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Association of Gender Role Attitudes and Proximal Determinants of Sexual Violence in a
College Sample of Men in Viet Nam

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Abstract Cover Page

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Abstract

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Background:

Men's perpetration of sexual violence poses a serious threat to women's health and wellbeing globally. Across several studies, one of three men had perpetrated sexual violence. Adherence to traditional gender roles is an empirically identified risk factor for men's sexual violence perpetration. In Viet Nam, college-aged men subscribe to hierarchical gender roles in the context of dating and sexual relationships that may influence their sexual attitudes and knowledge. This analysis investigates the relationship between men's underlying gender role attitudes and four proximal determinants of sexual violence: rape myth attitudes, sexual communication attitudes, sexual consent knowledge, and sexual coercion knowledge in a sample of 776 college-aged men in Ha Noi, Viet Nam.

Methods:

Multilinear regression was used to investigate the association between underlying gender role attitudes and four proximal determinants of sexual violence. Models were adjusted for sociodemographic characteristics, relationship status, and prior or attempted perpetration of sexual violence in the last six months. Variables used in analysis were factor scores from validated summative scales.

Results:

Vietnamese men's gender role attitudes were associated with rape myth attitudes, sexual communication attitudes, and sexual consent knowledge in unadjusted and adjusted models. There was no association between gender role attitudes and sexual coercion knowledge.

Implications:

Vietnamese men's equitable gender role attitudes are associated with less subscription to rape myths, more equitable sexual communication attitudes, and greater knowledge of sexual consent. This provides a better understanding of the relationship between distal and proximal determinants of sexual violence in Viet Nam and adds to the evidence of pathways to men's sexual violence perpetration.

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Dedication

This thesis is dedicated to all survivors of sexual violence.

Violence is preventable.

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Chapter 1: Introduction

Sexual violence against women is highly prevalent across human populations. In the United States, 44% of women experienced some form of contact sexual violence in their lifetime (Smith et al., 2018). Globally, one in three women experienced either physical or sexual intimate partner violence or non-partner sexual violence in their lifetime (*Global and regional estimates of violence against women: prevalence and health effects of intimate partner violence and non-partner sexual violence*, 2013). Sexual violence is the perpetration of sexual acts against someone without their freely given consent (Basile, Smith, Breiding, Black, & Mahendra, 2014). While anyone can experience sexual violence, women, and gender and sexual minorities are disproportionately impacted (Cantor et al., 2015). There are varying forms of sexual violence, including verbal, emotional, and physical violence (Basile et al., 2014). Verbal sexual violence includes sexual harassment and verbal pressure to engage in unwanted sex, while emotional sexual violence includes threatening to end a relationship or spreading sexual rumors or images. Any unwanted sexual contact constitutes physical sexual violence. Tactics used to perpetrate sexual violence range from physical force, to use of drugs or alcohol, to varying forms of sexual coercion (Basile et al., 2014).

Survivors of sexual violence experience severe and long-lasting health and social impacts (Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002). In the short-term, sexual violence can cause a range of physical injuries. In the long-term, toxic stress caused by exposure to violence alters biological and neurobiological mechanisms and leads to chronic disease and mental health issues (Inslicht et al., 2006; Rivara et al., 2019). Sexual violence is associated with several behaviors that may lead to chronic diseases, such as smoking, alcohol use, and HIV risk-behaviors (Santaularia et al., 2014; Smith & Breiding, 2011). Chronic diseases and conditions associated with the

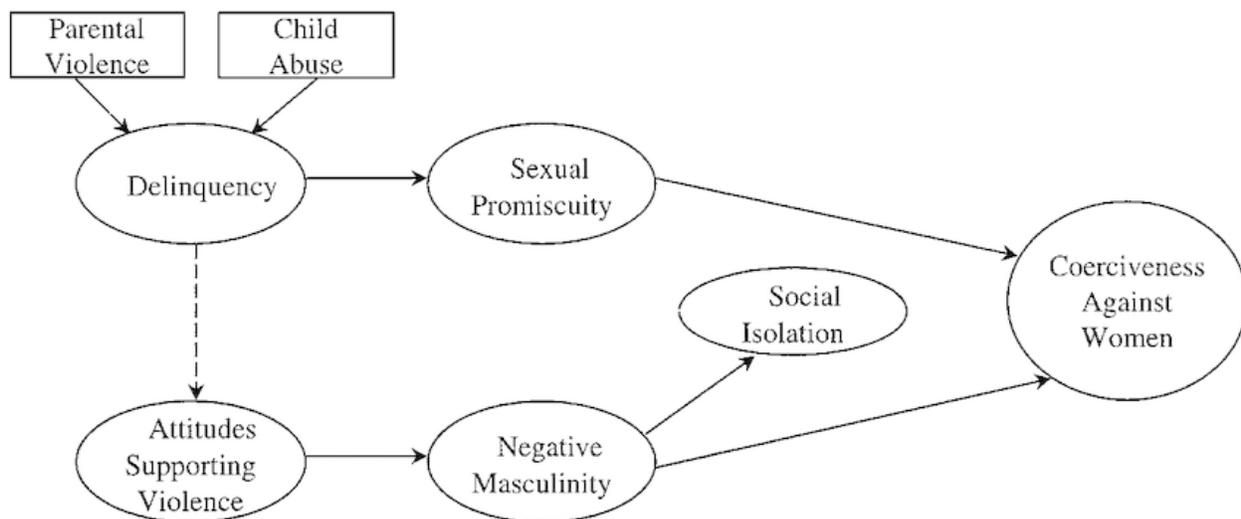
experience of sexual violence include heart disease and stroke, diabetes, high cholesterol, high blood pressure, asthma, gastrointestinal disorders, chronic pain, headaches, and insomnia (Black et al., 2011; Cloutier, Martin, & Poole, 2002). Survivors of sexual violence are more likely to experience anxiety, depression, sleep disorders, substance addiction, post-traumatic stress disorder, suicidal ideation, and attempted suicide (Bennice, Resick, Mechanic, & Astin, 2003; Black et al., 2011; Jordan, Campbell, & Follingstad, 2010; Rosellini et al., 2017; Smith et al., 2018). Both PTSD and sexual violence are associated with shortened telomere length, which may accelerate aging (Li, Wang, Zhou, Huang, & Li, 2017).

Sexual violence negatively impacts women's sexual and reproductive health and bodily autonomy in myriad ways. Physically, sexual violence is associated with gynecological issues like painful menstrual cramps, heavy bleeding during menstruation, vaginal and rectal bleeding, sexual dysfunction, painful intercourse, painful urination, bladder infection, and chronic pelvic pain (Campbell, Lichy, Sturza, & Raja, 2006; Golding, Wilsnack, & Learman, 1998; Jamieson & Steege, 1997). Women who experience sexual violence have diminished control over the use of contraceptives, leading to unwanted pregnancy and exposure to sexually transmitted diseases (Krug et al., 2002). Social repercussions for sexual violence victimization include stigma, social ostracization, and economic burden (Krug et al., 2002; Miller, 1996; Tjaden & Thoennes, 2006).

Men's sexual violence perpetration is common. Across several studies done in the United States, around 1 in 3 men had perpetrated sexual violence and were often repeat offenders (Loh, Gidycz, Lobo, & Luthra, 2005; Maxwell, Robinson, & Post, 2003; Zinzow & Thompson, 2015). The seminal *Confluence Model of Sexual Aggression* depicts two paths of risk that arise from adverse childhood experiences (Malamuth, Sockloskie, Koss, & Tanaka, 1991). In this empirically

tested model, sexual promiscuity and attitudes of hostile masculinity combine to create risk for sexual violence perpetration (i.e., “coerciveness against women”) (Figure 1).

Figure 1. The Confluence Model of Sexual Aggression



From (Johnson & Knight, 2000), adapted from (Malamuth et al., 1991)

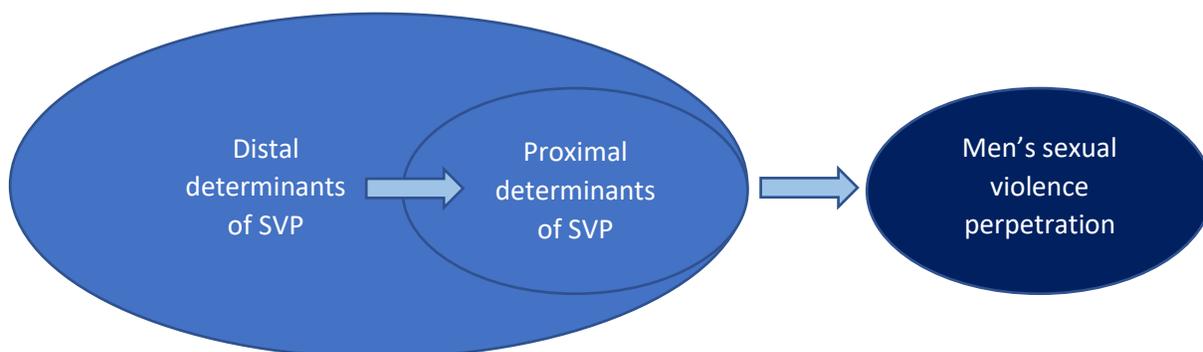
Significant risk factors identified in the pathway to men’s sexual violence perpetration broadly fall into family, peer, relationship, individual, and substance use categories (Tharp et al., 2013). Childhood maltreatment, family conflict, and parental violence are all components of family life that are known to increase men’s risk for future perpetration (Borowsky, Hogan, & Ireland, 1997; Carr & VanDeusen, 2004; Forbes & Adams-Curtis, 2001; Jewkes et al., 2006; Malamuth, Linz, Heavey, Barnes, & Acker, 1995). Exposure to peers who support or perpetrate sexual violence puts men at higher risk for perpetrating it themselves (Christopher, Madura, & Weaver, 1998; Humphrey & Kahn, 2000). Similarly, exposure to peers who endorse hypermasculinity (e.g., fraternities) is a risk factor for sexual violence perpetration (Boeringer, 1996; Loh et al., 2005). Both the presence of conflict (including violence) and men’s controlling

behavior within intimate partnerships increase risk for sexual violence at the relationship level (Christopher et al., 1998; Katz, Carino, & Hilton, 2002; Loh & Gidycz, 2006).

At the individual level, inequitable gender ideology (including adherence to traditional gender norms, hostility towards women, and hypermasculinity) is a widely identified risk factor for men's perpetration of sexual violence (Abrahams, Jewkes, Hoffman, & Laubsher, 2004; Carr & VanDeusen, 2004; Gage & Hutchinson, 2006; Loh et al., 2005; Lyndon, White, & Kadlec, 2007; Malamuth et al., 1995; Muehlenhard & Falcon, 1990; Santana, Raj, Decker, La Marche, & Silverman, 2006). Other individual risk factors include rape myth subscription, harmful sexual attitudes and behaviors, and antisocial/psychopathic traits (Abbey, Parkhill, BeShears, Clinton-Sherrod, & Zawacki, 2006; Abrahams et al., 2004; Bohner, Jarvis, Eyssel, & Siebler, 2005; Dean & Malamuth, 1997; DeGue & DiLillo, 2004; Malamuth et al., 1995; Vega & Malamuth, 2007). Men who have experienced prior sexual violence victimization or who have perpetrated sexual violence are at increased risk for future perpetration (Loh & Gidycz, 2006). Finally, alcohol use is consistently associated with sexual violence perpetration (Abbey et al., 2006; Carr & VanDeusen, 2004; Jewkes et al., 2006).

These empirically identified risk factors may coalesce to form pathways to men's sexual violence perpetration. Risk factors can be categorized as distal (i.e., underlying, antecedent) and proximal (i.e., direct) determinants using a public health lens (Figure 2). Distal determinants include underlying inequitable gender role ideology developed in childhood and exposure to violence in childhood. Proximal determinants include sexual attitudes, beliefs, and behaviors that lead directly to perpetration.

Figure 2. *The Distal and Proximal Determinants of sexual violence perpetration*



Male-perpetrated sexual violence poses a serious threat to women's health and wellbeing globally. A better understanding of the universal and contextual pathways to perpetration is needed to prevent sexual violence effectively. While there is evidence documenting the determinants of perpetration in heterosexual men, there is minimal knowledge of the relationship between distal and proximal determinants. Investigating this relationship will shed light on the pathways to sexual violence perpetration and will inform targeted prevention programming. This thesis investigates the association between underlying gender role attitudes and four contextually identified proximal determinants of sexual violence in college-aged men in Ha Noi, Viet Nam: rape myth attitudes, sexual communication attitudes, sexual consent knowledge, and sexual coercion knowledge (Yount et al., 2019).

Research Context

This research is done in the context of two university campuses in Ha Noi, Viet Nam. University campuses are identified as high-risk environments for sexual violence across global contexts (Adinew & Hagos, 2017; Chan, Straus, Brownridge, Tiwari, & Leung, 2008; Lehrer, Lehrer, & Koss, 2013). Living outside of the parents' home for the first time, poor knowledge of sex, gendered sexual roles, and heightened alcohol consumption compound to construct an

environment primed for sexual violence (Muehlenhard, Humphreys, Jozkowski, & Peterson, 2016). Viet Nam is a middle-income country in Southeast Asia. It is ranked 67th in the United Nations gender inequality index and has a high female literacy rate, high female labor force participation, and high female representation in parliament (*Human Development Report 2019*, 2019; Schuler et al., 2006). There is legislation in place to address gender inequality and intimate partner violence (physical, psychological, or sexual violence directed at an intimate partner) in Viet Nam, specifically the 2006 Law on Gender Equality in 2006 and the 2007 Law on Domestic Violence Prevention and Control (Schuler et al., 2006).

Despite considerable progress towards women's rights, embedded gender hierarchy sustains. Intimate partner violence, including sexual violence, is prevalent and normalized. The 2010 *National Study on Domestic Violence Against Women in Viet Nam* found that 10 percent of ever-married women reported experiencing sexual violence in their lifetime ("*Keeping silent is dying*" *Results from the National Study on Domestic Violence Against Women in Viet Nam*, 2010). Another study found that more than one-third of married men between the ages of 18 and 51 reported any physical, psychological, or sexual intimate partner violence against their current wife (Yount et al., 2016). Sexual violence is most likely underreported in Viet Nam, as it is in most contexts. Barriers to reporting in Viet Nam include gender-discriminatory social and cultural values, limited knowledge of rights and how to navigate the legal system, insensitivity towards victims reporting violence, extensive court cases, and lack of women-friendly policies and facilities (Skinnider, Montgomery, & Garrett, 2017).

Gender hierarchy, normalization of violence, and the gender role expectation that women must maintain harmony in the family drive the high prevalence of intimate partner violence in Viet Nam (James-Hawkins, Hennink, Bangcaya, & Yount, 2018; Rydstrøm, 2017; Vung & Krantz,

2009). Confucian ideals of patrilineal ancestor worship and the celebration of male sons established underlying gender hierarchy in Viet Nam in the 10th century AD (Rydstrøm, 2006b). Equal rights for men and women were legally recognized during communist rule, although women faced increased pressure to put the needs of both the family and the State ahead of their own (Vijayarasa, 2010). *Doi Moi*, a period of “renovation” that started in 1986, aimed to maintain socialism in a global market economy. As a result of *Doi Moi*, globalization drastically shifted sexual norms in Viet Nam, leading to increased acceptability of casual sex, pre-marital sex, and multiple sexual partners (Ngo, Ross, & Ratliff, 2008; Nguyen, 2007). Despite this shift in sexual norms, stigma and control over women’s sexuality endures.

Chapter 2: Literature Review

This literature review is organized thematically by variable, starting with the exposure variable (gender role attitudes), then going through each of the four outcome variables: rape myth attitudes, sexual communication attitudes, sexual consent knowledge, and sexual coercion knowledge. Contextual evidence for each determinant of sexual violence from the existing body of literature on gender ideology and intimate partner violence in Viet Nam is reviewed. This evidence includes a qualitative study on gender hierarchy and sexual violence in dating relationships that sampled participants from the same two universities in Ha Noi, Viet Nam that this analysis does (Yount et al., 2019).

Gender Role Attitudes

The idea of gender roles (also called “sex roles” in early literature) emerged from role theory in Sociology and developmental psychology (Eagly & Wood, 2016). West and Zimmerman define *gender* as an action taken to adhere to a biological sex category, and *gender roles* as “the social construction of gender categories” in *Doing Gender* (West & Zimmerman, 1987). Building upon this, the social role theory of sex differences defines gender role beliefs as societal stereotypes around how men and women behave. This theory posits that gender role beliefs emerge distally from the interaction between physical characteristics of the biological sexes (i.e., men’s size and strength and women’s reproductive ability) and economic and technological developments that afford men greater decision-making power and access to resources (Eagly & Wood, 2016). Division of labor arises from these two factors, which in turn shapes gender role beliefs, which in turn shape behavior. Normative gender roles are embedded in society and typically reflect a binary understanding of gender. Deviation from normative gender roles is often socially perilous (Eagly & Wood, 2016).

Traditionally, gender role ideology (beliefs and attitudes) is comprised of masculine and feminine roles and reflects a gender hierarchy that gives men power over women. Hypermasculinity, also called hostile masculinity or machismo, is a type of masculinity. Hypermasculine men subscribe to inequitable and harmful gender role ideology. Harmful ideology can include beliefs such as: men should dominate women, men should compete with each other, violence is manly, danger is exciting, and men are entitled to sex (Malamuth & Thornhill, 1994; Mosher & Tomkins, 1988; Murnen, Wright, & Kaluzny, 2002). Both adherence to traditional gender roles and hypermasculinity are associated with men's sexual violence perpetration in community and college samples of men (Tharp et al., 2013).

Gender role ideology develops in childhood through social learning. Social learning theory posits that learning is a cognitive process that occurs through the direct observation of a behavior or the rewards and consequences of a behavior (Bandura & Walters, 1977). Children learn inequitable gender roles through gender socialization: observation of gender hierarchy modeled in the family by parents and siblings (Collins, 1998). Through a similar pathway, boys learn that violence is acceptable through observing older males perpetrating violence in a family environment (Hearn, 1998).

Despite shifts in normative gender roles for men and women in Viet Nam, traditional gender role ideology still influences behavior (James-Hawkins, Salazar, Hennink, Ha, & Yount, 2019). Ideals of kinship, Confucianism, and communism interact to construct gender roles attitudes in Viet Nam. Traditional kinship ideals reflect gender and age hierarchies of power. Men are dominant in the domestic space and can continue their father's lineage, while women are subservient and cannot (Rydström, 2006a). Men transfer their ancestor's honor and morality to the next generation, and through this belief, have the right to discipline younger male kin (Cam,

Kanthoul, Trung, & Duc, 2012; Rydstrøm, 2006a). Disciplinary violence modeled by older males in childhood normalizes it as part of masculinity (Cam et al., 2012). The Confucian model of gender links male bodies with “Duong” and female bodies with “Am” (Rydstrøm, 2006a). Duong is considered superior and is linked to the sun, heaven, fire, heat, movement, and stimulation. In contrast, Am is considered complimentary and inferior to Duong and is associated with the moon, earth, water, cold, rest, responsiveness, passivity, darkness, and inwardness (Rydstrøm, 2006a). Duong justifies “hot” masculinity that leads to the perpetration of violence against women (James-Hawkins et al., 2018; Krause, Gordon-Roberts, VanderEnde, Schuler, & Yount, 2016; Rydstrøm, 2003). Traditional female gender roles include running the household, raising children, and maintaining harmony within the family through hard work and proper behavior (Go et al., 2002). While there was seemingly social emancipation for women during communist rule, traditional gender roles did not dissipate. Instead, they became embedded with communist ideals and female gender roles expanded to include studying hard and working for the good of the nation (Schuler et al., 2006).

Qualitative data show that inequitable gender roles are present in dating relationships while at university in Viet Nam (Yount et al., 2019). Parental expectations shape gender roles in dating relationships. Participants believed that parents expected women to be less independent, less argumentative, and to prioritize family and household tasks over a career. In contrast, they believed parents expected men to be decisive, to avoid social evils, to be career-oriented, and to find a suitable wife. Within the context of dating and sexual relationships, men felt they should initiate dating and physical touch. Men expected women to indirectly refuse or accept their initiation. Men were free to have sex, while women’s reputation was dependent on virginity (Yount et al., 2019).

Rape Myths

Sociologists and feminists defined rape myths in the 1980s as cultural attitudes and beliefs that justify male-perpetrated sexual violence against women (Bohner et al., 1998; Burt, 1980; Lonsway & Fitzgerald, 1994). Rape myths are widely accepted by men, even if not expressed explicitly (Chapleau & Oswald, 2010; Devine, 1989; Edwards, Turchik, Dardis, Reynolds, & Gidycz, 2011). There are several ways rape myths materialize, including victim-blaming, disbelief in claims of rape, and exemption of the perpetrator (Bohner et al., 2009; Ryan, 2011). Victim-blaming encompasses the beliefs that rape happens to “certain types” of women and that women “asked for it” due to the clothing they wore or the amount of alcohol they drank (Bohner et al., 2009; Ryan, 2011). Other common rape myths are that rape cannot occur within a longtime partnership or marriage, that rape cannot occur during casual sex, that a stranger usually perpetrates rape, and that rape is always physically violent (Krahé, Bieneck, & Scheinberger-Olwig, 2007; Littleton, Breitkopf, & Berenson, 2007; Ryan, 1988).

Scholars speculate that rape myths emerge from underlying gender inequality and that they, in turn, create and sustain an environment in which rape is perpetrated (Edwards et al., 2011; Ryan, 2011). Rape myth subscription may arise from the desire to distance oneself from the possibility of being a victim or a perpetrator of sexual violence (Bohner, Eyssel, Pina, Siebler, & Viki, 2013). Rape myths may also be a way for individuals to understand and explain their problematic behavior or events that they witness in their social world (Bohner et al., 2009). Rape scripts, conceptualized using sexual script theory, are social scripts based on rape myth beliefs that inform behavior (Frith, 2013; McCormick, 2010; Simon & Gagnon, 1984). Rape scripts assign different roles to men and women in instances of rape (i.e., perpetrator and victim), and prescribe women as vulnerable to rape (Crome & McCabe, 2001).

Subscription to rape myths is a documented determinant of men's sexual violence perpetration. The Confluence Model found that rape myth acceptance predicted male sexual coercion (used synonymously with "aggression") when mediated by hostile masculinity (Malamuth et al., 1991). A literature review from 1994 compiled multiple studies that found significant associations between rape myth acceptance and sexual violence in college students and the general population (Lonsway & Fitzgerald, 1994). In a more recent systematic literature review, twenty-six studies found that rape myth subscription was associated with sexual violence perpetration in community and college samples of men (Tharp et al., 2013).

Evidence shows that men subscribe to rape myths across global contexts. A comparative study between students in the United States, Japan, and India found that college students in all three countries accepted rape myths, but to varying degrees (Stephens et al., 2016). Evidence for rape myth acceptance exists for Pakistan, India, and sub-Saharan Africa (Jamshed & Kamal, 2019; Qureshi, Kulig, Cullen, & Fisher, 2020; Singleton, Winskell, Nkambule-Vilakati, & Sabben, 2018). A qualitative study done on college-aged men in Viet Nam found that they rely on rape myths (Yount et al., 2019). Vietnamese men in the study held common rape myth beliefs that strangers usually commit rape in isolated places or at night, that women were asking for it, that rape between acquaintances usually involves alcohol, that rape cannot occur in a loving relationship, and that women who did not physically resist were not raped (Yount et al., 2019).

Sexual Communication

Sexual communication is "the means by which individuals come to select potential partners for sexual relations, and through which the meanings, functions, and effects of sexual relations are negotiated" (Metts & Spitzberg, 1996). Sexual communication encompasses verbal and non-verbal behaviors that signal an increased or decreased likelihood of sex occurring (La France, 2010).

There are several tacit cues that men and women use to interpret willingness for sex; behaviors (e.g., dancing close), relationship status, location (e.g., moving to a bedroom), verbal and nonverbal sexual refusal, and active participation (e.g., taking clothes off) (Beres, 2010).

Sexual scripts are guidelines for how people should behave sexually, including how to communicate throughout a sexual interaction (Frith, 2013; Gagnon, 1990; Metts & Spitzberg, 1996; Simon & Gagnon, 1984). Normative gender roles shape sexual scripts at the cultural, interpersonal, and individual levels (Gagnon, 1990; La France, 2010). The heteronormative traditional sexual script (TSS) is an example of the influence of normative gender roles on scripts. TSS characterizes men as the initiators of sex and women as the “gatekeepers”. Gatekeepers engage in token resistance to sex (i.e., refusing sex with the intention to engage in sex) (Muehlenhard & Rodgers, 1998). The TSS is widely recognized, and both heterosexual men and women subscribe to it (Edgar & Fitzpatrick, 1993; La France, 2010).

A subset of literature on sexual communication focuses on the theory that gendered differences in communication are sometimes responsible for sexual violence (Frith & Kitzinger, 1997). The theory of miscommunication arose from sexual script theory, and proposes that men often overestimate women’s interest in sex and that women often say no when they mean yes (i.e., token resistance) (Beres, 2010; Lindgren, Schacht, Pantalone, & Blayney, 2009). Women’s sexual refusal competence and men’s and women’s ability to understand complex sexual communications challenge miscommunication theory. Sexual refusal, unfairly placed on women as their responsibility to communicate, is consistent with other types of social refusal (Beres, 2010; Kitzinger & Frith, 1999). Men can both hear verbal refusals that do not contain the word “no” and recognize subtle non-verbal refusals (O’byrne, Rapley, & Hansen, 2006). Given this evidence, use

of miscommunication theory as an explanation for rape is problematic (O'Byrne, Hansen, & Rapley, 2008).

College-aged men in Viet Nam adhere to the TSS and demonstrate sexual communication behaviors similar to behaviors identified in Western contexts (Yount et al., 2019). Men are the initiators of physical contact in relationships in Viet Nam. Participants in the qualitative study described a process of testing to see if women were interested in sexual contact by first holding hands, touching their shoulders, or touching their hair. This testing of sexual interest progressed along a continuum of increasingly sexual touch, like hugging and kissing. Men instinctively expected to know if a woman refused touch through reading physical signs (i.e., moving hand away), and expected women to indirectly show their refusal if they did not want to be touched. Men also believed women would not show direct, spoken interest in sex, and instead relied on tacit signals, such as winks or other nonverbal cues, to determine sexual interest.

Sexual Consent

The lack of consistency across legal, academic, and normative definitions of sexual consent reflects the complexity of the concept. Early legal definitions of consent grew out of Western rape law, wherein rape was considered a crime of property against a father or a husband (Brady, Lowe, Brown, Osmond, & Newman, 2018). Modern legal definitions of sexual consent typically specify who can consent and clarify what constitutes consent (Beres, 2014). Legal definitions may incorporate the concepts of “express consent” (permission given in verbal or written form), or “implied consent” (permission that is indirectly given and recognized by a sign) (Muehlenhard et al., 2016).

Academic definitions of sexual consent range from an agreement to engage in sex, a boundary line between dichotomous states related to sex, and an ongoing process of agreement to engage in sex (Beres, 2007; Muehlenhard et al., 2016). Within these broad categories, sexual consent is either displayed behaviorally using verbal and non-verbal sexual communication or indicated by a psychological state of willingness independent of behavior (Beres, 2007; Hurd, 1996; Muehlenhard et al., 2016; Ostler, 2003). Most of the sexual consent literature has the base assumption that women give consent to men (Brady et al., 2018; T. Humphreys, 2007; Ostler, 2003).

Consent as an agreement to engage in sex is broken down further into several categories in the literature. The “any yes” model requires a positive response for consent to be given, while the “any no” model assumes consent unless there is refusal (Anderson, 2004; Beres, 2007). Some scholars feel that agreement to consent can be valid or invalid, or full versus partial, depending on whether consent is freely given or if sex is genuinely wanted (Beres, 2007; Muehlenhard et al., 2016). Some consider freely given consent impossible if coercion or force is present in a sexual consent scenario (Hickman & Muehlenhard, 1999). Feminist scholars challenge whether freely given consent is ever possible, given the underlying context of hegemonic masculinity (MacKinnon, 1989; Pateman, 1980). Consent has also been broadly conceptualized as a boundary line between states: good and bad sex, morally problematic sex and morally sanctioned sex, “making love” versus committing a crime, and wanted versus unwanted sex (Beres, 2007). In opposition to the idea of consent as a boundary line between two states, others suggest that in practice, sexual consent is a continuous process of reading sexual communication cues from a partner, rather than a one-time occurrence (Beres, 2010; Beres, 2014; Brady et al., 2018; Coy, Kelly, Elvines, Garner, & Kanyeredzi, 2013; T. P. Humphreys, 2004).

Heteronormative sexual scripts influence normative understandings of consent, exemplified by the framing that men ask for consent (initiate) and women give consent (gatekeep) (Brady et al., 2018). Individuals ask for, give, and interpret consent to engage in sexual activity using explicit and implicit sexual communication. Evidence shows that the norm for giving and obtaining sexual consent is indirect and nonverbal sexual communication, while the norm for sexual refusal is explicit verbal sexual communication (Hickman & Muehlenhard, 1999; T. Humphreys, 2007; T. P. Humphreys, 2004; Jozkowski & Peterson, 2013; Jozkowski, Peterson, Sanders, Dennis, & Reece, 2014; Kitzinger & Frith, 1999; O'Byrne et al., 2008; O'byrne et al., 2006). There is also evidence that consent behavior varies based on the type of sexual relationship. In new sexual relationships, more attention is paid to sexual consent than in established relationships, where consent becomes presumed (Humphreys, 2007).

Wanting sex and consenting to sex are distinct concepts that may overlap but are often conflated in definition and practice (Muehlenhard et al., 2016). Evidence suggests that women sometimes consent to unwanted or ambivalent sex in heterosexual relationships (Fantasia, 2011; Muehlenhard & Peterson, 2005; O'Sullivan & Allgeier, 1998; O'Sullivan & Gaines, 1998; Peterson & Muehlenhard, 2007; Vannier & O'Sullivan, 2010). There are a variety of reasons that heterosexual women may consent to unwanted or ambivalent sex, such as to placate a partner, to gain peer approval, or to subscribe to a social norm (Muehlenhard et al., 2016; R. West, 2010). Ambivalence towards engaging in sex may also arise from gender roles in sexual relationships (Muehlenhard et al., 2016; Muehlenhard, Sakaluk, & Esterline, 2015; Yusuf & Muehlenhard, 2016). For example, the sexual double standard that judges women for engaging in casual sex could lead to ambivalence about whether to participate or not. Fear of being broken up with over

not complying with sex, stemming from the fear that men need sex, also illustrates why a woman might consent to ambivalent sex.

Understandings and practices of consent may vary across cultural contexts (Brady & Lowe, 2020; Muehlenhard et al., 2016). In Viet Nam, the legal age of consent is 18 years old, according to Penal Code No. 100/2015/QH13, which went into effect in 2018. The penal code does not specify incapacity to consent for those who are cognitively disabled, under the influence of alcohol or drugs, or asleep. However, the definition of rape includes taking advantage of a victim's ability for self-defense. There is no specification as to what constitutes consent (e.g., freely given, verbal). Underlying gender hierarchies shape Vietnamese college-aged men's sexual consent comprehension in dating relationships (Yount et al., 2019). Qualitative findings revealed that Vietnamese men rarely described consent as active and verbal, reflecting consent norms identified in other contexts. Men felt they would know when a woman wanted to have sex by reading non-verbal behavioral cues. Men also expected women to verbalize non-consent or to show clear refusal. In the absence of a clear, verbal, or non-verbal refusal, men assumed consent. When there was a clear refusal, it was often taken as an invitation to keep trying under the assumption that the woman was engaging in token resistance.

Sexual Coercion

Sexual coercion is a behavior perpetrated to obtain unwanted sex. The presence of coercion in a sexual encounter negates sexual consent. Sexual coercion is both a sexual violence tactic and a form of sexual violence. The definitions of sexual coercion in the literature over the last forty years are inconsistent and vary (Pugh & Becker, 2018). Some broadly define sexual coercion as any external pressure to engage in sex that may stem from gender roles, peers and social norms, and intimate partners (French & Neville, 2017). The terms sexual coercion and sexual assault are

often used interchangeably to refer to sexual violence, particularly in the early body of literature. Some scholars concretely define sexual coercion as a continuum of tactics used to elicit sex post-refusal, that range from non-forceful, verbal tactics to physical force (Pugh & Becker, 2018). Following this definition, there are a variety of identified tactics employed by perpetrators of sexual coercion. These and include manipulation (e.g., lying), verbal pressure (e.g., frequent arguments), substance use (e.g., seeking out intoxicated women or giving women alcohol), and physical force (DeGue & DiLillo, 2005; French & Neville, 2017; Struckman-Johnson, Struckman-Johnson, & Anderson, 2003). A subset of the literature considers sexual coercion an inherently verbal behavior (DeGue & DiLillo, 2005).

Risk factors for men's sexual coercion perpetration mirror those identified for sexual violence perpetration (Tharp et al., 2013). These factors include harmful sexual attitudes and beliefs, character traits and behaviors, and adverse life experiences. Attitudes and beliefs such as hostility towards women, subscription to rape myths, belief in male sexual dominance, belief that adversity in male-female relationships is normal, and broadly, heteronormative beliefs are all identified as risk factors for sexual coercion (DeGue & DiLillo, 2004; Eaton & Matamala, 2014; Schatzel-Murphy, Harris, Knight, & Milburn, 2009). Character traits like manipulation, the ability to imagine others' emotional reactions, impulsivity, and anti-social personality predict sexual coercion perpetration (DeGue, DiLillo, & Scalora, 2010; Hoffmann & Verona, 2019). Behavioral risk factors include having multiple sexual partners and sexual compulsivity (Schatzel-Murphy et al., 2009). Finally, the experience of sexual abuse in childhood and exposure to hostility between parents are risk factors for sexual coercion (Richardson, Simons, & Futris, 2017; Schatzel-Murphy et al., 2009; Zinzow & Thompson, 2015).

Qualitative findings from men in Viet Nam suggest that men do not consider sexual coercion to be a form of sexual violence (Yount et al., 2019). Gender role hierarchies, sexual communication attitudes, and sexual consent attitudes contributed to men's normalization of sexual coercion in dating and sexual relationships. Sexual coercion tactics, such as applying verbal and physical pressure to get a woman to engage in sex after she had refused, were described. Despite the finding that most men were able to read subtle sexual communications indicating refusal, some still chose to apply pressure on women for sex. If problematic sexual behavior did not end in sexual intercourse, men described it as sexual harassment, rather than sexual coercion or rape.

Chapter 3: Manuscript

Association of Gender Role Attitudes and Proximal Determinants of Sexual Violence in a College Sample of Men in Viet Nam

Target Journal: Sex Roles

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Background

Sexual violence, or nonconsensual sexual contact, is an endemic global health threat that disproportionately affects cisgender heterosexual women and gender and sexual minorities (Cantor et al., 2015). Globally, 1 in 3 women experience physical and/or sexual violence by a partner, or sexual violence by a non-partner (*Global and regional estimates of violence against women: prevalence and health effects of intimate partner violence and non-partner sexual violence*, 2013). Sexual violence can be verbal, emotional, or physical, and can range from non-contact to forced penetration (Basile, Smith, Breiding, Black, & Mahendra, 2014). Tactics used by male perpetrators of sexual violence also range from physical force to the use of drugs or alcohol, and to varying forms of sexual coercion (Basile et al., 2014). Often, the physical, mental, and social health effects of sexual violence victimization are severe (Bennice, Resick, Mechanic, & Astin, 2003; Chan, Straus, Brownridge, Tiwari, & Leung, 2008; Leserman, 2005; Smith & Breiding, 2011; Tjaden & Thoennes, 2006). Most of the research on sexual violence to date is through a Western, heteronormative lens.

Determinants of Sexual Violence

There is evidence for distal (i.e., indirect) and proximal (i.e., direct) determinants of sexual violence against women, but causal pathways to perpetration remain understudied (Borowsky, Hogan, & Ireland, 1997; Loh, Gidycz, Lobo, & Luthra, 2005; Malamuth, Linz, Heavey, Barnes, & Acker, 1995; Santana, Raj, Decker, La Marche, & Silverman, 2006; Tharp et al., 2013; Yount et al., 2019). These determinants may act independently or interact to drive sexually violent behavior in men (Yount, Minh, Trang, Cheong, & Sales, 2020). Prevailing gender norms in society that privilege heterosexual men are a key distal determinant of sexual violence. These norms produce patriarchal (i.e., inequitable) gender role attitudes within heterosexual relations that place

men as superior and entitled to sex and women as inferior and submissive. This gender role hierarchy enables sexual violence to emerge across societal, community, and peer levels (Jewkes, Sikweyiya, Morrell, & Dunkle, 2011; Murnen, Wright, & Kaluzny, 2002). Gender role attitudes are learned from childhood. Social learning theory posits that learning occurs through direct observation of a behavior, or through observation of the rewards or consequences related to a behavior (Bandura & Walters, 1977). Building on this theory, children learn and internalize gender hierarchy through observing it modeled in the family and by peers (Collins, 1998).

Inequitable Gender Role Attitudes and Sexual Violence in Viet Nam

Research on sexual violence in Viet Nam is limited, but existing evidence suggests that it is pervasive and normative (*"Keeping silent is dying" Results from the National Study on Domestic Violence Against Women in Viet Nam*, 2010; Yount et al., 2016). While Viet Nam has laws criminalizing sexual violence, persistent barriers to reporting for women suggest that prevalence may be higher than measured (Skinnider, Montgomery, & Garrett, 2017). Inequitable gender role attitudes may distally determine sexual violence in Viet Nam by influencing sexual attitudes, beliefs, and behaviors.

Hierarchical kinship ideals, the Confucian model of gender, and the communist model of gender intersect to construct Vietnamese gender role attitudes. Vietnamese kinship ideals consider men as "inside lineage" (able to continue their father's line), and woman as "outside lineage" (unable to continue their father's line) (Rydstrøm, 2006). The Confucian model of gender sets up a clear gender hierarchy. In this model, men's bodies are associated with superior "Duong," while women's bodies are associated with inferior "Am" (Rydstrøm, 2006). "Duong" is connected with the sun, fire, heat, movement, and activity, while "Am" is connected with the moon, water, cold, rest, passivity, and inwardness (Rydstrøm, 2006). These beliefs inform hierarchical gender roles

assigned to men and women (Go et al., 2002). Hypermasculinity, or “hot” masculinity, is learned through observing older male kin and normalized through this model of gender, which in turn normalizes violence against women (Krause, Gordon-Roberts, VanderEnde, Schuler, & Yount, 2016; Rydstrøm, 2003). Confucian models of gender became embedded with communist ideals, burdening women with gender-role expectations that include responsibilities to family and nation (Schuler et al., 2006).

Distal and Proximal Determinants of Sexual Violence in Viet Nam

In-depth interviews with college-aged men in Ha Noi have shown that perceived parental expectations shape inequitable gender roles in dating and sexual relationships while at university (Yount et al., 2019). In these interviews, participants felt that parents expected women to be less independent, less argumentative, and to prioritize family and household over careers. In contrast, participants expected men to be independent, decisive, avoidant of social evils, and career oriented. These narratives also suggested that, within dating relationships, men are viewed as the initiators of sexual touch, while women must refuse indirectly by relying on passive or non-verbal sexual communication cues. Men are free to engage in casual sex, while women’s engagement in casual sex is socially risky.

The interviews also revealed theoretical proximal determinants of sexual violence in Viet Nam, including rape myth subscription, indirect sexual communication, non-consensual sexual behaviors, and sexual coercion (Yount et al., 2019). Vietnamese men’s sexual attitudes and behaviors reflected gender role hierarchy within dating and sexual relationships. Male participants rarely described active (i.e., verbal, direct, and affirmative) consent. Instead, they assumed they knew when women wanted sex by reading physical cues or by the absence of refusal. Women refused sex, but men either interpreted this as an invitation to keep trying or dismissed the refusal.

Sexual coercion was normalized, and common rape myths were endorsed (Yount et al., 2019).

Current Study

Theory and prior qualitative research in Vietnam suggest the underlying attitudes about gender and their influence on proximal determinants of sexual violence may be critical to advancing our understanding of the multifaceted underpinnings of sexual violence perpetration. This study investigates the association between Vietnamese men's gender role attitudes, formed early on through gendered social learning, and theoretically important attitudinal and knowledge proximate determinants of men's sexual violence: attitudes about rape myths, attitudes about sexual communication, knowledge about sexual consent, and knowledge about sexual coercion. We hypothesize that college-aged men in Viet Nam who have more equitable gender role attitudes will tend to express weaker support of rape myths, more equitable attitudes about sexual communication, greater knowledge of sexual consent, and greater knowledge about sexual coercion.

Methods

Parent study and study sites

Data for this analysis come from the baseline survey of 793 heterosexual and bisexual men recruited from two universities in Ha Noi to participate in a two-arm randomized control trial to test the impact of an adapted educational entertainment program to prevent sexual violence (Yount et al., 2020). Emory University and the Center for Creative Initiatives in Health and Population are undertaking the parent study. The Institutional Review Boards of Emory University (IRB 00099860) and Hanoi School of Public Health (No. 017-384/DD-YTCC) approved this study. Details of the parent study are available elsewhere (Yount et al., 2020).

The parent study is underway at two universities in Hanoi. University 1 is a 100-year-old state university that has 1,000 students enrolled and offers health programs of study. University 2 is a 24-year-old private university that has 7,000 students enrolled and offers a range of programs of study. Both universities provided letters of support for students' participation in the adaptation of the prevention program.

Study sample

Heterosexual and bisexual male participants ages 18 and 24 and enrolled in their first year at University 1 or 2 were eligible for participation. Participants were invited into the baseline survey in fall of 2019. Of the 1,017 participants invited to participate in the study, 812 (79.8%) met inclusion criteria. Of the 800 eligible participants, 7 declined participation, leaving a final baseline sample size of $N=793$. After participants missing data on any outcome were dropped, the final sample included in this analysis was $N=776$.

At baseline, seven survey modules were administered through tablet-assisted self-interviews with consenting respondents. These modules focused on sexual violence, sexual consent, rape myths, gender roles, sexual communication, drugs and alcohol, alcohol and consent, rape empathy, myths and realities about sexual violence, sexual coercion, bystander intervention, and perpetration of sexual violence

Measures

Summative scales for all study measures were validated using exploratory and then confirmatory factor analysis in MPlus™ with the weighted least square mean and variance (WLSMV) estimator.

Outcome 1: Rape Myth Attitudes Scale

The Rape Myth Attitudes (RMA) scale measures the extent of men's endorsement (or non-endorsement) of common rape myths. This scale was adapted from fourteen items of the Illinois Rape Myth Scale-Short Form (Payne, Lonsway, & Fitzgerald, 1999) and eleven items of the College Date Rape Attitude and Behavior Survey (Lanier, Elliott, Martin, & Kapadia, 1998). Example items included: *"When guys rape, it is usually because of their strong desire for sex"* and *"In most cases when a woman was raped, she was asking for it"*. Response options were originally coded using a 5-point Likert Scale ranging from totally agree (1) to totally disagree (5). Several items were reverse coded to maintain common valence, and all response options were re-coded 0-4. Two uncorrelated factors (estimated correlation 0.017) having a reasonable fit to the data (root mean square error of approximation (RMSEA) 0.10, comparative fit index (CFI) 0.89, Tucker-Lewis index (TLI) 0.87) were identified. Four items captured Rape Myths Factor 1 (RM-F1), *He didn't mean to*, with standardized loadings of 0.48-0.76. Ten items captured Rape Myths Factor 2 (RM-F2), *She asked for it/it wasn't really rape*, with standardized loadings of 0.41-0.82. After validation, the fourteen-item summative Rape Myth Attitudes scale ranged from 0-56, with a higher score denoting attitudes less accepting of rape myths.

Outcome 2: Sexual Communication Attitudes Scale

The Sexual Communication Attitudes (SCA) scale measures men's gendered attitudes towards sexual communication. It was developed for the parent study based on the review of several validated communication scales (Newton, Connelly, & Landsverk, 2001; Ritschel, Tone, Schoemann, & Lim, 2015). The ten selected items were identified as salient from formative qualitative work. Example items included: *"Listening to a women's expectations about sex can help avoid assumptions in a sexual relationship"* and *"If a woman and I have had sex before, the*

next time I want to have sex with her, I already have consent". Response options were originally coded as a 5-point Likert scale ranging from totally agree (1) to totally disagree (5). Several items were reverse coded to maintain common valence, and all response options were re-coded to range from 0-4. The seven-item scale had reasonable fit to the data (RMSEA 0.108, CFI 0.972, TLI 0.958), with standardized factor loadings of 0.24-0.90. After validation, the seven-item summative SCA scale ranged from 0-28, with a higher score denoting more gender equitable sexual communication attitudes.

Outcome 3: Sexual Consent Knowledge Scale

The Sexual Consent Attitudes scale measures men's knowledge of what constitutes active consent. This scale was adapted from fifteen items of the Sexual Consent Attitudes and Behaviors scale (T. Humphreys & Herold, 2007), and eight items of the Alcohol and Consent scale adapted from the College Date Rape Attitudes and Behaviors scale (Lanier & Elliot, 1997). Example items include *"The need to ask for sexual consent DECREASES as the length of a dating relationship INCREASES"* and *"If your partner initiates sexual contact, it is okay to continue, even if she/he is drunk"*. A 5-point Likert Scale was originally used for this scale, with response options ranging from totally agree (1) to totally disagree (5). Several items were reverse coded to maintain common valence, and all response options were re-coded to range from 0-4. For this analysis, the scale was restructured from an attitude scale to a knowledge scale by re-coding responses into "No" (0) and "Yes" (1) based on what attitudes were compliant with active consent. Two correlated factors (estimated correlation 0.377), having a reasonable fit to the data (RMSEA 0.09, CFI 0.89, TLI 0.86) were identified. Seven items captured Sexual Consent Factor 1 (SC-F1), *General consent*, with standardized factor loadings of 0.34-0.80. Five items captured Sexual Consent Factor 2 (SC-F2), *Alcohol and consent*, with standardized factor loadings of 0.30-0.98. The validated Sexual

Consent Knowledge (SConK) scale is twelve items ranging from 0-12, with a higher score indicating greater knowledge of what constitutes active consent.

Outcome 4: Sexual Coercion Knowledge Scale

The Sexual Coercion Knowledge (SCoercK) scale measures men's knowledge of what behaviors constitute sexual coercion. This nineteen-item scale was adapted from the Sexual Coercion in Intimate Relationships scale (Goetz & Shackelford, 2010; Shackelford & Goetz, 2004). Examples of items in the scale included: "*Saying that a person would have sex with you if they truly love you*" and "*Asking your dating partner repeatedly to perform a sexual act after they have said that they do not want to*". Response options were coded into "No" (0), "Yes" (1) and "Unsure" (2). Several items had to be reverse coded to maintain common valence. For analysis, "No" and "Unsure" were re-coded into one response option. The eighteen-item scale had reasonable fit to the data (RMSEA 0.12, CFI 0.98, TLI 0.98), with standardized factor loadings of 0.42-0.99. After validation, the eighteen-item SCoercK scale ranged from 0-18, with a higher score denoting greater knowledge of what constitutes sexual coercion.

Exposure: Gender Role Attitudes Scale

The Gender Role Attitudes (GRA) scale measures men's gender role attitudes. The fifteen-item scale was adapted from the Gender Equitable Men scale (Khan et al., 2018), a scale that was adapted for use in Nepal from the GEM scale (Pulerwitz & Barker, 2008), the Male Role Norms Inventory (MRNI)-Adolescent-revised scale (Levant, McDermott, Hewitt, Alto, & Harris, 2016), the Gender Attitudes Scale (Lundgren, Beckman, Chaurasiya, Subhedi, & Kerner, 2013), and the International Men and Gender Equality Survey (IMAGES) (Levtov, Barker, Contreras-Urbina, Heilman, & Verma, 2014). Example items included: "*A woman should obey her husband even*

when she disagrees with him” and “Men should be the ones to initiate dating relationships”. Response options were coded using a 5-point Likert scale ranging from Totally agree (1) to Totally disagree (5). Two items needed to be reverse coded to maintain common valence, and all items were re-coded to range from 0-4. Two uncorrelated factors (estimated correlation 0.17) having reasonable fit to the data (RMSEA 0.12, CFI 0.90, TLI 0.86) were identified. Seven items captured Gender Roles Factor 1 (GR-F1), *Norms about femininity and male privilege*, with standardized loadings of 0.99-1.98. Five items captured Gender Roles Factor 2 (GR-F2), *Norms about men’s dominance with*, with standardized factor loadings of 0.70-1.53. Following validation, the eleven-item GRA scale ranged from 0-44, with a higher score indicating more equitable gender role attitudes.

Statistical Analysis

Exploratory univariate and bivariate analyses on all scale variables were conducted. Scatterplots and histograms to visualize the spread of data were generated, and correlation coefficients between the gender-role attitudes scores and the four outcomes were calculated to preliminarily assess multicollinearity. Histograms indicated that all exposure and outcome variables were reasonably normally distributed. Sociodemographic characteristics (age, sexual orientation, ethnicity, religion, and living in Ha Noi), participants’ current relationship status, and participants’ perpetration or attempted perpetration of prior sexual violence were identified a priori as covariates for this analysis based on qualitative findings from the parent study (Yount et al., 2019). The relationship status variable was re-coded from a 5-item categorical variable into a dichotomous variable (“been in a sexual or romantic relationship”/ “never been in a sexual or romantic relationship”). Prior six-month perpetration of any sexual violence was created by summing each of nine sexual violence variables. Listwise deletion was used to drop observations

missing exposure, outcome, or covariate data. In total, 17 observations were dropped: one observation missing the sexual coercion outcome, four observations missing the ethnicity covariate, and twelve observations missing the “any prior six-month sexual violence perpetration” covariate were dropped.

Twelve linear regression models were estimated to assess the unadjusted and then adjusted associations between more equitable gender-role attitudes (i.e., a higher score on the scale) and summative scores indicating less adherence to rape myths, more equitable attitudes about sexual communication, greater knowledge about sexual consent, and greater knowledge about sexual coercion. Factor scores for each scale were generated in MPlus™ for use in regression modelling (Table 1). The covariates were assessed for multicollinearity using the tolerance and variance inflation factor (VIF). Models were adjusted for clustering by university. Adjusted models controlled for all covariates. Potential confounders were assessed using the 10% rule (Maldonado & Greenland, 1993). Significance was determined by p values less than 0.05. All analyses were conducted in STATA SE/16.1™ (StataCorp, 2019).

[Table 1. Regression Variables and Corresponding Factors]

Results

Sample Characteristics

Of the 776 men included in the analytic sample, 340 (43.8%) were from University 1, and 436 (56.2%) were from University 2. The mean age across universities was 18.1. The total sample is comprised of mostly heterosexual men (95.6%), with less than 5% bisexual men across Universities 1 and 2. Most participants identified as the ethnic majority at both University 1 (94.1%) and University 2 (97.3%). Just over half (53.5%) of the participants across universities had never been in a sexual or romantic relationship with anyone. This was higher at University 1, where 61.2% of participants had never been in a relationship, and lower at University 2 (47.5%).

The majority of participants in the total sample did not identify as religious (83.0%), while the rest were Buddhist (12.9%), Christian (3.5%), or Other (0.6%). (Table 1).

The most common living arrangement across universities was off-campus alone or with non-relatives (35.8%), followed closely by living with parents (31.8%). Living off-campus was more common for students at University 1 (43.5%) than University 2 (29.8%), while living with parents was more common for students at University 2 (43.8%) than University 1 (16.5%). Students living on campus in dormitories made up 14.7% of the total sample. This was more common at University 1 (25.0%) than at University 2 (6.7%). Of all men in the sample, 30.3% had perpetrated or attempted to perpetrate sexual violence in the prior six months (Table 2).

[Table 2. Sociodemographic characteristics of the study sample N=776 Heterosexual and Bisexual Vietnamese male college students age 18-24]

Scale Scores

For each of the three attitudinal scales – GRA, RMA, and SCA– mean scores were statistically significantly higher for men at University 1 than at University 2. Men’s average score on the GRA scale was 29.2 out of a possible 44 (SD 5.8, alpha 0.76), with men at University 1 having a higher average score (30.3) than men at University 2 (28.3). The average score on the RMA scale was 31.8 out of a possible 56 (SD 6.8, alpha 0.73), with men at University 1 scoring higher on average (33.5) than men at University 2 (30.4). Men’s average score on the SCA scale was 20.1 out of a possible 28 (SD 3.5, alpha 0.70), with University 1 men scoring higher on average (21.6) than University 2 men (19.8). The mean scores for the two knowledge scales – SConK and SCoercK – were also both statistically significantly higher at University 1 than at University 2. The average score for SConK scale was 7.1 out of a possible 12 (SD 2.5, alpha 0.66), with men from University 1 having a higher mean score (8.2) than those in University 2 (6.4). The mean score for the SCoercK scale was 5.2 out of a possible 18 (SD 5.7, alpha 0.94), with men at

University 1 having a higher mean score (6.4) than those at University 2 (4.3) (Table 3).

[Table 3. Validated Scales for Analysis]

Regression Analysis

GR-F1: Norms about femininity and male privilege

GR-F1 was associated with RM-F1, RM-F2, SCA, and SC-F1 in unadjusted and adjusted models (Table 4). GR-F1 was not associated with SC-F2 or SCoercK. GR-F1 was negatively associated with RM-F1 (-0.23, 95% CI: -0.34, -0.13; $p=0.02$), and this association changed little with adjustment (-0.24, 95% CI: -0.36, -0.12; $p=0.03$). The adjusted model showed that 12.7% of the variability in RM-F1 score was accounted for by GR-F1 score (R square = 0.1273). For every one-point increase in GR-F1, there was a decrease of 0.24 in RM-F1. GR-F1 was positively associated with RM-F2 (0.60, 95% CI: 0.25, 0.95; $p=0.03$). Adjusting for covariates showed a negligible change in the beta coefficient (0.59, 95% CI: 0.21-0.97; $p=0.03$). GR-F1 score accounted for 38.9% of the variability in RM-F2 score (R square = 0.3888). For every one-point increase in GR-F1, there was an increase of 0.59 in RM-F2. (Table 4)

GR-F1 was positively associated with sexual communication attitudes (0.59, 95% CI: 0.39, 0.78; $p=0.02$), and this association changed little with adjustment (0.59, 95% CI 0.29, 0.89; $p=0.03$). GR-F1 score accounted for 39.4% of the variability in SCA score in the adjusted model (R square = 0.3936). For every one-point increase in GR-F1, SCA increased by 0.59. GR-F1 was also associated with SC-F1 (0.41, 95% CI: 0.17, 0.64; $p=0.03$), with negligible change after adjustment (0.40, 95% CI: 0.26, 0.55; $p=0.02$). The adjusted model showed that 19.0% of the variability in SC-F1 score was accounted for by GR-F1 (R square = 0.1900). For every one-point increase in GR-F1, there was a 0.40 increase in SC-F1. (Table 4)

GR-F2 - Norms about male dominance

GR-F2 was only associated with RM-F1 and was not associated with RM-F2, SCA, SC-F1, SC-F2, or SCoercK (Table 4). GR-F2 was positively associated with RM-F1 (0.28, 95% CI: 0.16, 0.39; $p=0.02$), and this association changed little with adjustment (0.27, 95% CI: 0.15, 0.40; $p=0.02$). GR-F2 score accounted for 12.7% of the variability in RM-F1 score in the adjusted model. For every one-point increase in GR-F2, there was a 0.27 increase in RM-F1. (Table 4)

[Table 4. Association of gender role attitudes with proximal determinants of sexual violence]

Discussion

This analysis assessed the relationship between the underlying gender role attitudes of Vietnamese college-aged men and four proximal determinants of sexual violence. Understanding these relationships is important to begin to model the pathways by which underlying attitudes about gender roles may influence men's risk of perpetrating sexual violence. In general, we found that men's gender role attitudes, broken into *attitudes about normative femininity and male privilege*, and *attitudes about male dominance*, were sometimes associated with rape myth attitudes, sexual communication attitudes, and general sexual consent knowledge. Gender role attitudes were not associated with alcohol and consent knowledge or with sexual coercion knowledge. In all relationships but one, more equitable gender role attitudes were associated with more equitable sexual attitudes and with greater sexual knowledge. The relationship between gender role attitudes and the four outcomes did not change significantly based on sociodemographic background, relationship status, or prior or attempted perpetration of sexual violence in the last six months. Nearly 1 in 3 Vietnamese men in this sample had perpetrated or attempted to perpetrate sexual violence in the past six months, consistent with existing evidence on men's perpetration prevalence in other contexts (Loh et al., 2005; Maxwell, Robinson, & Post,

2003; Thompson, Kingree, Zinzow, & Swartout, 2015).

Men scored relatively high on the GRA, RMA, and SCA scales, indicating equitable attitudes. Distinctively, the qualitative findings showed that men held inequitable gender role attitudes, rape myth attitudes, and sexual communication attitudes (Yount et al., 2019). Vietnamese men who did not subscribe to gender role attitudes of femininity and male privilege may subscribe less to “she asked for it/it wasn’t really rape” attitudes. Inversely, men with the same gender role attitudes may subscribe more to “he didn’t mean to” rape myths. This finding seems counterintuitive. It could have to do with the translation of items from English to Vietnamese, or the scale could be failing to capture all dimensions of the “he didn’t mean to” rape myth. This pathway warrants further investigation. Men who did not subscribe to gender role attitudes of male dominance may subscribe less to “he didn’t mean to” rape myths. There was no relationship between the same gender role attitudes around male dominance and “she asked for it/it wasn’t really rape” attitudes. These findings partially substantiate the evidence that underlying inequitable gender roles are related to rape myth subscription, and indicate that there may be different relationships between specific gender role attitudes and specific rape myth attitudes. (Edwards, Turchik, Dardis, Reynolds, & Gidycz, 2011).

Men with more equitable attitudes around femininity and male privilege may hold more equitable sexual communication attitudes. The qualitative data show that Vietnamese men’s sexual communication attitudes involved gender role attitudes around femininity and male dominance (Yount et al., 2019). Interestingly, attitudes of male dominance was not associated with sexual communication attitudes in this analysis. The findings from this analysis and the qualitative analysis add to the evidence that underlying gender role attitudes influence sexual communication attitudes through shaping sexual scripts (Gagnon, 1990). The implication that an equitable shift in

certain gender role attitudes of men could correspond with a shift in sexual communication attitudes and conceivably behavior, provides nuance to challenges to the theory of miscommunication (Beres, 2010; Kitzinger & Frith, 1999; O'byrne et al., 2006). This theory suggests that men's inability to understand women's sexual communication leads to sexual violence. Contemporary challenges to this theory posit that women refuse sex competently, and that men understand complex communications of sexual refusal. Embedded gender role hierarchy may play more of a role in men not "hearing" women's sexual communications than an inability to understand communications.

The knowledge outcomes were mixed. Vietnamese men who have more equitable attitudes around femininity and male privilege may have greater knowledge of what constitutes active consent, but no greater knowledge of alcohol and consent, or of sexual coercion. Evidence on consent behaviors in other contexts and in Viet Nam shows that regardless of knowledge of active consent, the *practice* of active consent is rare (Beres, 2010; T. P. Humphreys, 2004; Yount et al., 2019). Investigating the relationship between knowledge of active consent and practice of active consent would be valuable in future studies. Men scored poorly on the sexual coercion knowledge scale, which is consistent with the qualitative finding that Vietnamese men did not view sexual coercion as sexual violence (Yount et al., 2019). Gender role attitudes about male dominance was not significantly associated with any knowledge outcome.

Limitations

While this analysis highlights associations between gender role attitudes and proximal determinants of sexual violence, it cannot confirm causal relationships in the pathway to sexual violence. Findings are limited to the sample population of urban, college-aged, mostly heterosexual, Vietnamese men. Methodologically, scales may not always have captured all

components of the attitude or knowledge they were measuring. The RMA scale exemplifies this. While the validated scale captured several types of myth, other common rape myths like *rape cannot happen in intimate partnerships, or during casual sex, rape is perpetrated by strangers, and rape is physically violent*, were not captured. The lack of association between gender role attitudes of male dominance and most of the outcomes is notable and could indicate that the scale did not accurately capture all aspects of male dominance in Viet Nam, or that attitudes of male dominance are not related to these proximal determinants of sexual violence. The relationship between attitudes of male dominance and proximal determinants of sexual violence in Viet Nam needs further investigation. Finally, the survey did not include items about sexual consent or coercion behavior, so the association between gender role attitudes and these sexual behaviors could not be assessed.

Conclusions

This analysis indicates that shifting college-aged men's inequitable gender role attitudes could result in less rape myth subscription, more equitable sexual communication attitudes, and improved knowledge of consent in Viet Nam. The structured investigation of the association between one distal determinant and proximal determinants of sexual violence is unique and adds evidence to the extant body of literature on pathways to men's sexual violence perpetration (Lim & Howard, 1998; Malamuth et al., 1995; Tharp et al., 2013). The findings also add nuance to the existing body of literature on the construction of Vietnamese gender roles and the gender role hierarchy present within dating and sexual relationships in college-aged men (Rydstrøm, 2003, 2006; Yount et al., 2016; Yount et al., 2019). Despite notable institutional efforts to establish gender equality and criminalize violence against women in Viet Nam, the high prevalence of sexual violence makes this analysis salient.

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Conflicts of interest/Competing interests

The authors declare no competing interests.

Ethics approval

The data analyzed in this analysis is from a study that was approved by the Emory University Institutional Review Board (IRB00099860) and the Hanoi School of Public Health (384/2017/YTCC-HD3). The IRB protocol is reviewed and renewed annually. IRB approved consent forms are available for review.

Consent to participate

Informed consent was self-administered via tablet.

Consent for publication

The study team is following ICMJE guidelines for the determination of authorship.

Availability of data and material

Data is available upon request.

Code availability (software application or custom code)

Code is available upon request.

Authors' contributions

ECJ drafted the paper and did the analysis. IRB and ZK validated summative scales and critically reviewed the manuscript. KY, THM, JMS contributed expert knowledge on all aspects of the manuscript and the analysis plan and critically reviewed the manuscript. All authors made critical contributions to sections of the manuscript and approved the final manuscript for submission.

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Manuscript References

- Bandura, A., & Walters, R. H. (1977). *Social learning theory* (Vol. 1): Prentice-hall Englewood Cliffs, NJ.
- Basile, K. C., Smith, S. G., Breiding, M. J., Black, M. C., & Mahendra, R. (2014). *Sexual Violence Surveillance: Uniform Definitions and Recommended Data Elements, Version 2.0*. Retrieved from Atlanta, Georgia:
- Bennice, J. A., Resick, P. A., Mechanic, M., & Astin, M. (2003). The relative effects of intimate partner physical and sexual violence on post-traumatic stress disorder symptomatology. *Violence and victims, 18*(1), 87-94.
- Beres, M. (2010). Sexual miscommunication? Untangling assumptions about sexual communication between casual sex partners. *Culture, health & sexuality, 12*(1), 1-14.
- Beres, M. A. (2007). 'Spontaneous' sexual consent: An analysis of sexual consent literature. *Feminism & Psychology, 17*(1), 93-108.
- Beres, M. A. (2010). Sexual miscommunication? Untangling assumptions about sexual communication between casual sex partners. *Culture, health & sexuality, 12*(1), 1-14.
- Bohner, G., Reinhard, M. A., Rutz, S., Sturm, S., Kerschbaum, B., & Effler, D. (1998). Rape myths as neutralizing cognitions: Evidence for a causal impact of anti-victim attitudes on men's self-reported likelihood of raping. *European Journal of Social Psychology, 28*(2), 257-268.
- Borowsky, I. W., Hogan, M., & Ireland, M. (1997). Adolescent sexual aggression: Risk and protective factors. *Pediatrics, 100*(6), e7-e7.
- Cantor, D., Fisher, B., Chibnall, S., Townsend, R., Lee, H., Bruce, C., & Thomas, G. (2015). *Report on the AAU Campus Climate Survey on Sexual Assault and Sexual Misconduct*. Retrieved from https://www.aau.edu/sites/default/files/%40%20Files/Climate%20Survey/AAU_Campus_Climate_Survey_12_14_15.pdf
- Chan, K. L., Straus, M. A., Brownridge, D. A., Tiwari, A., & Leung, W.-C. (2008). Prevalence of dating partner violence and suicidal ideation among male and female university students worldwide. *Journal of midwifery & women's health, 53*(6), 529-537.
- Collins, P. H. (1998). It's all in the family: Intersections of gender, race, and nation. *Hypatia, 13*(3), 62-82.
- DeGue, S., & DiLillo, D. (2004). Understanding perpetrators of nonphysical sexual coercion: Characteristics of those who cross the line. *Violence and victims, 19*(6), 673-688.
- DeGue, S., Valle, L. A., Holt, M. K., Massetti, G. M., Matjasko, J. L., & Tharp, A. T. (2014). A systematic review of primary prevention strategies for sexual violence perpetration. *Aggression and violent behavior, 19*(4), 346-362.
- Desai, A., Edwards, K., & Gidycz, C. (2008). *Testing an integrative model of sexual aggression in college men*. Paper presented at the AC Aosved (Chair), Sexual violence perpetration: Individual and contextual factors. Symposium conducted at the annual meeting of the Association for Behavioral and Cognitive Therapies, Orlando, FL.
- Edwards, K. M., Turchik, J. A., Dardis, C. M., Reynolds, N., & Gidycz, C. A. (2011). Rape myths: History, individual and institutional-level presence, and implications for change. *Sex Roles, 65*(11-12), 761-773.
- French, B. H., & Neville, H. A. (2017). What is nonconsensual sex? Young women identify sources of coerced sex. *Violence against women, 23*(3), 368-394.

- Frith, H., & Kitzinger, C. (1997). *Talk about sexual miscommunication*. Paper presented at the Women's Studies International Forum.
- Gagnon, J. H. (1990). The explicit and implicit use of the scripting perspective in sex research. *Annual review of sex research*, 1(1), 1-43.
- Global and regional estimates of violence against women: prevalence and health effects of intimate partner violence and non-partner sexual violence*. (2013). Retrieved from Geneva, Switzerland: https://apps.who.int/iris/bitstream/handle/10665/85239/9789241564625_eng.pdf;jsessionid=F66396F3B59E254DAB9F4AEE4542F42F?sequence=1
- Go, V. F.-I., Quan, V. M., Chung, A., Zenilman, J., Hanh, V. T. M., & Celentano, D. (2002). Gender gaps, gender traps: sexual identity and vulnerability to sexually transmitted diseases among women in Vietnam. *Social Science & Medicine*, 55(3), 467-481.
- Goetz, A. T., & Shackelford, T. K. J. H. o. s.-r. m. (2010). Sexual coercion in intimate relationships scale. 125-127.
- Hickman, S. E., & Muehlenhard, C. L. (1999). "By the semi-mystical appearance of a condom": How young women and men communicate sexual consent in heterosexual situations. *Journal Of Sex Research*, 36(3), 258-272.
- Humphreys, T., & Herold, E. (2007). Sexual consent in heterosexual relationships: Development of a new measure. *Sex Roles*, 57(3-4), 305-315.
- Humphreys, T. P. (2004). Understanding sexual consent: An empirical investigation of the normative script for young heterosexual adults. *Making sense of sexual consent*, 209-225.
- Jewkes, R., Sikweyiya, Y., Morrell, R., & Dunkle, K. (2011). Gender inequitable masculinity and sexual entitlement in rape perpetration South Africa: findings of a cross-sectional study. *PloS one*, 6(12).
- "Keeping silent is dying" Results from the National Study on Domestic Violence Against Women in Viet Nam. (2010). Retrieved from Viet Nam: https://www2.unwomen.org/-/media/field%20office%20eseasia/docs/publications/2015/05/dv_study_executive_summary_eng.pdf?la=en&vs=3050
- Khan, Z., Jackson, E., Clark, C. J., Bergenfield, I., Puri, M., & Yount, K. M. (2018). *Supporting girls' education: an evaluation of 'Room to Read' in Nepal - Emerging baseline findings Executive Summary*. Retrieved from London, United Kingdom: <https://www.gage.odi.org/publication/supporting-girls-education-nepal-es/>
- Kitzinger, C., & Frith, H. (1999). Just say no? The use of conversation analysis in developing a feminist perspective on sexual refusal. *Discourse & Society*, 10(3), 293-316.
- Krause, K. H., Gordon-Roberts, R., VanderEnde, K., Schuler, S. R., & Yount, K. M. (2016). Why do women justify violence against wives more often than do men in Vietnam? *Journal of interpersonal violence*, 31(19), 3150-3173.
- La France, B. H. (2010). What verbal and nonverbal communication cues lead to sex?: An analysis of the traditional sexual script. *Communication Quarterly*, 58(3), 297-318.
- Lanier, C. A., & Elliot, M. N. (1997). A new instrument for the evaluation of a date rape prevention program. *Journal of College Student Development*.
- Lanier, C. A., Elliott, M. N., Martin, D. W., & Kapadia, A. (1998). Evaluation of an intervention to change attitudes toward date rape. *Journal of American College Health*, 46(4), 177-180.
- Leserman, J. (2005). Sexual abuse history: prevalence, health effects, mediators, and psychological treatment. *Psychosomatic medicine*, 67(6), 906-915.

- Levant, R. F., McDermott, R. C., Hewitt, A. A., Alto, K. M., & Harris, K. T. J. J. o. C. p. (2016). Confirmatory factor analytic investigation of variance composition, gender invariance, and validity of the Male Role Norms Inventory-Adolescent-revised (MRNI-Ar). *63*(5), 543.
- Levtov, R. G., Barker, G., Contreras-Urbina, M., Heilman, B., & Verma, R. (2014). Pathways to gender-equitable men: Findings from the international men and gender equality survey in eight countries. *Men and Masculinities, 17*(5), 467-501.
- Lim, S., & Howard, R. (1998). Antecedents of sexual and non-sexual aggression in young Singaporean men. *Personality and individual differences, 25*(6), 1163-1182.
- Loh, C., Gidycz, C. A., Lobo, T. R., & Luthra, R. (2005). A prospective analysis of sexual assault perpetration: Risk factors related to perpetrator characteristics. *Journal of interpersonal violence, 20*(10), 1325-1348.
- Lundgren, R., Beckman, M., Chaurasiya, S. P., Subhedi, B., & Kerner, B. (2013). Whose turn to do the dishes? Transforming gender attitudes and behaviours among very young adolescents in Nepal. *Gender & Development, 21*(1), 127-145.
- Malamuth, N. M., Linz, D., Heavey, C. L., Barnes, G., & Acker, M. (1995). Using the confluence model of sexual aggression to predict men's conflict with women: A 10-year follow-up study. *Journal of personality and social psychology, 69*(2), 353.
- Maldonado, G., & Greenland, S. (1993). Simulation study of confounder-selection strategies. *American journal of epidemiology, 138*(11), 923-936.
- Maxwell, C. D., Robinson, A. L., & Post, L. A. (2003). The nature and predictors of sexual victimization and offending among adolescents. *Journal of Youth and Adolescence, 32*(6), 465-477.
- Muehlenhard, C. L., Humphreys, T. P., Jozkowski, K. N., & Peterson, Z. D. (2016). The complexities of sexual consent among college students: A conceptual and empirical review. *The Journal of Sex Research, 53*(4-5), 457-487.
- Muehlenhard, C. L., & Rodgers, C. S. (1998). Token resistance to sex: New perspectives on an old stereotype. *Psychology of Women Quarterly, 22*(3), 443-463.
- Murnen, S. K., Wright, C., & Kaluzny, G. (2002). If "boys will be boys," then girls will be victims? A meta-analytic review of the research that relates masculine ideology to sexual aggression. *Sex roles, 46*(11-12), 359-375.
- Newton, R. R., Connelly, C. D., & Landsverk, J. A. (2001). An examination of measurement characteristics and factorial validity of the Revised Conflict Tactics Scale. *Educational and Psychological Measurement, 61*(2), 317-335.
- O'byrne, R., Rapley, M., & Hansen, S. (2006). 'You couldn't say "no", could you?': young men's understandings of sexual refusal. *Feminism & Psychology, 16*(2), 133-154.
- Payne, D. L., Lonsway, K. A., & Fitzgerald, L. F. (1999). Rape myth acceptance: Exploration of its structure and its measurement using the Illinois rape myth acceptance scale. *Journal of Research in Personality, 33*(1), 27-68.
- Pulerwitz, J., & Barker, G. (2008). Measuring attitudes toward gender norms among young men in Brazil: development and psychometric evaluation of the GEM scale. *Men and Masculinities, 10*(3), 322-338.
- Ritschel, L. A., Tone, E. B., Schoemann, A. M., & Lim, N. E. (2015). Psychometric properties of the Difficulties in Emotion Regulation Scale across demographic groups. *Psychological Assessment, 27*(3), 944.

- Ryan, K. M. (2011). The relationship between rape myths and sexual scripts: The social construction of rape. *Sex roles, 65*(11-12), 774-782.
- Rydström, H. (2003). Encountering “hot” anger: Domestic violence in contemporary Vietnam. *Violence against women, 9*(6), 676-697.
- Rydström, H. (2006). Masculinity and punishment: Men's upbringing of boys in rural Vietnam. *Childhood, 13*(3), 329-348.
- Santana, M. C., Raj, A., Decker, M. R., La Marche, A., & Silverman, J. G. (2006). Masculine gender roles associated with increased sexual risk and intimate partner violence perpetration among young adult men. *Journal of urban health, 83*(4), 575-585.
- Schatzel-Murphy, E. A., Harris, D. A., Knight, R. A., & Milburn, M. A. (2009). Sexual coercion in men and women: Similar behaviors, different predictors. *Archives of Sexual Behavior, 38*(6), 974-986.
- Schuler, S. R., Anh, H. T., Ha, V. S., Minh, T. H., Mai, B. T. T., & Thien, P. V. (2006). Constructions of gender in Vietnam: In pursuit of the ‘Three Criteria’. *Culture, health & sexuality, 8*(5), 383-394.
- Shackelford, T. K., & Goetz, A. T. (2004). Men’s sexual coercion in intimate relationships: Development and initial validation of the Sexual Coercion in Intimate Relationships Scale. *Violence and Victims, 19*(5), 541-556.
- Skinider, E., Montgomery, R., & Garrett, S. (2017). *The Trial of Rape - Understanding the criminal justice system response to sexual violence in Thailand and Viet Nam*. Retrieved from <https://www2.unwomen.org/-/media/field%20office%20eseasia/docs/publications/2017/10/trial-of-rape-executive-summary-eng-r3.pdf?la=en&vs=2440>
- Smith, S., & Breiding, M. (2011). Chronic disease and health behaviours linked to experiences of non-consensual sex among women and men. *Public Health, 125*(9), 653-659.
- StataCorp. (2019). Stata Statistical Software: Release 16. In. College Station, TX: .
- Struckman-Johnson, C., Struckman-Johnson, D., & Anderson, P. B. (2003). Tactics of sexual coercion: When men and women won't take no for an answer. *Journal Of Sex Research, 40*(1), 76-86.
- Tharp, A. T., DeGue, S., Valle, L. A., Brookmeyer, K. A., Massetti, G. M., & Matjasko, J. L. (2013). A systematic qualitative review of risk and protective factors for sexual violence perpetration. *Trauma, Violence, & Abuse, 14*(2), 133-167.
- Thompson, M. P., Kingree, J. B., Zinzow, H., & Swartout, K. (2015). Time-varying risk factors and sexual aggression perpetration among male college students. *Journal of Adolescent Health, 57*(6), 637-642.
- Tjaden, P. G., & Thoennes, N. (2006). Extent, nature, and consequences of rape victimization: Findings from the National Violence Against Women Survey.
- Warren, P., Swan, S., & Allen, C. T. (2015). Comprehension of sexual consent as a key factor in the perpetration of sexual aggression among college men. *Journal of Aggression, Maltreatment & Trauma, 24*(8), 897-913.
- Yount, K. M., Higgins, E. M., VanderEnde, K. E., Krause, K. H., Minh, T. H., Schuler, S. R., & Anh, H. T. (2016). Men’s perpetration of intimate partner violence in Vietnam: Gendered social learning and the challenges of masculinity. *Men and Masculinities, 19*(1), 64-84.
- Yount, K. M., Lewis, P., Bergenfeld, I., Quach, T. T., Minh, T. H., & Sales, J. (2019). Manufacturing Gender Hierarchy and Sexual Violence in Dating Relationships: A

Qualitative Study of University Men in Vietnam [Unpublished]. *Journal Of Sex Research*.

Yount, K. M., Minh, T. H., Trang, Q. T., Cheong, Y. F., & Sales, J. M. (2020). Preventing Sexual Violence in College Men: A Randomized-Controlled Trial of GlobalConsent [Unpublished]. *BMC public health*.

Tables

Table 1. *Variables Included in Regression Analysis*

Variables	Scale	Corresponding Factors	Construct
Outcome 1: Rape myth attitudes	RMA	RM-F1	<i>He didn't mean to</i>
		RM-F2	<i>She asked for it/it wasn't really rape</i>
Outcome 2: Sexual communication attitudes	SCA	SCA	<i>Gendered attitudes towards sexual communication</i>
Outcome 3: Sexual consent knowledge	SConK	SC-F1	<i>General consent knowledge</i>
		SC-F2	<i>Alcohol and consent knowledge</i>
Outcome 4: Sexual coercion knowledge	SCoercK	SCK	<i>Sexual coercion knowledge</i>
Exposure: Gender role attitudes	GRA	GR-F1	<i>Norms about femininity and male privilege</i>
		GR-F2	<i>Norms about male dominance</i>

Table 2. Sociodemographic characteristics of the study sample N=776 Heterosexual and Bisexual Vietnamese male college students age 18-24

	Total (n=776)	University 1 (n=340)	University 2 (n=436)	Significant Difference
	Mean (SD)	Mean (SD)	Mean (SD)	
Age in years				
18-24	18.06 (0.39)	18.08 (0.49)	18.05 (0.28)	
	%	%	%	
Sexual Orientation				
Heterosexual	95.62	95.59	95.64	
Bisexual	4.38	4.41	4.36	
Ethnicity				*
Ethnic majority	95.88	94.12	97.25	
Ethnic minority	4.12	5.88	2.75	
Relationship Status				*
Been in a sexual or romantic relationship	46.52	38.82	52.52	
Never been in a sexual or romantic relationship	53.48	61.18	47.48	
Religion				
Buddhist	12.89	9.41	15.60	
Christian	3.48	3.24	3.67	
None	82.99	86.76	80.05	
Other	0.64	0.59	0.69	
Lived in Hanoi at least 1 year				*
Yes	48.84	26.47	66.28	
No	51.16	73.53	33.72	
Living arrangement in Hanoi				*
With parents	31.83	16.47	43.81	
With other relatives	13.53	13.53	13.53	
Dormitory/on campus	14.69	25.00	6.65	
Off campus alone or with non-relatives	35.82	43.53	29.82	
Other	2.19	0.29	3.67	
Don't know	1.93	1.18	2.52	
Prior perpetration or attempted perpetration of sexual violence				*
Yes	30.28	24.41	34.86	
No	69.72	75.59	65.14	

*P < 0.05

Table 3. Validated scales for analysis

Variable	Description			Total N=793			University 1 N=345			University 2 N=448		
	# Items	Item response range	Scale Range	M (SD)	alpha	Min-Max	M (SD)	alpha	Min-Max	M (SD)	alpha	Min-Max
Knowledge (higher score indicates greater knowledge) Sexual Consent* Sexual Coercion*	12	0-1	0-12	7.1 (2.5)	0.66	0-12	8.2 (2.1)	0.54	2-12	6.4 (2.5)	0.64	0-12
	18	0-1	0-18	5.2 (5.7)	0.94	0-18	6.4 (6.2)	0.95	0-18	4.3 (5.0)	0.93	0-18
Attitudes (higher score indicates favorable/equitable attitudes) Rape Myths* Gender Roles* Sexual Communication*	14	0-4	0-56	31.8 (6.8)	0.73	0-54	33.5 (6.4)	0.75	8-54	30.4 (6.8)	0.72	0-52
	11	0-4	0-44	29.2 (5.8)	0.76	4-44	30.3 (5.2)	0.72	11-44	28.3 (6.0)	0.78	4-44
	7	0-4	0-28	20.1 (3.5)	0.70	9-28	21.6 (3.1)	0.69	11-28	19.8 (3.5)	0.68	9-28

*indicates significant difference in means ($p < 0.05$) by university, based on two sample t-tests

Table 4. Association of gender role attitudes with proximal determinants of sexual violence

Independent Variable	Unadjusted Parameter Estimates			Parameter estimates adjusted for SCD, relationship status, and perpetration of prior sexual violence		
	β	95% confidence interval	<i>p</i>	β	95% confidence interval	<i>p</i>
	<i>RM-F1</i>					
<i>GR-F1</i>	-0.23	-0.34, -0.13	0.023	-0.24	-0.36, -0.12	0.026
<i>GR-F2</i>	0.28	0.16, 0.39	0.021	0.27	0.15, 0.40	0.023
	<i>RM-F2</i>					
<i>GR-F1</i>	0.60	0.25, 0.95	0.029	0.59	0.21, 0.97	0.032
<i>GR-F2</i>	0.09	-0.002, 0.02	0.061	0.01	-0.09, 0.11	0.410
	<i>SCA</i>					
<i>GR-F1</i>	0.59	0.39, 0.78	0.017	0.59	0.29, 0.89	0.026
<i>GR-F2</i>	-0.12	-1.11, 0.87	0.378	-0.12	-1.09, 0.86	0.370
	<i>SC-F1</i>					
<i>GR-F1</i>	0.41	0.17, 0.64	0.029	0.40	0.26, 0.55	0.018
<i>GR-F2</i>	-0.01	-0.44, 0.42	0.847	-0.005	-0.27, 0.26	0.836
	<i>SC-F2</i>					
<i>GR-F1</i>	0.20	-0.18, 0.58	0.093	0.20	-0.12, 0.52	0.079
<i>GR-F2</i>	-0.03	-0.26, 0.19	0.304	-0.03	-0.20, 0.13	0.242
	<i>SCoerck</i>					
<i>GR-F1</i>	0.13	-0.39, 0.65	0.193	0.13	-0.41, 0.67	0.196
<i>GR-F2</i>	-0.07	-1.63, 1.49	0.671	-0.07	-1.56, 1.42	0.657

Chapter 4: Conclusions and Recommendations

Men who perpetrate sexual violence exist within a social environment that includes their attitudes, beliefs, behaviors, and character traits, their relationships with family and peers, community norms, and societal norms. Compiling empirical knowledge on what factors in men's social environments may coalesce to drive sexual violence perpetration is key to understanding how to prevent violence. While research has identified many risk factors for men's sexual violence, the myriad ways in which risk factors interact with each other to form pathways is understudied. To date, only two models offer a cohesive explanation of pathways to sexual violence perpetration: The Confluence Model and the Antecedents of Sexual and Non-sexual Aggression Model (Lim & Howard, 1998; Malamuth et al., 1995). Multi-contextual evidence on the pathways to sexual violence perpetration from diverse samples of people is also lacking. Most of the substantial body of literature on perpetration risk factors comes from samples of heterosexual college-aged men or sexual offenders in the United States (Tharp et al., 2013). The cisgender, heteronormative perspective shapes most research on sexual violence and sexual attitudes and behaviors. It cannot be assumed that all gender and sexual groups perpetrate or experience sexual violence in the same ways. These gaps in the literature should be addressed to provide nuanced understandings of sexual violence perpetration outside of the United States and in gender and sexual minorities.

This analysis is unique in that it investigates one component of the pathway to sexual violence in Viet Nam: the relationship between a distal determinant (i.e., gender roles) and proximal determinants (i.e., rape myth attitudes, sexual communication attitudes, sexual consent knowledge, and sexual coercion knowledge). This analysis implies that shifting Vietnamese men's inequitable gender role attitudes to be more equitable could, in turn, lead to less endorsement of certain rape myths, more equitable sexual communication attitudes, and increased knowledge of

general sexual consent. Conceivably, this could reduce sexual violence perpetration. Both the findings from this analysis and the existing body of literature on gender in Viet Nam suggest that including a focus on gender role attitudes in prevention programming for men's sexual violence is critical.

The high prevalence of men's sexual violence perpetration globally illuminates the need for effective sexual violence prevention programming for men. Currently, there are only three sexual violence prevention strategies that were found to be effective in decreasing sexual violence behavioral outcomes after rigorous evaluation: the *Safe Dates* program (Foshee, Bauman, Ennett, Linder, Benefield, & Suchindran, 2004), the *Shifting Boundaries* program (Taylor, Woods, & Mumford, 2011), and the 1994 U.S. Violence Against Women Act (VAWA) (Boba & Lilly, 2009) (DeGue et al., 2014). Both the programs and VAWA were implemented in the United States, and none of them were tailored for men. There needs to be a concerted effort in public health to develop and implement evidence-based, context-specific sexual violence prevention programs for men. As both gender role attitudes and exposure to violence in childhood are key distal determinants of future sexual violence perpetration, these targeted programs should be implemented early and often. Finally, there is an urgent need for post-program (i.e., after implementation) evaluation of sexual violence prevention programs to ensure they are effective and that their effect holds over time. A relevant example of this is the 4-year post-intervention evaluation of *Safe Dates* (Foshee et al., 2004).

The public health implications for effective, early, consistent, targeted, context-specific sexual violence primary prevention are far reaching. This thesis outlines the numerous physical and mental health outcomes that survivors of sexual violence face. Universal application of effective sexual violence primary prevention would decrease the prevalence of men's perpetration,

eliminate an array of serious health impacts on millions of people, and contribute to ending intergenerational cycles of violence.

Thesis References

- Abbey, A., Parkhill, M. R., BeShears, R., Clinton-Sherrod, A. M., & Zawacki, T. (2006). Cross-sectional predictors of sexual assault perpetration in a community sample of single African American and Caucasian men. *Aggressive Behavior: Official Journal of the International Society for Research on Aggression*, 32(1), 54-67.
- Abrahams, N., Jewkes, R., Hoffman, M., & Laubscher, R. (2004). Sexual violence against intimate partners in Cape Town: prevalence and risk factors reported by men. *Bulletin of the world health organization*, 82, 330-337.
- Adinew, Y. M., & Hagos, M. A. (2017). Sexual violence against female university students in Ethiopia. *BMC international health and human rights*, 17(1), 19.
- Anderson, M. J. (2004). Negotiating sex. *Southern California Law Review*, 78, 1401.
- Bandura, A., & Walters, R. H. (1977). *Social learning theory* (Vol. 1): Prentice-hall Englewood Cliffs, NJ.
- Basile, K. C., Smith, S. G., Breiding, M. J., Black, M. C., & Mahendra, R. (2014). *Sexual Violence Surveillance: Uniform Definitions and Recommended Data Elements, Version 2.0*. Retrieved from Atlanta, Georgia:
- Bennice, J. A., Resick, P. A., Mechanic, M., & Astin, M. (2003). The relative effects of intimate partner physical and sexual violence on post-traumatic stress disorder symptomatology. *Violence and victims*, 18(1), 87-94.
- Beres, M. (2010). Sexual miscommunication? Untangling assumptions about sexual communication between casual sex partners. *Culture, health & sexuality*, 12(1), 1-14.
- Beres, M. A. (2007). 'Spontaneous' sexual consent: An analysis of sexual consent literature. *Feminism & Psychology*, 17(1), 93-108.
- Beres, M. A. (2010). Sexual miscommunication? Untangling assumptions about sexual communication between casual sex partners. *Culture, health & sexuality*, 12(1), 1-14.
- Beres, M. A. (2014). Rethinking the concept of consent for anti-sexual violence activism and education. *Feminism & Psychology*, 24(3), 373-389.
- Black, M. C., Basile, K. C., Breiding, M. J., Smith, S. G., Walters, M. L., Merrick, M. T., . . . Stevens, M. R. (2011). *The National Intimate Partner and Sexual Violence Survey*. Retrieved from Atlanta, GA: https://www.cdc.gov/violenceprevention/pdf/nisvs_report2010-a.pdf
- Boba, R., & Lilley, D. (2009). Violence Against Women Act (VAWA) funding: A nationwide assessment of effects on rape and assault. *Violence Against Women*, 15(2), 168-185.
- Boeringer, S. B. (1996). Influences of fraternity membership, athletics, and male living arrangements on sexual aggression. *Violence against women*, 2(2), 134-147.
- Bohner, G., Eyssel, F., Pina, A., Siebler, F., Viki, G., Horvath, M., & Brown, J. (2009). Rape: Challenging contemporary thinking. In: Willan Cullompton.
- Bohner, G., Eyssel, F., Pina, A., Siebler, F., & Viki, G. T. (2013). Rape myth acceptance: Cognitive, affective and behavioural effects of beliefs that blame the victim and exonerate the perpetrator. In *Rape* (pp. 40-68): Willan.
- Bohner, G., Jarvis, C. I., Eyssel, F., & Siebler, F. (2005). The causal impact of rape myth acceptance on men's rape proclivity: Comparing sexually coercive and noncoercive men. *European Journal of Social Psychology*, 35(6), 819-828.
- Bohner, G., Reinhard, M. A., Rutz, S., Sturm, S., Kerschbaum, B., & Effler, D. (1998). Rape myths as neutralizing cognitions: Evidence for a causal impact of anti-victim attitudes on

- men's self-reported likelihood of raping. *European Journal of Social Psychology*, 28(2), 257-268.
- Borowsky, I. W., Hogan, M., & Ireland, M. (1997). Adolescent sexual aggression: Risk and protective factors. *Pediatrics*, 100(6), e7-e7.
- Brady, G., & Lowe, P. (2020). 'Go on, Go on, Go on': Sexual Consent, Child Sexual Exploitation and Cups of Tea. *Children & Society*, 34(1), 78-92.
- Brady, G., Lowe, P., Brown, G., Osmond, J., & Newman, M. (2018). 'All in all it is just a judgement call': issues surrounding sexual consent in young people's heterosexual encounters. *Journal of Youth Studies*, 21(1), 35-50.
- Burt, M. R. (1980). Cultural myths and supports for rape. *Journal of personality and social psychology*, 38(2), 217.
- Cam, H., Kanthoul, L., Trung, L. H., & Duc, D. T. (2012). 'Teach the wife when she first arrives' Trajectories and pathways into violent and non-violent masculinities in Hue City and Phu Xuyen district, Viet Nam. Retrieved from Geneva, Switzerland: http://www.partners4prevention.org/sites/default/files/resources/qualitative_study_on_masculinities_gbv_eng.pdf
- Campbell, R., Lichty, L. F., Sturza, M., & Raja, S. (2006). Gynecological health impact of sexual assault. *Research in nursing & health*, 29(5), 399-413.
- Cantor, D., Fisher, B., Chibnall, S., Townsend, R., Lee, H., Bruce, C., & Thomas, G. (2015). *Report on the AAU Campus Climate Survey on Sexual Assault and Sexual Misconduct*. Retrieved from https://www.aau.edu/sites/default/files/%40%20Files/Climate%20Survey/AAU_Campus_Climate_Survey_12_14_15.pdf
- Carr, J. L., & VanDeusen, K. M. (2004). Risk factors for male sexual aggression on college campuses. *Journal of family violence*, 19(5), 279-289.
- Chan, K. L., Straus, M. A., Brownridge, D. A., Tiwari, A., & Leung, W.-C. (2008). Prevalence of dating partner violence and suicidal ideation among male and female university students worldwide. *Journal of midwifery & women's health*, 53(6), 529-537.
- Chapleau, K. M., & Oswald, D. L. (2010). Power, sex, and rape myth acceptance: Testing two models of rape proclivity. *Journal Of Sex Research*, 47(1), 66-78.
- Christopher, F. S., Madura, M., & Weaver, L. (1998). Premarital sexual aggressors: A multivariate analysis of social, relational, and individual variables. *Journal of Marriage and the Family*, 56-69.
- Cloutier, S., Martin, S. L., & Poole, C. (2002). Sexual assault among North Carolina women: Prevalence and health risk factors. *Journal of Epidemiology & Community Health*, 56(4), 265-271.
- Collins, P. H. (1998). It's all in the family: Intersections of gender, race, and nation. *Hypatia*, 13(3), 62-82.
- Coy, M., Kelly, L., Elvines, F., Garner, M., & Kanyeredzi, A. (2013). Sex without consent, I suppose that is rape?': How young people in England understand sexual consent. *Office of the Children's Commissioner*.
- Crome, S. A., & McCabe, M. P. (2001). Adult rape scripting within a victimological perspective. *Aggression and Violent Behavior*, 6(4), 395-413.
- Dean, K. E., & Malamuth, N. M. (1997). Characteristics of men who aggress sexually and of men who imagine aggressing: Risk and moderating variables. *Journal of personality and social psychology*, 72(2), 449.

- DeGue, S., & DiLillo, D. (2004). Understanding perpetrators of nonphysical sexual coercion: Characteristics of those who cross the line. *Violence and victims, 19*(6), 673-688.
- DeGue, S., & DiLillo, D. (2005). "You would if you loved me": Toward an improved conceptual and etiological understanding of nonphysical male sexual coercion. *Aggression and Violent Behavior, 10*(4), 513-532.
- DeGue, S., DiLillo, D., & Scalora, M. (2010). Are all perpetrators alike? Comparing risk factors for sexual coercion and aggression. *Sexual Abuse, 22*(4), 402-426.
- DeGue, S., Valle, L. A., Holt, M. K., Massetti, G. M., Matjasko, J. L., & Tharp, A. T. (2014). A systematic review of primary prevention strategies for sexual violence perpetration. *Aggression and violent behavior, 19*(4), 346-362.
- Devine, P. G. (1989). Stereotypes and prejudice: Their automatic and controlled components. *Journal of personality and social psychology, 56*(1), 5.
- Eagly, A. H., & Wood, W. (2016). Social role theory of sex differences. *The Wiley Blackwell encyclopedia of gender sexuality studies, 1-3*.
- Eaton, A. A., & Matamala, A. (2014). The relationship between heteronormative beliefs and verbal sexual coercion in college students. *Archives of sexual behavior, 43*(7), 1443-1457.
- Edgar, T., & Fitzpatrick, M. A. (1993). Expectations for sexual interaction: A cognitive test of the sequencing of sexual communication behaviors. *Health Communication, 5*(4), 239-261.
- Edwards, K. M., Turchik, J. A., Dardis, C. M., Reynolds, N., & Gidycz, C. A. (2011). Rape myths: History, individual and institutional-level presence, and implications for change. *Sex roles, 65*(11-12), 761-773.
- Fantasia, H. C. (2011). Really not even a decision any more: Late adolescent narratives of implied sexual consent. *Journal of forensic nursing, 7*(3), 120-129.
- Forbes, G. B., & Adams-Curtis, L. E. (2001). Experiences with sexual coercion in college males and females: Role of family conflict, sexist attitudes, acceptance of rape myths, self-esteem, and the Big-Five personality factors. *Journal of interpersonal violence, 16*(9), 865-889.
- Foshee, V. A., Bauman, K. E., Ennett, S. T., Linder, G. F., Benefield, T., & Suchindran, C. (2004). Assessing the long-term effects of the Safe Dates program and a booster in preventing and reducing adolescent dating violence victimization and perpetration. *American journal of public health, 94*(4), 619-624.
- French, B. H., & Neville, H. A. (2017). What is nonconsensual sex? Young women identify sources of coerced sex. *Violence against women, 23*(3), 368-394.
- Frith, H. (2013). Sexual scripts, sexual refusals and rape. In *Rape* (pp. 122-145): Willan.
- Frith, H., & Kitzinger, C. (1997). *Talk about sexual miscommunication*. Paper presented at the Women's Studies International Forum.
- Gage, A. J., & Hutchinson, P. L. (2006). Power, control, and intimate partner sexual violence in Haiti. *Archives of sexual behavior, 35*(1), 11-24.
- Gagnon, J. H. (1990). The explicit and implicit use of the scripting perspective in sex research. *Annual review of sex research, 1*(1), 1-43.
- Global and regional estimates of violence against women: prevalence and health effects of intimate partner violence and non-partner sexual violence*. (2013). Retrieved from Geneva, Switzerland:

- https://apps.who.int/iris/bitstream/handle/10665/85239/9789241564625_eng.pdf;jsessionid=F66396F3B59E254DAB9F4AEE4542F42F?sequence=1
- Go, V. F.-I., Quan, V. M., Chung, A., Zenilman, J., Hanh, V. T. M., & Celentano, D. (2002). Gender gaps, gender traps: sexual identity and vulnerability to sexually transmitted diseases among women in Vietnam. *Social Science & Medicine*, 55(3), 467-481.
- Golding, J. M., Wilsnack, S. C., & Learman, L. A. (1998). Prevalence of sexual assault history among women with common gynecologic symptoms. *American Journal of Obstetrics and Gynecology*, 179(4), 1013-1019.
- Hearn, J. (1998). *The violences of men: How men talk about and how agencies respond to men's violence to women*: Sage.
- Hickman, S. E., & Muehlenhard, C. L. (1999). "By the semi-mystical appearance of a condom": How young women and men communicate sexual consent in heterosexual situations. *Journal Of Sex Research*, 36(3), 258-272.
- Hoffmann, A. M., & Verona, E. (2019). Psychopathic traits, gender, and motivations for sex: Putative paths to sexual coercion. *Aggressive behavior*, 45(5), 527-536.
- Human Development Report 2019*. (2019). Retrieved from New York, NY: <http://hdr.undp.org/sites/default/files/hdr2019.pdf>
- Humphrey, S. E., & Kahn, A. S. (2000). Fraternities, athletic teams, and rape: Importance of identification with a risky group. *Journal of interpersonal violence*, 15(12), 1313-1322.
- Humphreys, T. (2007). Perceptions of sexual consent: The impact of relationship history and gender. *Journal Of Sex Research*, 44(4), 307-315.
- Humphreys, T. P. (2004). Understanding sexual consent: An empirical investigation of the normative script for young heterosexual adults. *Making sense of sexual consent*, 209-225.
- Hurd, H. M. (1996). The moral magic of consent. *Legal Theory*, 2(2), 121-146.
- Inslicht, S. S., Marmar, C. R., Neylan, T. C., Metzler, T. J., Hart, S. L., Otte, C., . . . Baum, A. (2006). Increased cortisol in women with intimate partner violence-related posttraumatic stress disorder. *Psychoneuroendocrinology*, 31(7), 825-838.
- James-Hawkins, L., Hennink, M., Bangcaya, M., & Yount, K. M. (2018). Vietnamese Men's Definitions of Intimate Partner Violence and Perceptions of Women's Recourse-Seeking. *Journal of Interpersonal Violence*, 0886260518817790.
- James-Hawkins, L., Salazar, K., Hennink, M. M., Ha, V. S., & Yount, K. M. (2019). Norms of masculinity and the cultural narrative of intimate partner violence among men in Vietnam. *Journal of interpersonal violence*, 34(21-22), 4421-4442.
- Jamieson, D. J., & Steege, J. F. (1997). The association of sexual abuse with pelvic pain complaints in a primary care population. *American Journal of Obstetrics and Gynecology*, 177(6), 1408-1412.
- Jamshed, N., & Kamal, A. (2019). Prevalence of rape myths and sexual double standards among university students in Pakistan. *Journal of interpersonal violence*, 0886260519844282.
- Jewkes, R., Dunkle, K., Koss, M. P., Levin, J. B., Nduna, M., Jama, N., & Sikweyiya, Y. (2006). Rape perpetration by young, rural South African men: Prevalence, patterns and risk factors. *Social science & medicine*, 63(11), 2949-2961.
- Johnson, G. M., & Knight, R. A. (2000). Developmental antecedents of sexual coercion in juvenile sexual offenders. *Sexual Abuse: A Journal of Research and Treatment*, 12(3), 165-178.

- Jordan, C. E., Campbell, R., & Follingstad, D. (2010). Violence and women's mental health: The impact of physical, sexual, and psychological aggression. *Annual review of clinical psychology, 6*.
- Jozkowski, K. N., & Peterson, Z. D. (2013). College students and sexual consent: Unique insights. *Journal Of Sex Research, 50*(6), 517-523.
- Jozkowski, K. N., Peterson, Z. D., Sanders, S. A., Dennis, B., & Reece, M. (2014). Gender differences in heterosexual college students' conceptualizations and indicators of sexual consent: Implications for contemporary sexual assault prevention education. *The Journal of Sex Research, 51*(8), 904-916.
- Katz, J., Carino, A., & Hilton, A. (2002). Perceived verbal conflict behaviors associated with physical aggression and sexual coercion in dating relationships: A gender-sensitive analysis. *Violence and victims, 17*(1), 93-109.
- "Keeping silent is dying" Results from the National Study on Domestic Violence Against Women in Viet Nam. (2010). Retrieved from Viet Nam: https://www2.unwomen.org/-/media/field%20office%20eseasia/docs/publications/2015/05/dv_study_executive_summary_eng.pdf?la=en&vs=3050
- Kitzinger, C., & Frith, H. (1999). Just say no? The use of conversation analysis in developing a feminist perspective on sexual refusal. *Discourse & Society, 10*(3), 293-316.
- Krahé, B., Bieneck, S., & Scheinberger-Olwig, R. (2007). Adolescents' sexual scripts: Schematic representations of consensual and nonconsensual heterosexual interactions. *Journal Of Sex Research, 44*(4), 316-327.
- Krause, K. H., Gordon-Roberts, R., VanderEnde, K., Schuler, S. R., & Yount, K. M. (2016). Why do women justify violence against wives more often than do men in Vietnam? *Journal of interpersonal violence, 31*(19), 3150-3173.
- Krug, E., Dahlberg, L., Mercy, J., Zwi, A., & Lozano, R. (2002). *World report on violence and health*. Retrieved from Geneva: https://apps.who.int/iris/bitstream/handle/10665/42495/9241545615_eng.pdf;jsession
- La France, B. H. (2010). What verbal and nonverbal communication cues lead to sex?: An analysis of the traditional sexual script. *Communication Quarterly, 58*(3), 297-318.
- Lehrer, J. A., Lehrer, E. L., & Koss, M. P. (2013). Sexual and dating violence among adolescents and young adults in Chile: a review of findings from a survey of university students. *Culture, health & sexuality, 15*(1), 1-14.
- Li, X., Wang, J., Zhou, J., Huang, P., & Li, J. (2017). The association between post-traumatic stress disorder and shorter telomere length: a systematic review and meta-analysis. *Journal of affective disorders, 218*, 322-326.
- Lindgren, K. P., Schacht, R. L., Pantalone, D. W., & Blayney, J. A. (2009). Sexual communication, sexual goals, and students' transition to college: Implications for sexual assault, decision-making, and risky behaviors. *Journal of college student development, 50*(5), 491.
- Littleton, H., Breitkopf, C. R., & Berenson, A. B. (2007). Rape scripts of low-income European American and Latina women. *Sex Roles, 56*(7-8), 509-516.
- Loh, C., & Gidycz, C. A. (2006). A prospective analysis of the relationship between childhood sexual victimization and perpetration of dating violence and sexual assault in adulthood. *Journal of interpersonal violence, 21*(6), 732-749.

- Loh, C., Gidycz, C. A., Lobo, T. R., & Luthra, R. (2005). A prospective analysis of sexual assault perpetration: Risk factors related to perpetrator characteristics. *Journal of interpersonal violence, 20*(10), 1325-1348.
- Lonsway, K. A., & Fitzgerald, L. F. (1994). Rape myths: In review. *Psychology of Women Quarterly, 18*(2), 133-164.
- Lyndon, A. E., White, J. W., & Kadlec, K. M. (2007). Manipulation and force as sexual coercion tactics: Conceptual and empirical differences. *Aggressive Behavior: Official Journal of the International Society for Research on Aggression, 33*(4), 291-303.
- MacKinnon, C. A. (1989). *Toward a feminist theory of the state*: Harvard University Press.
- Malamuth, N. M., Linz, D., Heavey, C. L., Barnes, G., & Acker, M. (1995). Using the confluence model of sexual aggression to predict men's conflict with women: A 10-year follow-up study. *Journal of personality and social psychology, 69*(2), 353.
- Malamuth, N. M., Sockloskie, R. J., Koss, M. P., & Tanaka, J. S. (1991). Characteristics of aggressors against women: Testing a model using a national sample of college students. *Journal of consulting and clinical psychology, 59*(5), 670.
- Malamuth, N. M., & Thornhill, N. W. (1994). Hostile masculinity, sexual aggression, and gender-biased domineeringness in conversations. *Aggressive behavior, 20*(3), 185-193.
- Maxwell, C. D., Robinson, A. L., & Post, L. A. (2003). The nature and predictors of sexual victimization and offending among adolescents. *Journal of Youth and Adolescence, 32*(6), 465-477.
- McCormick, N. B. (2010). Sexual scripts: Social and therapeutic implications. *Sexual and Relationship Therapy, 25*(1), 96-120.
- Metts, S., & Spitzberg, B. H. (1996). Sexual communication in interpersonal contexts: A script-based approach. *Annals of the International Communication Association, 19*(1), 49-92.
- Miller, T. R. (1996). *Victim costs and consequences: A new look*: US Department of Justice, Office of Justice Programs, National Institute of ...
- Mosher, D. L., & Tomkins, S. S. (1988). Scripting the macho man: Hypermasculine socialization and enculturation. *Journal Of Sex Research, 25*(1), 60-84.
- Muehlenhard, C. L., & Falcon, P. L. (1990). Men's heterosocial skill and attitudes toward women as predictors of verbal sexual coercion and forceful rape. *Sex Roles, 23*(5-6), 241-259.
- Muehlenhard, C. L., Humphreys, T. P., Jozkowski, K. N., & Peterson, Z. D. (2016). The complexities of sexual consent among college students: A conceptual and empirical review. *The Journal of Sex Research, 53*(4-5), 457-487.
- Muehlenhard, C. L., & Peterson, Z. D. (2005). III. Wanting and not wanting sex: The missing discourse of ambivalence. *Feminism & Psychology, 15*(1), 15-20.
- Muehlenhard, C. L., & Rodgers, C. S. (1998). Token resistance to sex: New perspectives on an old stereotype. *Psychology of Women Quarterly, 22*(3), 443-463.
- Muehlenhard, C. L., Sakaluk, J. K., & Esterline, K. M. (2015). Double standard. *The International Encyclopedia of Human Sexuality, 309-312*.
- Murnen, S. K., Wright, C., & Kaluzny, G. (2002). If "boys will be boys," then girls will be victims? A meta-analytic review of the research that relates masculine ideology to sexual aggression. *Sex roles, 46*(11-12), 359-375.
- Ngo, A. D., Ross, M. W., & Ratliff, E. A. (2008). Internet influences on sexual practices among young people in Hanoi, Vietnam. *Culture, health & sexuality, 10*(S1), S201-S213.

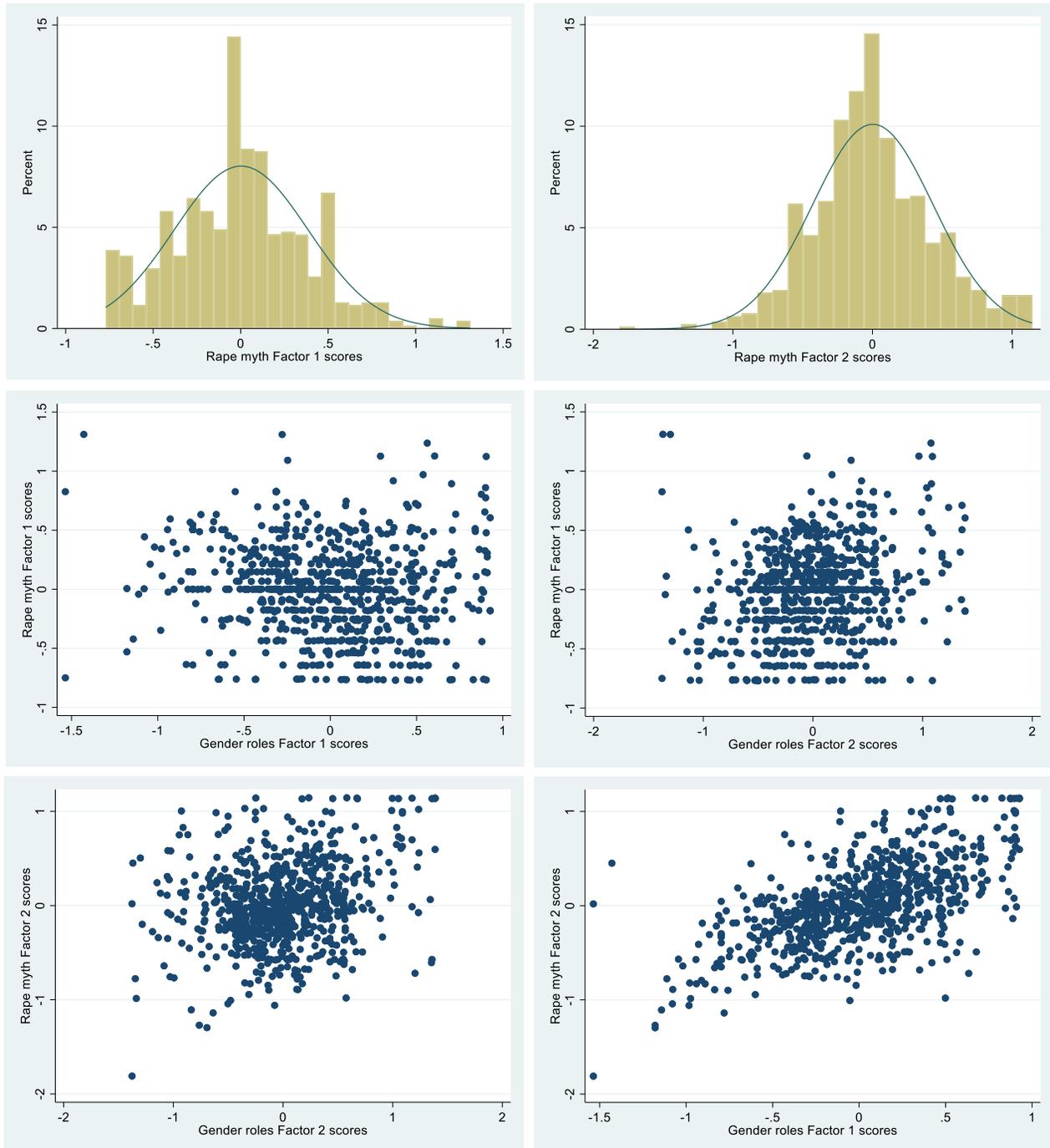
- Nguyen, P. A. (2007). 'Relationships based on love and relationships based on needs': emerging trends in youth sex culture in contemporary urban Vietnam. *Modern Asian Studies*, 41(2), 287-313.
- O'Byrne, R., Hansen, S., & Rapley, M. (2008). If a girl doesn't say 'no'...': young men, rape and claims of 'insufficient knowledge. *Journal of Community & Applied Social Psychology*, 18(3), 168-193.
- O'byrne, R., Rapley, M., & Hansen, S. (2006). 'You couldn't say "no", could you?': young men's understandings of sexual refusal. *Feminism & Psychology*, 16(2), 133-154.
- O'Sullivan, L. F., & Allgeier, E. R. (1998). Feigning sexual desire: Consenting to unwanted sexual activity in heterosexual dating relationships. *Journal Of Sex Research*, 35(3), 234-243.
- O'Sullivan, L. F., & Gaines, M. E. (1998). Decision-making in college students' heterosexual dating relationships: Ambivalence about engaging in sexual activity. *Journal of Social and Personal Relationships*, 15(3), 347-363.
- Ostler, T. (2003). Verbal and nonverbal dating behaviors and sexual consent: Implications for miscommunication between men and women (Unpublished doctoral dissertation). *University of Nevada, Reno, Reno, Nevada*.
- Pateman, C. (1980). Women and consent. *Political Theory*, 8(2), 149-168.
- Peterson, Z. D., & Muehlenhard, C. L. (2007). Conceptualizing the "wantedness" of women's consensual and nonconsensual sexual experiences: Implications for how women label their experiences with rape. *Journal Of Sex Research*, 44(1), 72-88.
- Pugh, B., & Becker, P. (2018). Exploring definitions and prevalence of verbal sexual coercion and its relationship to consent to unwanted sex: Implications for affirmative consent standards on college campuses. *Behavioral sciences*, 8(8), 69.
- Qureshi, H., Kulig, T. C., Cullen, F. T., & Fisher, B. S. (2020). Rape Myth Acceptance Among College Students in India: Prevalence and Predictors in a Changing Context. *Deviant Behavior*, 1-24.
- Richardson, E. W., Simons, L. G., & Futris, T. G. (2017). Linking family-of-origin experiences and perpetration of sexual coercion: College males' sense of entitlement. *Journal of child and family studies*, 26(3), 781-791.
- Rivara, F., Adhia, A., Lyons, V., Massey, A., Mills, B., Morgan, E., . . . Rowhani-Rahbar, A. (2019). The effects of violence on health. *J Health Affairs*, 38(10), 1622-1629.
- Rosellini, A. J., Street, A. E., Ursano, R. J., Chiu, W. T., Heeringa, S. G., Monahan, J., . . . Sampson, N. A. (2017). Sexual assault victimization and mental health treatment, suicide attempts, and career outcomes among women in the US Army. *American journal of public health*, 107(5), 732-739.
- Ryan, K. M. (1988). Rape and seduction scripts. *Psychology of Women Quarterly*, 12(2), 237-245.
- Ryan, K. M. (2011). The relationship between rape myths and sexual scripts: The social construction of rape. *Sex roles*, 65(11-12), 774-782.
- Rydström, H. (2003). Encountering "hot" anger: Domestic violence in contemporary Vietnam. *Violence against women*, 9(6), 676-697.
- Rydström, H. (2006a). Masculinity and punishment: Men's upbringing of boys in rural Vietnam. *Childhood*, 13(3), 329-348.
- Rydström, H. (2006b). Sexual desires and 'social evils': Young women in rural Vietnam. *Gender, Place & Culture*, 13(3), 283-301.

- Rydström, H. (2017). A zone of exception: Gendered violences of family 'happiness' in Vietnam. *Gender, Place & Culture*, 24(7), 1051-1070.
- Santana, M. C., Raj, A., Decker, M. R., La Marche, A., & Silverman, J. G. (2006). Masculine gender roles associated with increased sexual risk and intimate partner violence perpetration among young adult men. *Journal of urban health*, 83(4), 575-585.
- Santaularia, J., Johnson, M., Hart, L., Haskett, L., Welsh, E., & Faseru, B. (2014). Relationships between sexual violence and chronic disease: a cross-sectional study. *BMC public health*, 14(1), 1286.
- Schatzel-Murphy, E. A., Harris, D. A., Knight, R. A., & Milburn, M. A. (2009). Sexual coercion in men and women: Similar behaviors, different predictors. *Archives of Sexual Behavior*, 38(6), 974-986.
- Schuler, S. R., Anh, H. T., Ha, V. S., Minh, T. H., Mai, B. T. T., & Thien, P. V. (2006). Constructions of gender in Vietnam: In pursuit of the 'Three Criteria'. *Culture, health & sexuality*, 8(5), 383-394.
- Simon, W., & Gagnon, J. H. (1984). Sexual scripts. *Society*, 22(1), 53-60.
doi:10.1007/BF02701260
- Singleton, R., Winkell, K., Nkambule-Vilakati, S., & Sabben, G. (2018). Young Africans' social representations of rape in their HIV-related creative narratives, 2005–2014: Rape myths and alternative narratives. *Social Science & Medicine*, 198, 112-120.
- Skinnider, E., Montgomery, R., & Garrett, S. (2017). *The Trial of Rape - Understanding the criminal justice system response to sexual violence in Thailand and Viet Nam*. Retrieved from <https://www2.unwomen.org/-/media/field%20office%20eseasia/docs/publications/2017/10/trial-of-rape-executive-summary-eng-r3.pdf?la=en&vs=2440>
- Smith, S. G., & Breiding, M. J. (2011). Chronic disease and health behaviours linked to experiences of non-consensual sex among women and men. *Public Health*, 125(9), 653-659.
- Smith, S. G., Shang, X., Basile, K. C., Merrick, M. T., Wang, J., Kresnow, M.-j., & Chen, J. (2018). *The National Intimate Partner and Sexual Violence Survey (NISVS): 2015 Data Brief - Updated Release*. Retrieved from Atlanta, GA:
- Stephens, T., Kamimura, A., Yamawaki, N., Bhattacharya, H., Mo, W., Birkholz, R., . . . Olson, L. M. (2016). Rape myth acceptance among college students in the United States, Japan, and India. *SAGE Open*, 6(4), 2158244016675015.
- Struckman-Johnson, C., Struckman-Johnson, D., & Anderson, P. B. (2003). Tactics of sexual coercion: When men and women won't take no for an answer. *Journal Of Sex Research*, 40(1), 76-86.
- Taylor, B., Woods, D., & Mumford, E. (2011, October). Shifting boundaries: Final report on an experimental evaluation of a youth dating violence prevention program in New York City middle schools. Police Executive Research Forum.
- Tharp, A. T., DeGue, S., Valle, L. A., Brookmeyer, K. A., Massetti, G. M., & Matjasko, J. L. (2013). A systematic qualitative review of risk and protective factors for sexual violence perpetration. *Trauma, Violence, & Abuse*, 14(2), 133-167.
- Tjaden, P. G., & Thoennes, N. (2006). Extent, nature, and consequences of rape victimization: Findings from the National Violence Against Women Survey.

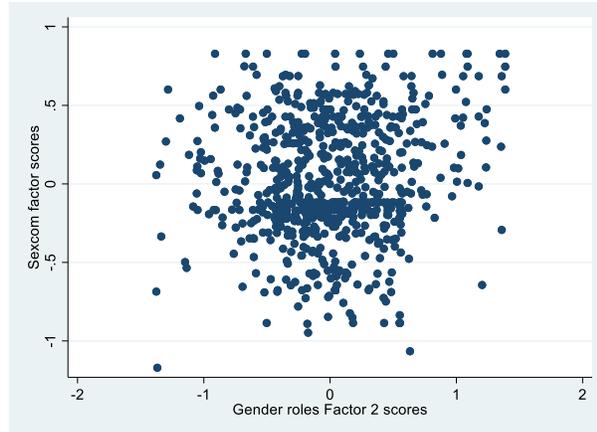
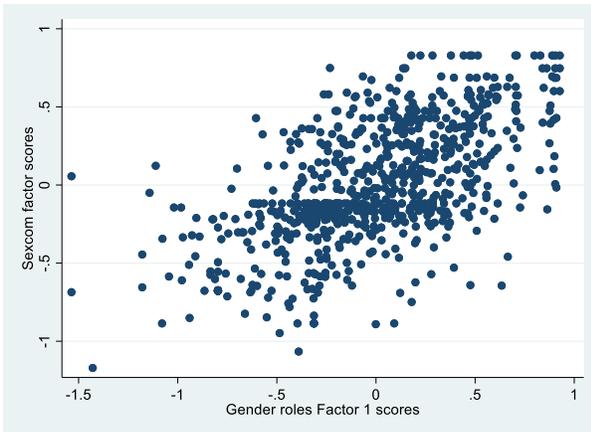
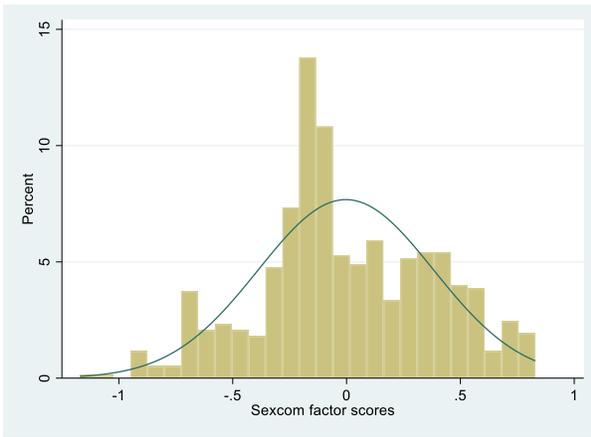
- Vannier, S. A., & O'Sullivan, L. F. (2010). Sex without desire: Characteristics of occasions of sexual compliance in young adults' committed relationships. *Journal Of Sex Research*, 47(5), 429-439.
- Vega, V., & Malamuth, N. M. (2007). Predicting sexual aggression: The role of pornography in the context of general and specific risk factors. *Aggressive Behavior: Official Journal of the International Society for Research on Aggression*, 33(2), 104-117.
- Vijayarasa, R. (2010). The State, the family and language of 'social evils': re-stigmatising victims of trafficking in Vietnam. *Culture, health & sexuality*, 12(S1), S89-S102.
- Vung, N. D., & Krantz, G. (2009). Childhood experiences of interparental violence as a risk factor for intimate partner violence: a population-based study from northern Vietnam. *Journal of Epidemiology & Community Health*, 63(9), 708-714.
- West, C., & Zimmerman, D. H. (1987). Doing gender. *Gender and Society*, 1(2), 125-151.
- West, R. (2010). Sex, law, and consent. *The Ethics of Consent: Theory and Practice*; Oxford University Press: Oxford, UK, 221-249.
- Yount, K. M., Higgins, E. M., VanderEnde, K. E., Krause, K. H., Minh, T. H., Schuler, S. R., & Anh, H. T. (2016). Men's perpetration of intimate partner violence in Vietnam: Gendered social learning and the challenges of masculinity. *Men and Masculinities*, 19(1), 64-84.
- Yount, K. M., Lewis, P., Bergenfeld, I., Quach, T. T., Minh, T. H., & Sales, J. (2019). Manufacturing Gender Hierarchy and Sexual Violence in Dating Relationships: A Qualitative Study of University Men in Vietnam [Unpublished]. *Journal Of Sex Research*.
- Yusuf, A., & Muehlenhard, C. (2016). Women's and men's reactions to being sexually coerced: A quantitative and qualitative analysis. *Manuscript in preparation*.
- Zinzow, H. M., & Thompson, M. (2015). A longitudinal study of risk factors for repeated sexual coercion and assault in US college men. *Archives of sexual behavior*, 44(1), 213-222.

Histograms and Scatterplots for each variable

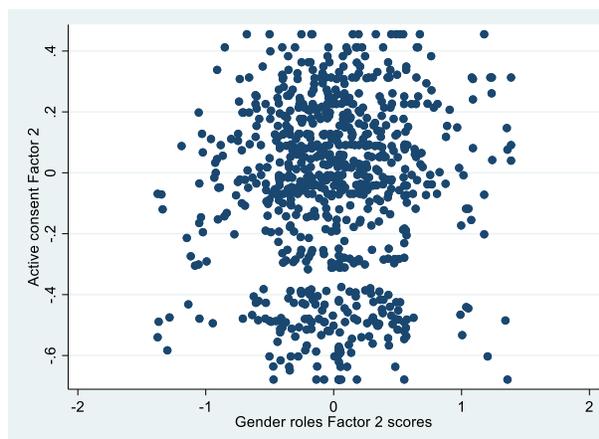
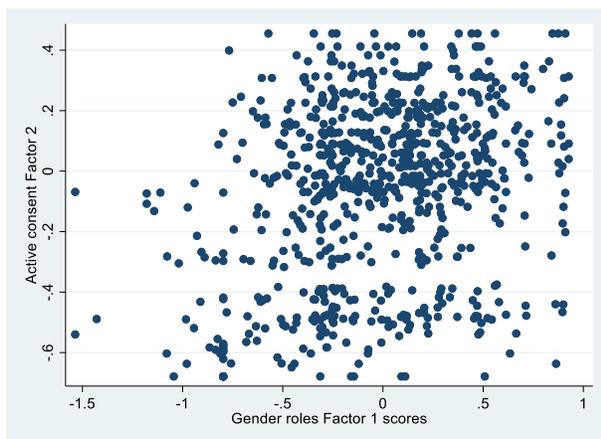
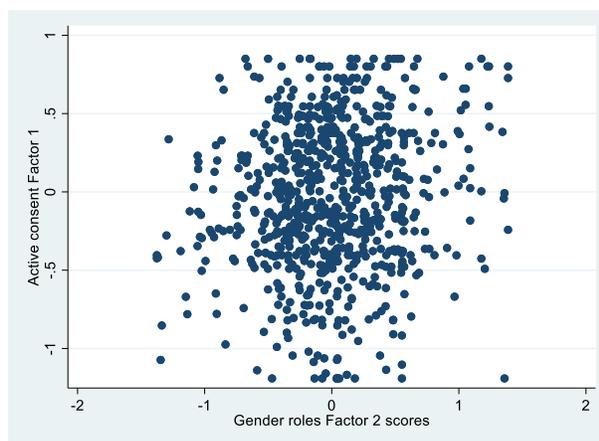
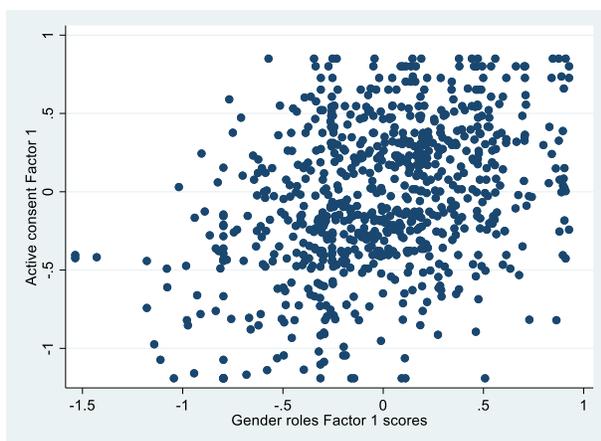
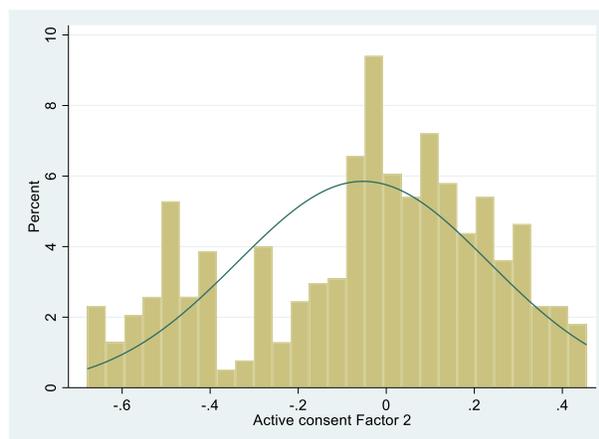
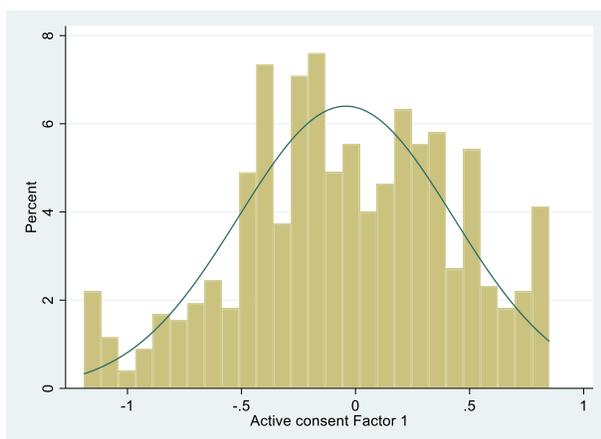
Outcome 1: Rape Myth Attitudes



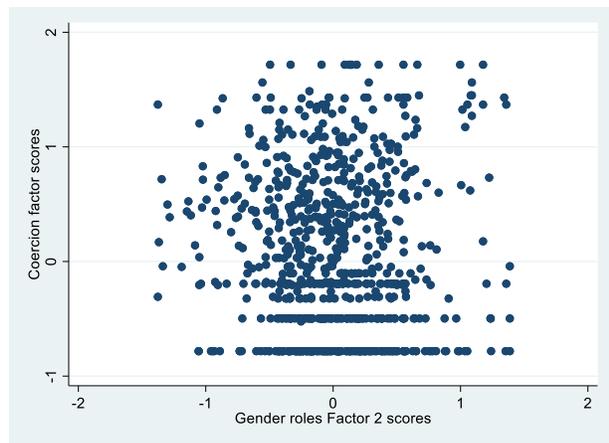
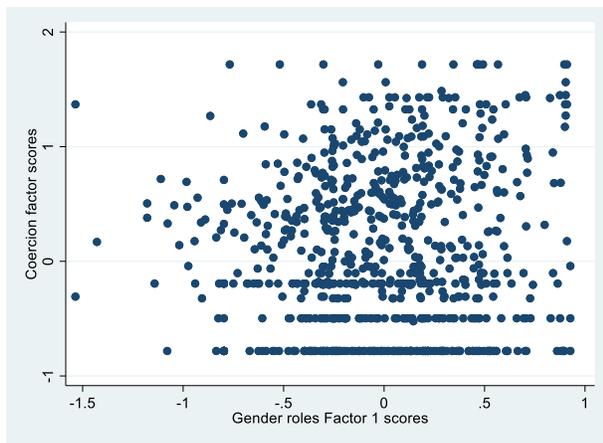
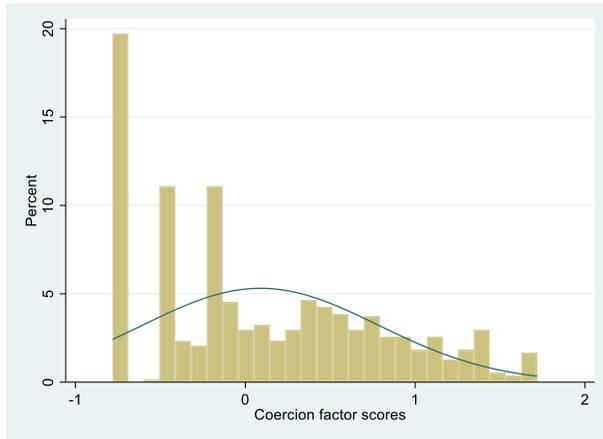
Outcome 2: Sexual Communication Attitudes



Outcome 3: Sexual Consent Knowledge



Outcome 4: Sexual Coercion Knowledge



Exposure: Gender Role Attitudes

