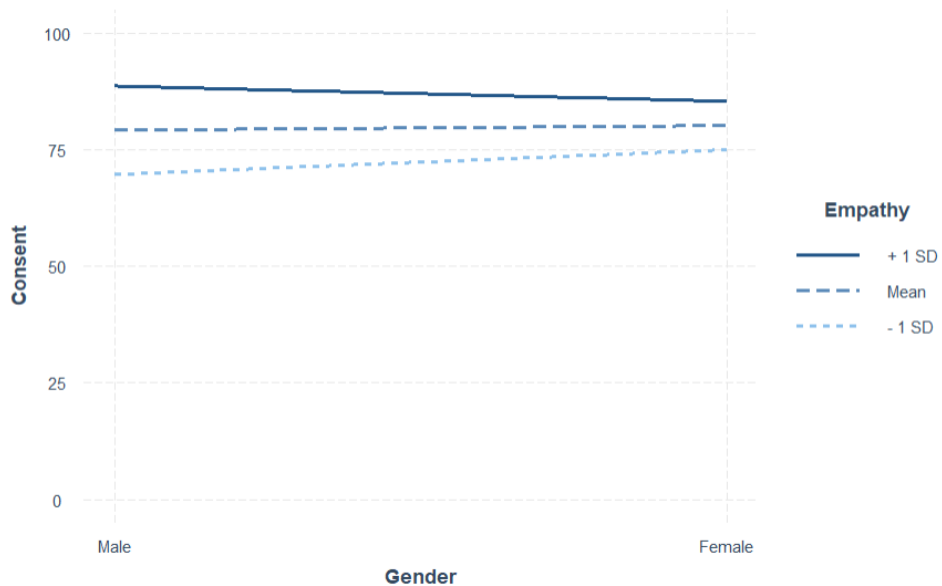


Figure 4. Simple slopes of empathy at three levels



The third was a simple moderation to predict consent from empathy, MGRS, and its interaction. As shown in Table 4, all effects, including the interaction term, were significant. The evaluation of simple slopes suggested significant moderation at the mean and 1SD below the mean levels of empathy. As shown in Figure 4, when empathy is at or below the mean, there is a

significant positive relationship between MGRS and consent, such that as MGRS increases, so does the valuation of consent.

Table 4 The moderating effect of empathy on the relationship between MGRS and consent

Variable	B	SE	z	p
Constant	24.837	10.904	2.278	0.023
MGRS (X)	7.870	3.310	2.378	0.017
Empathy (W)	0.781	0.157	4.984	0.000
MGRS*Empathy (XW)	-0.101	0.047	-2.153	0.031
Evaluation of simple slopes (Consent from MGRS by Empathy)				
1 SD below (Empathy)	2.834	1.151	2.461	0.014
Mean (Empathy)	1.307	0.745	1.754	0.079
1 SD above (Empathy)	-0.220	0.887	-0.248	0.804

Note. N = 517

Figure 5. The moderating effect of empathy on the relationship between MGRS and consent

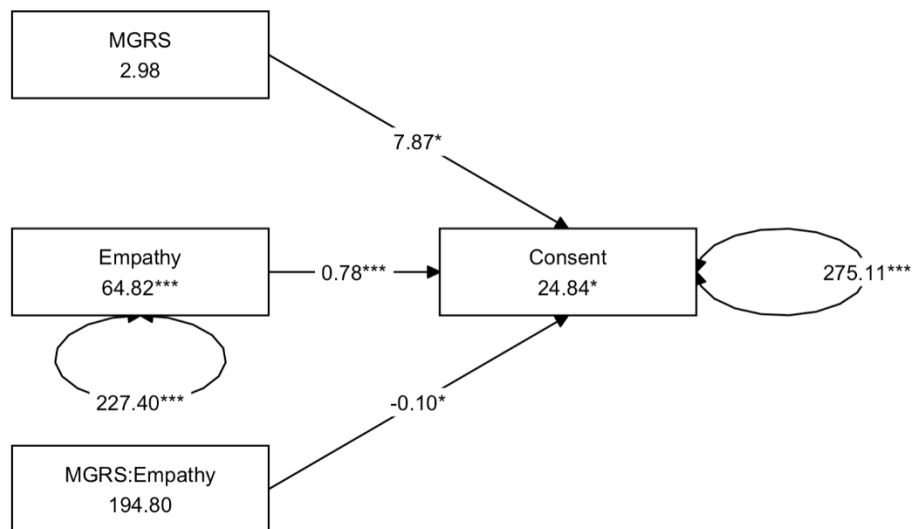
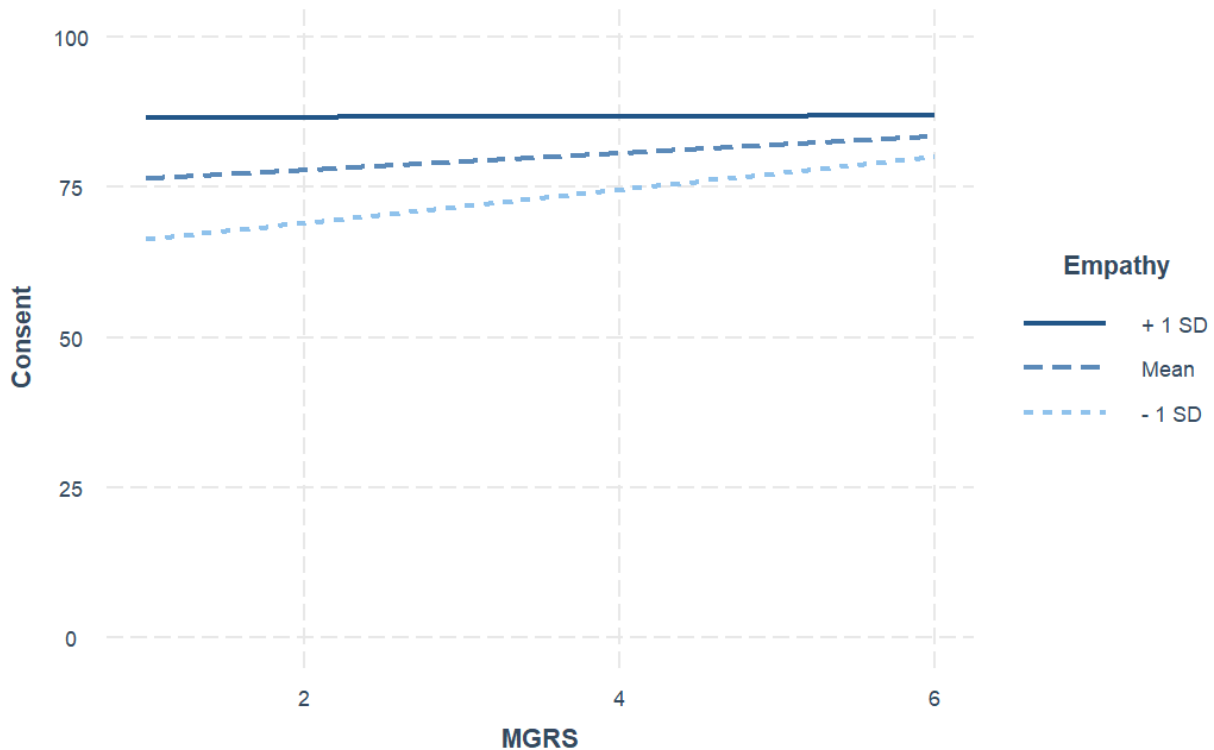


Figure 6. Simple slopes of empathy across three levels



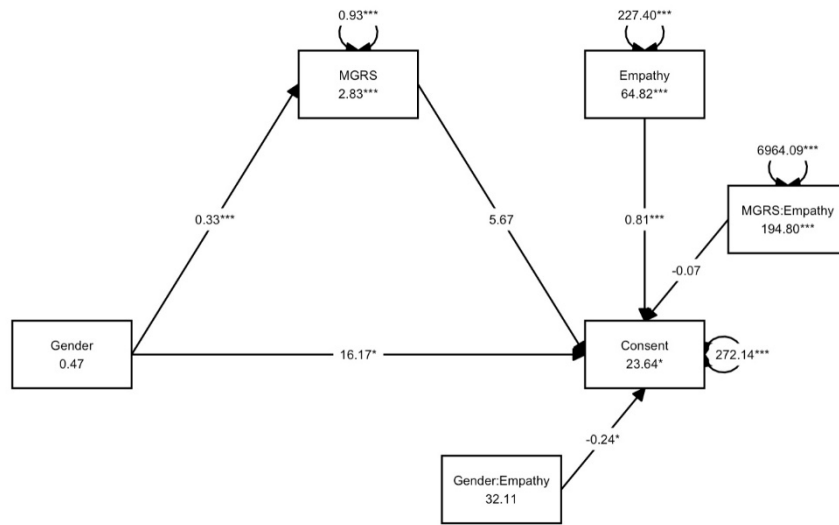
The final assembly evaluated a moderation mediation model predicting understanding of consent (Y) from gender (X) mediated by masculine gender role stress (MGRS[M]). Empathy (W) was our moderating variable. We specified a moderation of paths b (MGRS to consent) and the direct path, c' (gender to consent). Results of the full model are presented in Table 1 and illustrated in Figure 1.

With the addition of the moderators, the conditional indirect effects were significant at and below the mean. Regarding the other paths in the model, gender had a significant effect on MGRS as well as consent. Empathy had a significant effect on consent, but this relationship was nuanced with a significant gender*empathy interaction (previously described). The index of moderated mediation was also non-significant (-0.024, SE = 0.020, p = 0.235), suggesting that the conditional indirect effects were not statistically significantly different from each other.

Table 6 Model coefficients for the moderated mediation model

Antecedent		M (MGRS)			Consequent			
						Y (Consent)		
		Coeff.	SE	p	Path	Coeff.	SE	p
Constant	$i\mu$	2.825	0.059	0.000	i_Y	23.641	10.777	0.028
X (Gender)	a	0.332	0.084	0.000	c'	16.168	7.348	0.028
M (MGRS)					b_1	5.669	3.291	0.085
W (Empathy)					b_2	0.806	0.156	0.000
MGRS X					b_3	-0.069	0.047	0.139
Empathy (XW)								
Gender X					c^2	-0.240	0.104	0.021
Empathy (MW)								
$R^2 = 0.033$					$R^2 = 0.336$			
Conditional indirect effects of MGRS on the relationship between gender and consent at M +/- 1SD empathy values								
		Boot indirect effect	Boot SE		Boot CI95 lower		Boot CI95 upper	
1 SD below		0.736	0.420		0.057		1.770	
Mean		0.390	0.260		-0.022		1.012	
1 SD above		0.043	0.305		-0.610		0.636	
Conditional direct effects of empathy on the relationship between gender and consent								
1 SD below		4.220	2.509		-0.686		9.175	
Mean		0.598	1.542		-2.304		3.522	
1 SD above		-3.025	1.839		-6.848		0.367	

Figure 7. Moderated mediation model



CHAPTER IV – DISCUSSION

The purpose of this research was to examine the relationship between masculine gender role stress and empathy upon adolescents' understanding of the concept of consent in order to expand our understanding of the factors that influence consent education. This research was conducted with the intent of exploring how these factors might predict the understanding of consent. Ultimately, the goal of this project is to contribute to a body of research that can guide intervention programs aimed at preventing sexual harassment and assault.

The first mediation of the analysis examined the degree to which MGRS influenced the relationship between gender and understanding of consent. The significant direct effect of gender on consent indicated that females are more likely to demonstrate a superior understanding of the components of consent. This is in line with existing literature surrounding consent (Javidi, 2020). This relationship is partially mediated by MGRS. Surprisingly, females demonstrated a higher level of MGRS. Unexpectedly, a higher level of MGRS for both genders was related to a greater understanding of the components of consent.

This suggests the relationship between MGRS and sexual violence/the violation of consent is nuanced and complex. Literature indicates that higher MGRS is indicative of violence (Eisler, 1995; Eisler & Skidmore, 1987), so it is unexpected that higher MGRS for both genders was related to greater understanding of the components of consent. Perhaps more research surrounding the decision-making process leading to perpetration could illuminate this discrepancy. Yet, focusing on the decision to perpetrate is more related to forensic psychology, and focusing on the understanding of consent in the context of prevention and gender psychology is the focus of this research. The goal of KCSARC's intervention is preventing assault and perpetration, so further studying how elevated gender stress in adolescents impacts the decision

to violate boundaries and whether their understanding of the concept of consent interacts with empathy to influence this decision-making process may be worthwhile.

Furthermore, it is important to consider the effect of stress and who is experiencing it in this study, as well as the changing attitudes towards masculinity, sexuality, and gender identity in the population being examined. For example, recent studies have found that youth (age 13-17) who identify as transgender has nearly doubled from past estimates, and this same group makes up one in five of the transgender individuals in the US (Flores et al, 2016). Consider the example of a non-cisgendered and queer/non-heterosexual youth who identified as male. Speculatively, this subject might report experiencing even more masculine gender role stress than his cisgendered, heterosexual peers as he navigates adolescence in a patriarchal culture and faces more severe consequences for violating societal expectations of masculinity. There is a massive shift in attitudes surrounding gender role expectations and attitudes towards gender equality that has occurred in younger generations, and this population has historically been understudied; a vast majority of affirmative consent literature has focused on adults, particularly college students. It would be worthwhile for future research to use a more nuanced and detailed measure of gender identity when studying youth participants, for example measuring gender as a continuum, assessing attitudes on gender equality, and considering factors such as trans identity and sexual orientation when examining empathy and understanding of affirmative consent in participants who identify as male.

Another surprising result from the first mediation analysis was that females reported high levels of MGRS. It was not the intention of this research to study this relationship, but it is notable and therefore worthy of consideration. This relationship is not often examined, as feminine gender stress is usually the focus of gender stress studies with females. This research is

primarily concerned with the findings related to the male participants, as it aims to shift focus to prevention efforts focused on a group that has an immensely higher chance of future perpetration and change the pattern of interventions aimed at potential victims, which in the author's opinion aligns with victim blaming and places increased stress and responsibility on a group that is already marginalized, endangered, and experiencing a higher level of baseline stress (Matud, 2004; Sandanger et al, 2004). However, it is fascinating to consider why females reported higher MGRS. Specifically, there are items regarding school performance and perceived evaluation by peers that may have contributed to girls endorsing these items at higher levels than boys (adolescent girls experience higher levels of academic stress and have higher baseline stress (Kristensen, 2023)). It could be that girls have both higher feminine and masculine gender stress as gender role expectations change over time, however, this is speculation. Nevertheless, it is interesting to theorize how the age of this understudied population might have influenced reported gender stress, and there may be space for future research to explore how generational changes and patterns in masculine, feminine, and nonbinary gender role stress may present as a continuum.

Regarding the measurement of MGRS and the unexpectedly high endorsement of MGRS by female participants, it is important to consider the possibility that the adapted version of the abbreviated MGRS scale used in the survey might have measured a construct adjacent to masculine gender stress, such as emotional restriction or fear of vulnerability. As previously mentioned, MGRS was measured with an adapted version of the AMGRS and included items that pertained to people anywhere on the gender continuum. For example, the item "Being compared unfavorably to other men" was omitted, and the item "Having your children see you cry" was rewritten as "Having a friend see you cry." Although the AMGRS included only 15

items total, I reduced the scale to only seven questions in the domains of emotional inexpressiveness, intellectual inferiority, and physical inadequacy. There were 5 items aiming to assess subordination to women from the AMGRS that were omitted (these included items such as “Being married to someone who makes more money than you,” and “Being with a woman who is more successful than you”). As previously noted, these omitted items received the lowest level of endorsement during reliability testing in the development of the AMGRS, with a third to over half of the sample giving these items the lowest endorsement possible. Nevertheless, the high endorsement of MGRS by female participants implicates a need for further research surrounding adolescent gender stress.

Speculating about the construct validity of the revised scale raises questions surrounding the interpretation of the results. Future research could provide more clarity about this construct, and development of a modern, psychometrically sound masculine gender stress scale for adolescents is implicated.

As previously stated, not only are females more likely to demonstrate understanding of the components of consent, but this relationship is partially mediated by MGRS, such that females have a higher endorsement of MGRS and in turn higher levels of MGRS leads to greater understanding of consent. Again, this finding highlights a potential area of future research focusing on adolescent girls' gender stress, however, males are the primary focus of this discussion considering their heightened risk for future perpetration and the cultural legacy of victim-blaming within sexual assault prevention efforts.

The second simple moderation predicted consent from gender, empathy, and its interaction. All effects were statistically significant, including the gender*empathy term. There was significance at only 1SD below the mean for empathy. The simple slopes in the graphed

results (figure 6) showed that at this lower level of empathy, females demonstrated a higher valuation of consent than males, and males with low empathy had the lowest valuation of consent compared to all other groups. This is expected and synchronous with research and statistics showing that males are less likely to value consent and more likely to perpetrate violence as adults (US Department of Justice, 2002). Further, compared to males, females are more likely have higher valuation of consent and demonstrate higher levels of concern for others, greater affiliative ties, and significantly higher levels of empathy (Broidy et al., 2013). As previously discussed, research indicates that these significant gender differences in empathy and serious offending emerge in adolescence (Broidy et al., 2013).

One exciting result of this study was that the highest valuation of consent belonged to males with high empathy. So, boys with low levels of empathy had the lowest valuation of consent (lower than the girls) and boys with high empathy had the highest valuation of consent (even higher than the girls). These findings underscore the potential strength of empathy to enhance boys' understanding of consent. Even more encouraging is that there is evidence that this potentially powerful bolstering factor can be taught. Researchers have investigated the development of empathy and determined that for children, empathy is determined through both genetic and environmental contributions (Knafo, 2008). This is especially hopeful with regard to enhancing prevention interventions because empathy development can be bolstered via environment and empathy is associated with prosocial behavior (Abramson, 2020).

The third simple moderation predicted consent from empathy, MGRS, and its interaction revealed all effects, including the interaction term, were significant. When empathy is at or below the mean, there is a significant positive relationship between MGRS and consent, such that as MGRS increases, so does the valuation of consent. This was not expected. If an individual

has at or below the mean, then a higher level of MGRS for this person could predict a better understanding of the components of consent. This relationship suggests that gender stress deserves to be more closely examined in the adolescent and teenage population, and the pathway and decision-making process leading to perpetration needs to be further examined.

The final assembly evaluated a moderation mediation model predicting understanding of consent (Y) from gender (X) mediated by masculine gender role stress (MGRS[M]). Empathy (W) was our moderating variable. We specified a moderation of paths b (MGRS to consent) and the direct path, c' (gender to consent). With the addition of the moderators, the conditional indirect effects were significant at and below the mean. Regarding the other paths in the model, gender had a significant effect on MGRS as well as consent. Empathy had a significant effect on consent, but this relationship was nuanced with a significant gender*empathy interaction (previously described). These findings underscore the importance of empathy' role in consent education. Significantly, empathy associated with prosocial behavior is mainly due to environmental effects. (Knafo, 2008), so it is exciting to conject the ways that consent interventions could supplement the educational environment and potentially reduce the rate of sexual assault and the devastating and wide-reaching psychological effects that results from this enormous social and health issue.

Possible Implications

Higher MGRS may indicate that subjects with a greater awareness of gender roles may have greater awareness in the nuances of gender-based stress and the ability to identify societal pressure. Perhaps the experience of stress and the openness to report experiencing this societal pressure, emotional state of worry, and mental tension predict a higher understanding of others' boundaries in the context of a patriarchal society wherein males are the greatest perpetrators of sexual violence. Further research into this association as well as research focused on the development of a new, psychometrically sound masculine gender role stress scale that reflects adolescents' current understanding of MGRS could be useful in elucidating this result.

Findings underscore the need for discussion around the systems-level societal expectations and the pressures of masculinity, and the effect that this has on people who identify as male. Results suggest that males who report high levels of masculine gender stress and have high empathy have the highest understanding of consent. Empathy is partly heritable but is also a learned skill. The results of this research suggest that it could be possible to fortify consent education with education surrounding gender role stress and society's expectations of men (i.e., not showing emotions, needing to appear strong, not being vulnerable or emotional), and validate that noticing and experiencing the stress associated with these expectations can cause significant stress. It follows that if we focus on developing boys' understanding of the way rigid gender role expectations create stress, then they can recognize when these pressures exist and hopefully this understanding can assuage the shame of having emotions and expressing understanding of others emotional states, thereby increasing empathy and increasing the number of young men who have a higher understanding of consent.

Limitation/Future Research

This study has various limitations. The cross-sectional nature of the study excludes causation. Furthermore, the methodology would have been strengthened with additional behavioral corroborating data to supplement students' self-report data. Additionally, since mediation is not statistically defined (Kenny, 2014), a mediation model must be presumed, and then a statistical analysis must be conducted. If the presumed mediation model is erroneous, the parameters used to estimate that model will fail to be significant or meaningful (Maxwell & Cole, 2007). Finally, the conceptual moderated mediation model supposes empathy causally precedes understanding of consent, which I cannot fully test due to the cross-sectional nature of the data.

Future research could focus on ways to fortify education and violence prevention interventions with exercises in empathy and information about historical gender role expectations and the ways these may limit boys' ability to express themselves and show gentleness and empathy to others. There is a need for additional research on consent education and sexual violence prevention. Further research could lead to a better understanding of additional factors that might help develop more comprehensive prevention methods. In the future there could be further studies that evaluate the effectiveness of interventions with fortification of information regarding gender role stress and the way that patriarchal culture is stressful and damaging to men as well as women and incorporating empathy building exercises to determine if there are significant bolstering effects on the understanding of empathy on the understanding of consent with the inclusion of empathy teaching content. Future research should take the effect of time into consideration and measure students before and after consent education interventions. It is a limitation of this dissertation that the effect of time on the understanding of consent was not considered (due to the COVID pandemic), and students were not evaluated after they received

the consent intervention. Another limitation of this dissertation is treating gender as a binary (male/female). Future studies should focus on gender as a spectrum and/or include variations of non-binary identities in their research. Furthermore, there could be studies that examined gender role stress and empathy specific to other gender identities and within underserved groups such as trans populations or nonbinary individuals. Masculine gender role stress was chosen in this project based on discussions with KCSARC interventionists who reported that this stress came up frequently in discussion with students, furthermore, existing literature suggests that masculine gender role stress is a robust predictor of intimate partner violence in addition to perpetration, and statistics reveal that men are much more likely to be perpetrators of sexual violence. Further research may also examine the nuances of understanding of consent in the context of decision-making, for example the processes by which perpetrators make the decision to violate boundaries and whether their understanding of the concept of consent interacts with empathy to influence this decision-making process. Further research should also focus on shedding light on the differences of gender role stress across racial identities and cultures. Sexual assault is a global issue, and gender role expectations vary across cultures.

Conclusion

The purpose of this dissertation was to examine the relationship between masculine gender role stress and empathy upon the adolescents' understanding of the concept of consent, expand our understanding of the factors that influence consent education, explore how these factors might predict the understanding of consent, and contribute to research that will guide continued intervention programs aimed at preventing sexual harassment and assault.

What I discovered was that when empathy is at or below the mean, there is a significant positive relationship between MGRS and consent, such that as MGRS increases, so does the

valuation of consent. Boys with high empathy value consent the most, and boys with low empathy value consent the least.

It is worth considering incorporating information about how gender role norms and expectations in a society rooted in patriarchy can cause stress in both men and women, and men experience pressure to adhere to a specific set of expectations that encourage them to refrain from expressing emotions and practicing empathy openly. Perhaps education surrounding the ways that gender inequality can negatively affect both men and women and providing educational content on the importance of empathy as well as including empathy building interventions in classrooms could enhance prevention efforts.

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