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April 20th, 2015

**Peer Influence on IPV in Adult Males:
Investigating the Case for a Social Norms Approach**

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Abstract

Peer Influence on IPV in Adult Males: Investigating the Case for a Social Norms Approach

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This study examines the relationship between the outcome of intimate partner violence (IPV) perpetration and exposures of perceiving peer IPV behaviors and peer IPV-supportive attitudes in adult males. Data from 101 male peer dyads (n=202) were taken from a previous study on the affects of alcohol and bystander interventions in Atlanta, Georgia. Nearly 36% of the sample reported physical IPV perpetration in the past 12 months and 67% reported perpetrating sexually coercive behavior. Descriptive analysis was conducted and no associations were found between perception of peer IPV behaviors and self-reported perpetration. Peer attitudes of expecting sex from a female partner were found to be associated with self-report sexual coercion perpetration ($X^2=9.53$; $p<.05$), suggesting a need to address rape myths in this population. Including data from both a male and his peer, our study was able to examine whether or not the respondent's perception of his peers' IPV perpetration reflected that of one of his peer's self-report of IPV behaviors. Nearly 35% of the sample reported having no peers who had perpetrated physical IPV, while their study peer self-reported physical violence perpetration in the past 12 months, indicating that males underestimate their peer's IPV behaviors. Discordance between respondent's perception and peer self-report was also present for forced sex and sexually coercive behaviors, and all three discordance variables were associated with self-report IPV perpetration. These findings suggest that a social norms approach to IPV prevention, which would seek to correct the misperception of peers' negative behaviors, would not be appropriate among adult males.

Peer Influence on IPV in Adult Males: Investigating the Case for a Social Norms Approach

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Finally, I would like to dedicate this paper and my life's work to the survivors and loved ones lost to intimate partner violence, sexual violence, and gender based violence.

Table of Contents

Chapter 1: Introduction	1
Chapter 2: Literature Review	4
Intimate Partner Violence.....	4
IPV Outcomes.....	5
IPV Perpetration.....	5
Risk Factors.....	7
Peer Influence on IPV Perpetration.....	8
Gaps in the Literature.....	12
Chapter 3: Manuscript	14
Introduction.....	14
Methods.....	17
Results.....	22
Discussion.....	26
References.....	31
Appendix A: Tables & Figures.....	34
Chapter 4: Conclusions and Recommendations	38
References	42

CHAPTER 1: INTRODUCTION

Every minute, 24 individuals are raped, physically assaulted, or stalked by a former or current significant other in the United States (Black et al., 2011). Additionally, one in 3 women and 1 in 4 men have experienced at least one of these three forms of intimate partner violence (IPV) in their lifetime (Black et al., 2011). IPV is the threat or act of physical, sexual or psychological violence, by a current or former dating partner or spouse (Saltzman, Fanslow, McMahon, & Shelley, 2002). Until recently, IPV was only considered a topic of concern for the criminal justice system and the field of psychology, despite the link to negative health outcomes such as mental health issues, physical injuries, and death (Black et al., 2011; J. C. Campbell, 2002). As violence is now understood to be predictable and preventable, scientists have begun to address IPV within a public health model, where IPV is addressed by defining the problem, utilizing surveillance, identifying risk and protective factors, and developing prevention measures ("The Public Health Approach to Violence Prevention," 2014; Spivak, Jenkins, VanAudenhove, Lee, & Kelly, 2014).

Historically, victimization has been the focus of IPV research and, as a result, the field of IPV victimization research is much more evolved. As perpetration has become a priority among many experts in the field, evidence around behavior estimates and risk factors has begun to develop and grow steadily. While national prevalence rates of IPV perpetration are largely absent in the literature, several strides have been made in the estimation of prevalence for smaller populations and in the identification of associated risk factors. Estimates of physical violence IPV perpetrated by a male range from 14% to 29%, while sexual violence ranges from 13-42%, with variations likely a result of differing

methodology (Kessler, Molnar, Feurer, & Appelbaum, 2001; O'Keefe & Treister, 1998; Oriel & Fleming, 1998; Ramirez, Paik, Sanchagrin, & Heimer, 2012; Reed, Silverman, Raj, Decker, & Miller, 2011; Rhodes, Lauderdale, He, Howes, & Levinson, 2002). Despite differing prevalence estimates, it is clear that partner violence is occurring, indicating a need for the prevention of these behaviors.

Several risk factors have been linked to perpetrating partner violence across the lifespan including witnessing parental violence, experiencing child maltreatment, and previous victimization (Arriaga & Foshee, 2004; Gwartney-Gibbs, Stockard, & Bohmer, 1987; O'Keefe & Treister, 1998; Roberts, McLaughlin, Conron, & Koenen, 2011). While individual and relationship risk factors are much more understood than community and societal risk factors, the evidence supporting many associated predictors is still largely mixed. The effect of peers on IPV perpetration is much less understood among adult populations than that of interparental violence and child physical abuse. Mostly studied among adolescents, the influence of peers' dating violence behavior has been shown to increase the odds of self-report perpetration (Arriaga & Foshee, 2004; Reed et al., 2011). Research on peer influence on IPV perpetration in adult populations has mostly been conducted among college students and findings are mixed. Among college samples, peer influence has both been shown to be associated with the outcome of self-report perpetration as well as to have no effect on violent behaviors (Gwartney-Gibbs et al., 1987; Schwartz & DeKeseredy, 2000).

In both adolescent and college studies, measures used to assess peer influence on IPV are largely based on the perception of peers' behavior. That is, the association is truly looking at whether or not the subject's opinion of their peers' behavior is related to their

own violent behavior. While this is a valid relationship to assess, what if their opinion of their friend's behavior is wrong? And what if having false views of their peer's violent behavior contributes to their own perpetration of dating violence? The purpose of this paper is to ascertain (a) if discordance exists between the perception of peers' IPV behavior and a peer's self-reported IPV perpetration and (b) whether or not that discordance affects IPV perpetration.

Objectives:

1. To examine the level of discordance between the perceptions of peers' dating violence behavior and actual peer self-report of perpetration.
2. To assess whether or not a relationship exists between the discordance between perceived and actual peer behavior and self-reported IPV perpetration.

Aims:

1. To describe the prevalence of IPV perpetration among a community sample of adult men in Atlanta, GA.
2. To describe the perceptions of peers' dating violent behaviors among a community sample of adult men in Atlanta, GA.
3. To examine discordance between perceived peer dating violence behavior and actual peer self-report behavior among a community sample of adult men in Atlanta, GA.
4. To examine the association between the discordance between perceived and actual peer behavior and self-reported IPV among a community sample of adult men in Atlanta, GA.

CHAPTER 2: LITERATURE REVIEW

Intimate Partner Violence

Intimate partner violence has now been recognized as a significant social and public health problem in the United States (Desmarais, Reeves, Nicholls, Telford, & Fiebert, 2012; Franklin, Menaker, & Kercher, 2012; Roberts et al., 2011). The term IPV refers to sexual, physical or psychological violence, or the threat of physical/sexual violence, inflicted by a current or former significant other, cohabitating partner, or spouse (Saltzman et al., 2002). The Centers for Disease Control and Prevention (CDC) define physical violence as “The intentional use of physical force with potential for causing death, disability, injury or harm”, and some examples include grabbing, choking, slapping, scratching, burning, use of restraints, and use of weapons (Saltzman et al., 2002). Sexual violence can be defined as an attempted or completed sexual act by the use of physical force against another’s will or involving an individual who is unable to communicate or decline engagement (Saltzman et al., 2002). The field of sexual violence research has begun to differentiate between forced sex, defined as above, and sexual coercion. Sexual coercion is when an individual is forced in a non-physical manner, by pressure or manipulation, to engage in unwanted sexual activity (Black et al., 2011). The threat of violence, both physical and sexual, is a form of abuse used to inflict fear and includes verbal communication, gestures, or display of weapons (Saltzman et al., 2002). Psychological & emotional abuse, while the most prevalent form of IPV, is the most broad and is generally defined as psychological harm caused by use of threat, control, isolation, coercion, or physical/sexual abuse (Black et al., 2011; Saltzman et al., 2002).

IPV Outcomes

Health consequences resulting from IPV place an enormous burden on medical, social, and public health systems. Some examples of immediate negative health outcomes are lacerations, knife and gunshot wounds, welts, broken bones, head and spinal cord injuries, and burns (Tjaden & Thoennes, 2000). Long-term consequences linked to IPV include irritable bowel syndrome, urinary tract infections, sexually transmitted infections, HIV/AIDS, chronic pain, headaches, migraines, asthma, diabetes, high blood pressure, insomnia, depression, anxiety, and other mental health issues (Black et al., 2011; J. C. Campbell, 2002). Additionally, crime data show that women are killed by their intimate partners more often than by any other type of perpetrator (J.C. Campbell et al., 1985). These negative health outcomes result in a large financial burden on victims, as women who experience IPV have 92% higher health care costs than non-victims, with the majority of expenses going to psychological services (Wisner, Gilmer, Saltzman, & Zink, 1999). The estimated societal cost of IPV is \$5.8 billion annually, with \$4.1 billion attributed directly to health care and \$1.8 billion to lost productivity (NCICP, 2003). The true cost, suspected to be much larger, would include expenditures from the criminal justice system, where 1.5 million police reports are filed and 79,000 convicted sentences occur each year (NCICP, 2003).

IPV Perpetration

In 2010, the National Intimate Partner and Sexual Violence Survey (NISVIS) estimated that 36% of women and 29% of men have been a victim of IPV during their lifetime (Black et al., 2011). While IPV can happen to anyone without regard to gender or

sexual orientation, this research will focus on male to female perpetration. Less is known about perpetration, as historically researchers have studied IPV in the context of female victimization. Prevalence estimates for perpetration vary and discrepancies are likely a result of differing sampling methods, study procedures, measurement tools, time period measures, definitions, and the type of violence examined (Desmarais et al., 2012; Singh, 2009). For example, among adult populations, estimates of physical/sexual IPV perpetration range from 4-66% and physical violence only estimates range from 14-29% (Desmarais et al., 2012; Franklin et al., 2012; Kessler et al., 2001; Okuda et al., 2015; Oriel & Fleming, 1998; Ramirez et al., 2012; Rhodes et al., 2002; Roberts et al., 2011; Santana, Raj, Decker, La Marche, & Silverman, 2006). Additionally, unlike IPV victimization prevalence, there are no national prevalence estimates available for perpetration rates in the United States.

Adult perpetration of IPV has most commonly been studied among cohabitating or married partnership and only recently has begun to focus on relationships outside of marriage. Research on IPV outside of cohabitating partnerships has a strong presence among adolescent and college populations, typically sampled from school environments. The majority of studies on IPV from any population sample use a version of the Conflict Tactics Scale (CTS), which is well respected in the field and measures physical, sexual and emotional violence (Desmarais et al., 2012; Singh, 2009). While the CTS allows for the assessment of IPV by sub-type, the majority of studies report physical violence only rates or a combined physical and sexual violence estimate. Again, studies looking at sexual violence perpetration in the context of IPV are most prevalent among married samples. In addition, the majority of estimates are from convenience samples within a clinic setting

from women seeking help from abuse (Monson, Langhinrichsen-Rohling, & Taft, 2009). Further, studies looking at sexual IPV often combine forced sex and sexual coercion, or measure forced sex behaviors only.

Among an adult community sample of unspecified marital status, one study reported a 28% prevalence rate for sexual IPV perpetration (Santana et al., 2006). As common in other studies, this figure represents both forced sex and sexually coercive behavior. Assessing sub-types of sexual IPV separately, on which research is limited, researchers Monson, Langhinrichsen-Rohling, and Taft (2009) conducted a systematic review on victimization estimates of sexual coercion and forced sex. Estimates of sexual coercion victimization range from 9-50% while forced sex victimization prevalence rates range from 7-14% (Monson et al., 2009). As studies assessing sexual coercion and forced sex perpetration are largely absent, prevalence estimates from victimization research can be used as a proxy for perpetration. As IPV perpetration research is less developed and the etiology isn't fully understood, physical and sexual IPV, including sexual coercion and forced sex, should be studied separately (Ramirez et al., 2012).

Risk Factors

The etiology behind IPV perpetration is still being studied and risk factors are continuing to be identified across populations. The risk factor for which the strongest evidence base exists is the experience of witnessing interparental violence, which has shown association for perpetration across all dating age groups. This association has been reported for males in middle school (e.g. Arriaga & Foshee, 2004), high school (e.g. Brendgen, Vitaro, Tremblay, & Wanner, 2002; O'Keefe & Treister, 1998), college (e.g.

Gwartney-Gibbs et al., 1987; Reitzel-Jaffe & Wolfe, 2001), and among adults (e.g. Franklin et al., 2012; Roberts et al., 2011). Child physical abuse has also been linked to IPV perpetration in both high school and adult samples (Brendgen et al., 2002; Menard, Weiss, Franzese, & Covey, 2014; O'Keefe & Treister, 1998; Roberts et al., 2011). Roberts and colleagues also found an association between adult IPV perpetration and experiencing other forms of child maltreatment including sexual and emotional abuse, and emotional and physical neglect (Roberts et al., 2011). In addition, previous IPV victimization has also been linked to perpetration throughout late adolescence and into adulthood (Gwartney-Gibbs et al., 1987; O'Keefe & Treister, 1998; Okuda et al., 2015).

There are several theorized predictors of perpetration that have shown mixed evidence in the literature, most notably alcohol use and socio-demographic indicators. The type of alcohol use measured may explain the discrepancy, as Okuda and colleagues showed a correlation between alcohol use disorders and perpetration, while studies showing no association examined general or heavy episodic drinking (Franklin et al., 2012; Lisco, Parrott, & Tharp, 2012; Okuda et al., 2015). The inconsistency in socio-demographic indicators may be explained by population age, as studies among adult populations have shown a link between socio-economic indicators (income, poverty, etc.) while studies among adolescents have not (O'Keefe & Treister, 1998; Okuda et al., 2015; Roberts et al., 2011).

Peer Influence on IPV Perpetration

Peer influence on the outcome of IPV is less understood among adult populations and much more evident in the adolescent and college based literature. Several theories are

commonly cited in peer influence or social norms research; most notable is Social Learning Theory (Bandura, 1986). Mendard (2014) notes in relation to Social Learning Theory, “Violent behavior is learned just like any other behavior, through a process of imitation, modeling, and reinforcement” (p.628). Social Learning Theory suggests that the process of learning a behavior through others is most influenced by individuals of importance, such as parents and friends. The social learning of violent behaviors among adolescents, when dating experiences begin, may occur through trying to understand dating norms by observing peer behavior or discussion with friends (Arriaga & Foshee, 2004; Ellis, Chung-Hall, & Dumas, 2013). However this raises one important question: does the influence of peers become obsolete as an adult? One argument is that the adolescent period is when norms and behaviors are established and engaging with violent peers has more influence on self-report behaviors during this time (Capaldi, Dishion, Stoolmiller, & Yoerger, 2001). Further, both adolescents and college age populations spend an increased time with peers as a result of being immersed in a school setting. Yet, as the presence of peer groups continue into adulthood, it may be possible that their influence on dating behavior is sustained. Further, the mechanisms theorized to support violent social learning in relationships, such as observing friends and discussion with peers, may still exist among adults. Outside of social learning, several predictors of perpetration have shown associations across age groups, contributing to the possibility that peer influence may also continue throughout the life course. Additionally, longitudinal research has shown evidence for the need to study IPV in the context of one’s lifespan (Roberts et al., 2011).

General Peer Aggression

General peer aggression is the only form of peer influence on IPV perpetration that has been studied among an adult population outside of college samples. One study found that adolescents who were perceived to engage with physically aggressive peers were significantly more likely to engage in hostile talk about women, which was then associated with perpetrating physical violence against intimate partners between the ages of 20-23 years old (Capaldi et al., 2001). Similarly, another study showed that individuals with large peer networks composed of violent adolescents were more likely to perpetrate physical IPV in early adulthood (Ramirez et al., 2012). These findings mirror those from research done in both high school and college populations (e.g. Brendgen et al., 2002; Reitzel-Jaffe & Wolfe, 2001).

Peer Physical Dating Violence

Research on the relationship between peer IPV perpetration and individual perpetration is predominantly conducted among adolescent and college populations. In adolescents, the odds of perpetrating physical and physical/sexual IPV have been found to be 3 times higher among individuals who report that their peers perpetrate violence than among individuals who believe their friends do not (Arriaga & Foshee, 2004; Reed et al., 2011). Measuring the outcome of physical and sexual violence separately, researchers Schwartz & DeKeseredy found no association between the perception of peers' violent behavior and the outcome of self-reported perpetration among college students (Schwartz & DeKeseredy, 2000). Conversely, they found an association between peers' violence attitudes and self-report perpetration (Schwartz & DeKeseredy, 2000).

Similar to prevalence estimates, varying outcomes are likely a result of differences in study constructs, such as violent sub-type measure used (i.e. physical vs. sexual) and whether or not peers' behavior were identified via self-report. The findings above measured the perception of peer behavior and did not examine actual peer report of IPV perpetration. Only one study has examined the actual report from peers on their behavior, instead of relying on the opinions of others. Ellis, Chung-Hall, & Dumas, contrary to Schwartz & DeKeseredy, found a significant association between peers' dating violence perpetration and self-report physical/sexual perpetration (Ellis et al., 2013). In addition, they found no association between peer group attitudes and self-reported perpetration (Ellis et al., 2013). Again, these differing results may be due to variation in sub-violence definitions, measures, and the way in which peer behaviors were assessed.

Peer Sexual Violence

Research on the relationship between peer sexual IPV and self-report sexual IPV is limited. Only one study among a college sample has examined this relationship and reported that individuals who perceived their peers to be sexually aggressive were more likely to perpetrate forced sex on their dating partner (Gwartney-Gibbs et al., 1987). In addition, a few studies non-specific to dating partners have shown similar relationships in college and adult populations. Associations have been found between individuals' perception of their peers' approval of sexually violent behavior and the outcome of non-partner self-report sexual violence perpetration (Abbey, Parkhill, Clinton-Sherrod, & Zawacki, 2007; Swartout, 2013). While sexual violence differs in many ways when the

victim is a partner versus an acquaintance or stranger, it is evident that peers may influence both.

Gaps in the Literature

It is clear that IPV perpetration research is continuing to develop and researchers are still trying to understand the various predictors of perpetration. As previously mentioned, several gaps and inconsistencies are evident in the literature. First, many studies examining the prevalence or risk factors for perpetration do not clearly segment subtypes of IPV. Some studies have examined what they term total IPV, the combination of physical and sexual violence, while others examine physical violence only, and a few studies isolate sexual violence. Further, of the studies that look specifically at sexual violence perpetration, only one examines the sub-type of forced sex (Gwartney-Gibbs et al., 1987) and no known studies examine sexual coercion perpetration, as defined previously, specific to intimate relationships. Evidence from victimization research showing differences between violence sub-types (e.g. Black et al., 2011; Tjaden & Thoennes, 2000), combined with the limited knowledge of IPV perpetration etiology, supports the need to study dating violence segmented by type of perpetration.

In addition, dating violence research has traditionally studied risk factors by developmental age periods. Specifically, the influence of peers on IPV perpetration has been identified in adolescent and college populations with limited understanding of this relationship in adult and community samples. Of the studies that have examined this in adults, among college samples, associations between peers' influence and self-report perpetration are mixed, again indicating the need for continued examination of this

relationship. Further, several other risk factors have shown a relationship to IPV perpetration across the lifespan including interparental violence, child maltreatment, and IPV victimization. This supports the hypothesis that peer influence on IPV perpetration may also be a risk factor that continues throughout life.

Lastly, the majority of studies examining peer influence on IPV perpetration measure peer behavior by the individual's perception of their friends. That is to say, the evidence actually assesses whether or not a subject's opinion of their peers' behavior influences their own perpetration. While this is a valid concern, what if their perception is wrong? Currently, there is no evidence showing whether or not an individual's perception of their peers' IPV behavior is accurate. It is important to evaluate if Social Norms Theory, whereby negative behaviors and attitudes are overestimated by peers, is applicable to peer influence on IPV perpetration (A. Berkowitz, 2004). There has been evidence from gender norms research to suggest that the perceptions of peers' attitudes vary from self-report. Fabiano et al. (2003) showed that males greatly underestimated their peers' opinions on the importance of sexual consent and their peers' willingness to intervene as a bystander in situations of sexual assault. If similar to gender norms research and Social Norms Theory, there will be discordance between the perception of peer IPV behavior and the actual peer report of behavior, where individuals will overestimate their peers' engagement in IPV perpetration.

CHAPTER 3: MANUSCRIPT

INTRODUCTION

Each year 7 million women experience intimate partner violence (IPV) in the United States and 36% of women report being victimized at some point in their lifetime (Black et al., 2011). In general, IPV is defined as sexual, physical or psychological violence caused by a current or former significant other (Saltzman et al., 2002). Women who experience IPV are at greater risk for a number of negative health outcomes including urinary tract infections, irritable bowel syndrome, chronic pain, sexually transmitted infections, HIV, migraines, asthma, diabetes, high blood pressure, insomnia, depression, anxiety, and death (Black et al., 2011; J. C. Campbell, 2002; J.C. Campbell et al., 1985). Partner violence and the associated health outcomes place an enormous burden on social, medical, and criminal justice systems with estimated costs reaching more than \$5.8 billion annually (NCIPC, 2003).

Violence against women is a significant public health problem and while a large body of evidence has been established for IPV victimization, less is known about perpetration. Estimates of adult male perpetration range from 14%-29% for physical violence and 13-42% for sexual violence, with variations likely a result of differing methodology (Desmarais et al., 2012; Kessler et al., 2001; O'Keefe & Treister, 1998; Oriel & Fleming, 1998; Ramirez et al., 2012; Reed et al., 2011; Rhodes et al., 2002; Singh, 2009). The prevalence of specific types of sexual IPV perpetration also vary, for example, forced sex, a sexual act by the use of physical force within an intimate partnership has reported estimates between 12-37% (Reed et al., 2011; Saltzman et al., 2002; Swartout, 2013).

Studies examining either forced sex or sexual coercion IPV perpetration are limited and as stated previously, victimization research is much more evolved. Among victimization research, estimates for forced sex IPV range from 7-14% and sexual coercion prevalence rates range from 9-50% (Monson et al., 2009).

Intimate partner violence research, for both physical and sexual IPV, has begun to build a sufficient evidence base linking risk factors to perpetration. The etiology behind violence perpetrated in a relationship has most commonly been studied among cohabitating or married adults and less is known about perpetration in non-cohabitating intimate relationships. Among adult males, IPV perpetration has been linked to younger age, lower education levels, income, and unemployment consistently throughout the literature (Capaldi, Knoble, Shortt, & Kim, 2012). Evidence of a relationship between alcohol and substance use has been mixed and likely a result of differentiation between chronic use and episodic use. (Capaldi et al., 2012; Lisco et al., 2012; Okuda et al., 2015). Several other predictors have shown a consistent relationship with IPV perpetration including witnessing parental violence, experiencing child maltreatment, previous IPV victimization, hostile talk towards women, and attitudes supporting traditional gender roles (Capaldi et al., 2001; Capaldi et al., 2012; Menard et al., 2014; Okuda et al., 2015; Roberts et al., 2011; Santana et al., 2006).

One risk factor heavily cited in adolescent and college age literature that is largely absent from research in adult populations is the effect of peers' attitudes and behaviors on IPV perpetration. Largely driven by the Social Learning Theory (Bandura, 1986), studies indicate that dating violence is learned through observing, modeling, and imitating peer behavior (Menard et al., 2014). Among adolescents, the odds of perpetrating physical or

both physical and sexual IPV has been found to be 3 times higher among individuals who report that their peers perpetrate violence compared to individuals who do not (Arriaga & Foshee, 2004; Reed et al., 2011). In college populations, perceiving peers to be sexually aggressive has shown to increase the likelihood of self-reported forced sex behaviors, while conversely the perception of peer physical violence IPV has not shown a relationship with self-report physical perpetration (Gwartney-Gibbs et al., 1987; Schwartz & DeKeseredy, 2000). This research has yet to be replicated in an adult sample and some researchers theorize that violent peers have a greater effect during the adolescent period, when norms and behaviors are established (Capaldi et al., 2001). Despite this, many of the constructs that support social learning's effect on dating violence exist among adults, including the observation of peer behavior and discussion of dating norms, which indicates a need to examine this relationship and identify the nature of this predictor among adults.

It is important to note that studies examining the influence of peers' IPV on individual perpetration have not assessed whether or not these perceptions are accurate, potentially resulting in misinformed prevention programming. As described by Social Norms Theory, "...overestimation of problem behavior will increase these problem behaviors while underestimations of healthy behaviors will discourage individuals from engaging in them" (A. Berkowitz, 2004, p. 5). It follows that if the perception of peers' IPV perpetration is an overestimation, then individual IPV perpetration will be increased. This can be addressed through a social norms approach, where misperceptions of peers' behaviors are corrected in order to influence individual behaviors (A. Berkowitz, 2004).

Social Norms Theory has a significant presence among non-partner sexual violence research and programming, but its potential influence on partner specific violence is not

well understood. It is important to understand if IPV misconceptions about peers' IPV-related attitudes and IPV perpetration exist in order develop tailored prevention messaging.

The current study aims to fill several gaps in IPV perpetration research specific to adult populations. First, this study will assess peer influence on IPV perpetration among adults with reference to Social Learning Theory and second, will draw on Social Norms Theory to assess whether or not adults misperceive their peers' IPV behavior. In order to fulfill these aims our study is guided by several research questions: 1. Does a relationship between the perception of peers' intimate partner violence perpetration and self-report perpetration exist among adults? 2. What is the level of discordance between the perceptions of peers' intimate partner violence perpetration and actual peer self-report of perpetration? 3. Does a relationship exist between the discordance between perceived and actual peer behavior, and self-reported intimate partner violence perpetration?

METHODS

Participants

The data used to answer the research questions were obtained from a larger study on the effects of alcohol, peers, and bystander intervention on sexual aggression. This analysis was deemed exempt by Emory University's Institutional Review Board (IRB) as all data were de-identified prior to secondary data analysis. Prior to data collection, all portions of the study were approved by Georgia State University's IRB.

The study recruited 261 males between the ages of 21 and 35 in the metro-Atlanta area through Internet based advertisements and local newspapers. Participants were led to

believe the study was on “Alcohol and Views About the Media”. Initial phone screening was utilized to ascertain participants’ self-report alcohol consumption and exclude individuals who reported alcohol or drug related problems, psychopathological disorder, learning disabilities, other medical conditions, and serious head injuries. Participants recruited were required to attend an in-person session with a “good friend” and completed study questionnaires separately. Only participants who met the required eligibility criteria, self-identified as heterosexual, and reported being in an intimate relationship in the past year were included in this analysis.

The final sample included 202 men, 101 dyads, with an average age of 25 years ($SD=3.4$). The sample consisted of 62% African Americans, 27% Caucasians, 9% Multi-racial, 1% American Indian or Alaska Native, .5% Asian, and .5% did not identify. On average, participants reported 14 years of education ($SD=2.4$) and an annual income of \$22,017 ($SD=\$17,108$). Of the individuals in the study, 82% identified as single (never married) and reported an average of 8 drinks per day ($SD=1$), on days they drank, in the past 12 months. All participants received \$10 an hour for their participation.

Measures

Demographic form

A demographic form collected general information including age, race, relationship status, sexual orientation, years of education, and yearly income.

Heavy Episodic Drinking

Respondents' alcohol consumption during the past 12 months was assessed using the National Institute on Alcohol Abuse and Alcoholism's recommended set of questions (NIAAA, 2003). In order to measure participants' average consumption of alcohol per day, the following question was asked, "During the last 12 months, how many alcoholic drinks did you have on a typical day when you drank alcohol?" Categorical responses were provided on a scale from 1 to 25 or more drinks per day, (e.g. 1-2 drinks, 3-4 drinks, etc.). As recommended by NIAAA, final scores were computed by averaging the number of drinks in each range. This method reliably measures a respondent's average consumption of alcoholic drinks per day over a period of time.

Revised Conflict Tactic Scale (CTS-2) (Straus, Hamby, Boney-McCoy, & Sugarman, 1996)

The CTS-2 is a self-report instrument consisting of 78 questions measuring both perpetration and victimization of physical, sexual, and emotional violence in an intimate relationship. Participants were instructed to report frequency of behaviors in the past 12 months on a 7 point scale, ranging from never (0) to more than 20 times (6). While the full scale was administered, only a subset including 18 measures of physical violence perpetration and 7 measures of sexual violence perpetration were included in this study. Sexual violence measures were divided into forced sex (2 items) and sexual coercion (5 items). The forced sex items are the same measure administered twice for reliability, in varying order, and were both included in this study. For the purpose of this study, responses were dichotomized to 0, never, or 1, at least once in past 12 months. The questions used in this study are listed in Table 1 by perpetration subtype.

Male Peer Support (DeKeseredy & Kelly, 1995)

The Male Peer Support assessment measures the influence of peers on dating violence behaviors (DeKeseredy & Kelly, 1995). The Male Peer Support instrument is divided into two variants, informational support and attachment to abusive male peers. The informational support variant includes 7 dichotomous questions asking about peer advice received on physical violence perpetration, emotional abuse, forced sex behaviors, and expecting sex from women. For the purpose of this study, the emotional abuse measure is not included. Physical violence, forced sex, and expecting sex each had two associated questions and were combined into a binary variable for each topic. Questions used to assess peer attitudes are shown in Table 2.

The attachment to abusive male peers variant is a 3-question Likert-type scale measuring the perception of peers' dating violence perpetration. This variant asked participants to identify how many of their male peers perpetrated physical violence, forced sexual activity, and psychological abuse. Questions pertaining to physical violence and forced sex were used in this analysis, as described below:

To the best of your knowledge, how many of your male friends...

- 1. ...have ever made physically forceful attempts at sexual activity with women they were dating which were disagreeable and offensive enough that the women responded in an offended manner such as crying, fighting, screaming or pleading?*
- 2. ...have ever used physical force, such as hitting or beating, to resolve conflicts with their girlfriends and/or dating partners to make them fulfill some demand?*

The response scale included 4 categories regarding how many friends they believed had exhibited these behaviors (none, 1 or 2, 3 to 5, and 6 to 10) and for this analysis responses were dichotomized to “None” or “At least 1 peer”.

Procedure

Upon arrival, participating dyads were greeted by researchers and led to separate rooms where they provided consent for the study. Participants completed several computer based questionnaires including a demographic form, the NIAAA daily alcohol consumption questions, the conflict tactics scale, and male peer support variants. Other questionnaires were also completed but are unrelated to this study and are not reported here. Researchers instructed participants on operating MediaLab 2000 software (Jarvis, 2006) and were available during the session to answer questions. After completion, participants were debriefed and compensated for their time.

Data Analysis

In order to compare the index respondent’s perception of their friends’ violent behavior with self-report data from their dyad, discordance variables were created. As described in Figure 1, reporting discordance was determined by comparing the perception of peers’ IPV perpetration to dyad self-report of IPV behavior. Both respondents in the dyad completed the same questionnaire, and as such each individual’s responses are counted as both an “index respondent” and a “dyad self-report”. Discordance variables were created for each IPV perpetration subtype, physical violence, forced sex, and sexual coercion. As individuals did not report their perception of peers’ sexually coercive

behavior, forced sex reports were used as a proxy. That is, the peer's perception of their friends' forced sex behavior was compared with their dyad's self-report of sexual coercion perpetration.

It is important to note that the measure of peer perception does not ask about behavior specific to their partner-dyad but rather about the behavior of all of their peers. While this is a limitation, reporting bias may have increased if the measure asked specifically about the friend enrolled in the study. Therefore, for the purpose of this research, it is assumed the individual's response applied not only to the behavior of all their peers, but specifically to the behavior of their dyad partner. In order to assess the association between peer perception and self-report IPV perpetration, Chi Square tests were performed.

RESULTS

IPV Prevalence

Demographic characteristics of men who reported IPV perpetration are summarized in Table 3. Of the total sample, 37% of men (n=73) reported perpetrating physical violence within the last 12 months, 5% (n=11) reported forced sex, and 67% (n=135) reported sexual coercion perpetration. The majority of respondents reporting any IPV perpetration were ages 21-25, African American, single (never married), had a yearly income less than \$20,000, and reported an average of 3-4 alcoholic drinks per day when drinking. Chi-square tests showed a significant association between education level and both physical violence ($p=.03$) and forced sex perpetration ($p=.03$). While there was high frequency of

sexual coercion perpetrated in this sample, there was no significant relationship with demographic indicators.

Peer Attitudes

From the Male Peer Support Scale questions on peer attitudes, 8% (n= 9) of participants reported being told by a male peer to use physical violence when a date or girlfriend challenged authority or in “certain situations”. Similarly, 5% (n= 6) reported that their male friends had verbally shared that forced sex was appropriate either when they were sexually rejected by a date/girlfriend or under “certain situations”. Nearly one fourth of the sample, (n=48), responded that their peers told them either a date/girlfriend should have sex with a man when he wants or if he spent money on a date.

Peer supportive attitudes towards IPV showed some relationship with self-reported IPV perpetration. Attitudes supporting forced sex behaviors showed a significant association with self-report forced sex behavior ($X^2=40.3$; $p<.001$). Reporting a friend shared the belief that men should expect sex was associated with self-report sexually coercive behavior ($X^2=9.53$; $p<.05$) but was not associated with self-report forced sex behavior.

Perceived Peer Behaviors

Male Peer Support questions specific to peer behaviors showed that only .5% of the sample (n=1) reported at least one of their peers engaged in physical IPV perpetration. In addition, only 1% (n=2) stated they had at least one peer who perpetrated forced sex.

There was no association found between the perception of peers perpetrating IPV and self-report perpetration for either physical violence, forced sex, or sexual coercion.

Peer Attitudes & Perceived Peer Behaviors

Of those who stated a peer had verbally supported physical violence against a dating partner, none of those same respondents reported any peers engaging in physically violent behavior in a relationship. The same result occurred for forced sex: none of the men who stated their peers support forced sex behaviors reported having peers who perpetrated forced sex with a dating partner.

IPV Discordance

Physical Violence

For physical IPV perpetration, 65% (n=102) of responses were concordant with their dyad's self-report, meaning the index person's perception of their peers' behavior mirrored that of their study peer's self-report behavior. Of the concordant responses, nearly all matched responses were a result of both the index person perceiving no perpetration and the study peer reporting no perpetration in the past 12 months (n=101). One individual reported having at least one peer who perpetrated physical IPV, which matched their study partner's self-report of perpetrating at least once in the past 12 months (Table 4). All 35% of discordant reports reflected the partner stating none of their friends had perpetrated physical violence while their peer reported perpetration at least once in the past 12 months (Table 4).

Forced Sex

Seven percent of forced sex perpetration responses (n=11) were discordant. One individual reported having at least 1 peer who perpetrated forced sex when their study peer self-reported no perpetration. The other discordant responses (n=10) reflect the index partner reporting no perpetration among friends while the study peer self-reported forced sex perpetration. All 94% of concordant responses (n=159) reflect the index partner indicating that none of their friends had forced sex on a woman before, matching their dyad's self-report of not perpetrating in the past year.

Sexual Coercion

As stated previously, no measure was administered to assess the respondents' perception of their peers' sexually coercive behavior and as such, the perception of peers' forced sex behavior was used as a proxy to assess discordance. The majority of responses were discordant (68%). All of the discordance (n=116) reflects the index partner perceiving no forced sex perpetration among friends while their dyad self-reported sexual coercion perpetration at least once in the past 12 months. Of the 54 concordant responses (32%), 96% (n=52) reflect both the index partner perceiving no forced sex among peers and the study peer self-reporting no sexual coercion perpetration. The remaining 4% (n=2) reflect both the index partner reporting forced sex among friends and the dyad reporting sexual coercive behaviors.

Discordance Association

As reflected in Table 5, there is a statistically significant relationship between the perceived peer IPV discordance and the index partner's self-report of perpetration. This relationship is significant for all three sub-types of IPV included in this study, indicating that the misperception of having no peers who perpetrated IPV influences one's own self-report of IPV perpetration.

DISCUSSION

The prevalence of IPV perpetration found in this study tended to be higher than that reported in other research, supporting the high-risk nature of this sample. This study found a 37% prevalence rate for physical violence perpetration, in contrast to other comparative studies with lower estimates, and nearly three quarters of the sample (67%) reported sexual coercion perpetration. Alcohol use and income, which have shown a relation to perpetration in other studies, were not associated with IPV in this sample. The number of years of education was found to be inversely associated with both physical violence and forced sex behaviors.

In answering our first research question we found that, contrary to research among adolescents, our study showed no association between the perception of peer behavior and self-reported perpetration. These results align with previous findings from Schwartz & DeKeseredy (2000), where no association was found among college students. Further, the perceptions of peers' IPV behaviors were extremely low in this sample. Only 1% or less of respondents perceived their peers to be perpetrating physical violence or forced sex behaviors. Conversely, 8% of respondents stated a friend had verbally shared a belief that

physical violence against a dating partner was acceptable and 5% reported peers supported forced sex behaviors. All of the same respondents did not believe they had a friend who had perpetrated IPV.

These results highlight a perplexing disconnect between peer supportive attitudes and perceived peer behavior. While these respondents had at least one friend positively affirm the use of partner violence, they did not convert this disclosure of attitudes into the perception that their friends perpetrated violence. Qualitative research assessing the way in which male peers discuss IPV-supportive attitudes may help to explain this relationship. For example, perhaps the discussion of IPV-supportive attitudes within peer networks is less rooted in the disclosure of personal dating experiences or dating advice but is driven largely from discussions of general hostility towards women and support of traditional gender roles. Again, additional research is necessary to understand the context of peer disclosure of attitudes.

In relation to dating expectations, almost 24% of the sample reported having a friend who verbally shared they should expect sex from a woman either on a date or when a man wants. The report of peer supportive attitudes for expecting sex and self-report sexual coercive behavior was found to be associated in this sample. This is consistent with current literature, as individuals with dominant male gender role ideologies have shown to be more likely to perpetrate sexual coercion (Santana et al., 2006). These results suggest that expecting sex from a dating partner is an important rape myth to address in group-based interventions to correct for falsely held beliefs justifying male perpetration of sexual violence (Lonsway & Fitzgerald, 1984).

Similar to previous findings in adolescent and college age samples, our study also found an association between peer supportive attitudes for forced sex and self-reported perpetration. Although there was no association found between peer supportive attitudes of physical IPV and self-reported perpetration, our study did not cumulatively assess peer attitudes and this may contribute to the differences found between our results and those of Schwartz & DeKeseredy (2000), who saw a positive association between peer attitudes and both physical and sexual violence.

In respect to our second research question, we found high levels of discordance between the perception of peers' behaviors and the self-report by one peer. For example, nearly one third of the sample reported having no peers who engaged in physical IPV when one of their friends self-reported perpetration in the past year. These results suggest that a social norms approach would not be appropriate among this population as the misperception is that peers do not perpetrate when in fact they do. As a consequence, correcting for this in educational messaging would not result in positive behavior changes. Similar comparisons should be conducted among adolescent populations. As a number of prevention programs among adolescents are derived from peer influence research and it would be important to observe if perceptions of peer behavior accurately reflect peer self-report behavior.

When answering our final research question, we found that the discordance between the perception of peers' behavior and the study peer's self-report IPV showed a statistically significant relationship with the index partner's self-report of perpetration. This relationship was significant for all three types of IPV perpetration. This provides evidence that while believing peers engage in IPV behavior is not associated with one's

own IPV perpetration, the misperception of peer behavior is associated with the outcome of self-reported IPV. Although additional research needs to be conducted to assess the odds of perpetration, this is an important finding that supports the need to study and address social norm misconceptions among adult males in relation to partner specific violence.

Although there are several important findings in this study, it is necessary to note a number of limitations. First, perpetration estimates were collected via self-report measures and may not accurately represent the true prevalence of behavior. Despite this, the respondents believed the study was on alcohol and the media therefore their responses on dating measures might not have been subject to increased reporting bias. As mentioned previously, the perception measures did not specifically ask about the partner-dyad, therefore the true accuracy of the perception of their dyad cannot be ascertained. However, the patterns of discordance results suggest that the findings would have been the same if the question were specific to the study partner. Lastly, discordance for sexual coercion was assessed with the forced sex peer perception measure as a proxy and future studies should assess the perception of peers' use of sexual coercion.

Despite these limitations, this study addresses several gaps in IPV perpetration research. First, these findings show that the perception of peers' IPV behavior is not associated with self-reported perpetration among adults. Secondly, contrary to research with younger populations, this study indicates that a large proportion of adult males do not perceive their peers to be perpetrating dating violence. In addition, our results indicate that the perception of peer behavior is not reflective of a peer's actual self-report behavior, where self-report IPV is higher than peer perception of IPV. And lastly, these findings show that the discordance between peer perception and peer self-report of IPV behaviors is

associated with the outcome of self-reported IPV perpetration. Overall these findings provide evidence to support continued research on the relationship between peers' attitudes and behaviors and IPV perpetration among adult populations in order to better inform prevention strategies.

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Appendix A. Tables & Figures

TABLE 1. CTS-2 Scale Questions, by Sub-Type

Physical Violence Perpetration
1. Have you thrown something at your partner that could hurt?
2. Have you twisted your partner's arm or hair?
3. Has your partner had a sprain, bruise, or small cut because of a fight with you?
4. Have you pushed or shoved your partner?
5. Have you used a knife or gun on your partner?
6. Has your partner passed out from being hit on the head by you in a fight?
7. Have you punched or hit your partner with something that could hurt?
8. Has your partner gone to the doctor because of a fight with you?
9. Have you choked your partner?
10. Have you slammed your partner against a wall?
11. Has your partner needed to see a doctor because of a fight with you, but didn't?
12. Have you beat up your partner?
13. Have you grabbed your partner?
14. Have you slapped your partner?
15. Has your partner had a broken bone from a fight with you?
16. Have you burned or scalded your partner on purpose?
17. Has your partner felt a physical pain that still hurt the next day because of a fight with you?
18. Have you kicked your partner?
Forced Sex Perpetration
1. Have you used force (like hitting, holding down, or using a weapon) to make your partner have anal or oral sex?
2. Have you used force (like hitting, holding down, or using a weapon) to make your partner have sex?
Sexual Coercion Perpetration
1. Have you made your partner have sex without a condom?
2. Have you insisted on sex when your partner did not want to (but did not use physical force)?
3. Have you used threats to make your partner have oral or anal sex?
4. Have you insisted on oral or anal sex when your partner did not want to (but did not use physical force)?
5. Have you used threats to make your partner have sex?

TABLE 2. Male Peer Support Informational Support Questions by Topic

Did any of your male friends tell you that...

Physical Violence Perpetration

1. You should respond to your dates' or girlfriends' challenges to your authority by using physical force, such as hitting or slapping?
2. It is alright for a man to hit his date or girlfriend in certain situations?

Forced Sex Behaviors

1. You should respond to your dates' or girlfriends' sexual rejections by physically forcing them to have sex?
2. It is alright for a man to physically force a woman to have sex with him in certain situations

Expecting Sex

1. Your dates or girlfriends should have sex with you when you want?
2. If a man spends money on a date, she should have sex with him in return?

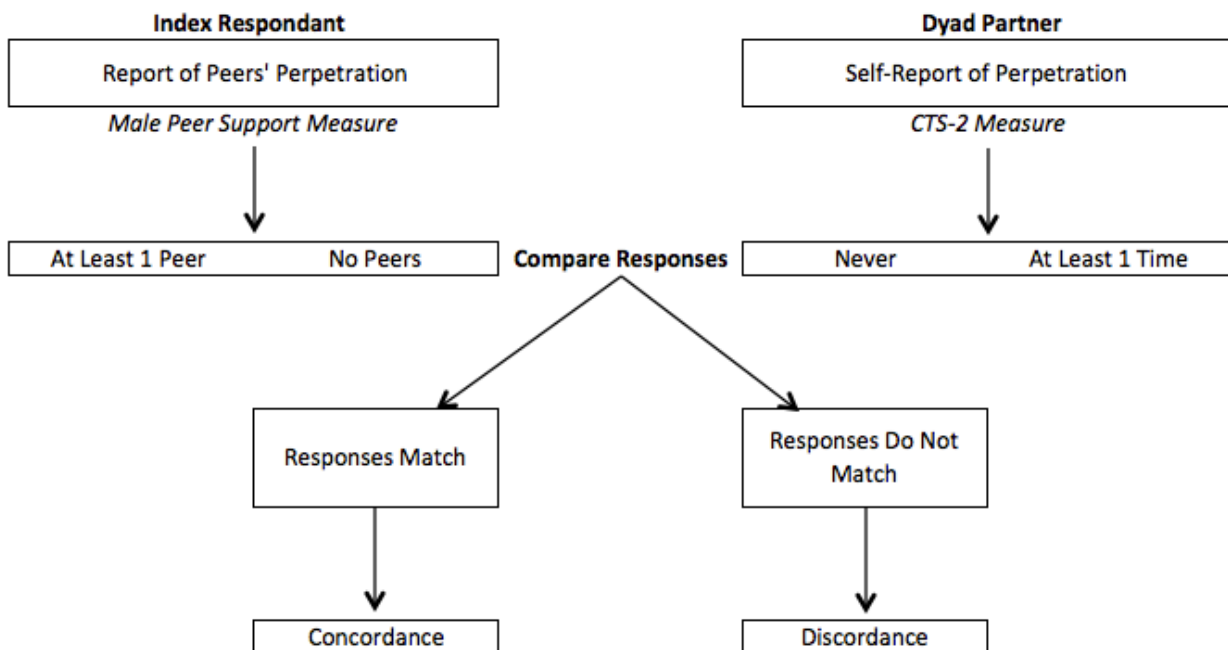
FIGURE 1. Index-Dyad Discordance Variable

TABLE 3- Distribution of Demographic Characteristics by IPV Perpetration Subtype

Characteristic	Physical Violence		Forced Sex		Sexual Coercion	
	% ^a (n)	<i>P</i>	% ^a (n)	<i>P</i>	% ^a (n)	<i>P</i>
Total Sample	36.1 (73)		5.4 (11)		66.8 (135)	
Age		0.164		0.968		0.146
21-25	72.6 (53)		63.6 (7)		68.9 (93)	
26-30	17.8 (13)		27.3 (3)		22.2 (30)	
31-35	9.6 (7)		9.1 (1)		8.9 (12)	
Education level		<.05		<.05		0.062
<High School	4.1 (3)		9.1 (1)		2.2 (3)	
Some High School	34.2 (25)		54.5 (6)		27.4 (37)	
Completed High School	12.3 (9)		9.1 (1)		16.3 (22)	
Some College	35.6 (26)		18.1 (2)		34.1 (46)	
Completed College or Higher	13.7 (10)		9.1 (1)		20.0 (27)	
Marital Status		0.197		0.751		0.187
Single (Never Married)	89.0 (65)		90.9 (10)		83.7 (113)	
Married	5.5 (4)		9.1 (1)		5.9 (8)	
Not married but living with intimate partner	5.5 (4)		0.0 (0)		8.9 (12)	
Separated or Divorced	0.0 (0)		0.0 (0)		1.5 (2)	
Ethnicity		0.529		0.413		0.817
Hispanic or Latino	4.1 (3)		0.0 (0)		5.2 (7)	
Non-Hispanic, Non-Latino	95.9 (70)		100.00 (11)		94.8 (128)	
Race		0.307		0.398		0.624
White	20.8 (15)		9.1 (1)		27.4 (37)	
Black or African American	69.4 (50)		90.9 (10)		63.0 (85)	
Asian	1.4 (1)		0.0 (0)		0.7 (1)	
American Indian or Alaska Native	1.4 (1)		0.0 (0)		1.5 (2)	
More than one race	6.9 (5)		0.0 (0)		7.4 (10)	
Income		0.091		0.497		0.632
<\$20,000	63.0 (46)		72.7 (8)		51.9 (70)	
\$20,000-\$40,000	28.8 (21)		27.3 (3)		33.3 (45)	
\$40,000-\$60,000	4.1 (3)		0.0 (0)		11.1 (15)	
>\$60,000	4.1 (3)		0.0 (0)		3.7 (5)	
Alcohol Consumption in Past 12 Months		0.357		0.949		0.355
1-2 times per day	8.2 (6)		9.1 (1)		6.7 (9)	
3-4 times per day	50.7 (37)		54.5 (6)		56.3 (76)	
5-6 times per day	20.5 (15)		27.3 (3)		22.2 (30)	
7-8 times per day	11.0 (8)		9.1 (1)		8.1 (11)	
9-11 times per day	6.8 (5)		0.0 (0)		5.2 (7)	
12 or more times per day	2.7 (2)		0.0 (0)		1.5 (2)	

Note: IPV perpetration self-report in past 12 months. *P* values determined by chi-square associations.

Total sample (n=202)

^aColumn Percentages

TABLE 4. Discordance between respondents' prediction peers' IPV behavior and their dyad's self-report

Discordance	Physical Violence Perpetration	Forced Sex Perpetration	Sexual Coercion Perpetration [§]
	% (n)	% (n)	% (n)
Concordance	65.0 (102)	93.5 (159)	31.8 (54)
<i>Self report "No" & Peer report "No"</i>	99.0 (101)	100.0 (159)	96.3 (52)
<i>Self report "Yes" & Peer report "Yes"</i>	1.0 (1)	0.0 (0)	3.7 (2)
Discordance	35.0 (55)	6.5 (11)	68.2 (116)
<i>Self report "Yes" & Peer report "No"</i>	100.0 (55)	90.9 (10)	100.0 (116)
<i>Self report "No" & Peer report "Yes"</i>	0.0 (0)	9.1 (1)	0.0 (0)

[§]Discordance identified by comparing self-report sexual coercion perpetration with peer report of forced sex perpetration

TABLE 5. Association between perception discordance and index partner's self-report IPV perpetration

	Physical Violence Perpetration	Forced Sex Perpetration	Sexual Coercion Perpetration
	χ^2	χ^2	χ^2
Discordance	152.7**	153.6**	156.4**

**p<.01

CHAPTER 4: RECOMMENDATIONS

Our findings contribute to a growing number of studies identifying IPV as an important public health concern and further support the need to invest in perpetration prevention. The current research is the first study to look at peer influence within an adult community sample and as such resulted in several recommendations for future research. In addition, specific findings on peer attitudes and peer behaviors point to a number of recommendations for prevention programming.

Program Recommendations:

1. Evidence for Peer Group Interventions

This study found a number of associations between negative peer attitudes and self-report IPV perpetration. In particular, having at least one friend who shared that a man should expect sex from a woman showed a statistically significant relationship with self-report sexual coercion perpetration. Rape myths are often corrected either in individual interventions, school-based programs, or large-scale outreach, through educational messaging or public service announcements. Our findings suggest that addressing the rape myth that a man should expect sex from a woman would also be appropriate in programs working with groups of males or specific peer networks, such as athletic teams. Research has shown that working with male groups is an effective strategy because males feel comfortable and safe challenging one another in discussion (A. D. Berkowitz, 2002). It is important to address this rape myth in a group or peer network setting as our research not only indicates the discussion of expecting sex occurs between adult males but that this discussion is related to sexual coercion perpetration.

2. Evidence Against the Social Norms Approach

As stated previously, the social norms approach aims to correct for the overestimation of peers engaging in negative behaviors. Our findings suggest that a social norms approach would not be appropriate for adult males and their peer groups. As our study showed, individuals in fact underestimated the actual prevalence of peer IPV perpetration. Correcting for this misperception would be inappropriate, as it would inadvertently be promoting negative behaviors. These results suggest that peers do not discuss self-perpetration of IPV nor do they display these behaviors around friends. Despite this, other findings from our research show that peers do talk about IPV attitudes, which indicates that a peer level intervention other than one driven by the social norms approach would be beneficial.

Research Recommendations:

1. Evidence for Contextual Analysis Surrounding Adult Male Peers' Disclosure of IPV Attitudes and Behaviors

This study showed that while male peers discuss affirmative IPV attitudes, this does not lead to the perception that their peers perpetrate violence. In order to understand how the acknowledgement of supporting violence does not then lead individuals to think their friends have perpetrated violence, it is important to develop a deeper understanding of how these discussions are framed. Qualitative research looking at the context surrounding disclosure of IPV-supportive attitudes between males would provide insight into the nature of these adult male conversations. For example, perhaps while individual males hold IPV-supportive attitudes and share these with one another, they may also indicate that they do

not actually perpetrate violence for larger societal reasons (e.g. stigma, legal ramifications, etc). Outside of information specific to the nature of conversations, narratives can also determine other context, such as whether these discussions occur under the influence of alcohol or only as a reaction to specific current event media related to IPV.

This information could be collected in a number of ways, first in the form of in-depth interviews from males who also provide quantitative responses to survey measures used in this study, allowing for a more direct connection between statistical associations and explanatory narratives. Second, focus groups would allow for males to stimulate discussion around these topics and would double as an observational opportunity for researchers to understand how males communicate with one another. Lastly ethnographic research, while likely the most difficult to conduct, would provide rich data on the context surrounding these conversations. A more comprehensive understanding of these exchanges between adult males from any of these qualitative methods would help to better inform programmatic recommendations for addressing peer influence on IPV in adults.

In addition to understanding the context surrounding discussions of IPV-supportive attitudes, qualitative research would also give insight into why self-report IPV perpetration is not also shared between peers. This type of work would help to identify whether or not males make a conscious decision to not disclose IPV behaviors. Second, this research would be able to investigate the reasons for this phenomenon. This again may be linked to the understanding among adults that in the larger societal context IPV is unacceptable and perhaps this unacceptability prevents adults from discussing these behaviors with one another. As stated previously, a holistic understanding of the discussions occurring between adult males surrounding IPV would better inform future quantitative research and intervention strategies.

2. Evidence for Discordance Analysis Among Adolescent Populations

As stated previously, research on peer influence is most often conducted among adolescence. Despite this, studies assessing the perception of peer behavior do not also assess the accuracy of these perceptions. As educational messaging and a number of school based interventions are based on peer influence findings and target social influences on negative behaviors, it would be beneficial to conduct a discordance analysis among adolescences to ensure these programs are accurately addressing misperceptions of peer behaviors in relation to actual behaviors. Conducting research on the accuracy of perceived peer behaviors can either support the continuation of a social norms approach for this population or can better inform current programs that do not account for misperceptions among peers.

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