

**The Social Norms Approach as a Strategy to Prevent Violence Perpetrated by Men and
Boys: A Review of the Literature**

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Abstract

The "Social Norms Approach" (SNA) is an evidence-based violence prevention strategy with a growing body of research to support the underlying theory and positive outcomes when implemented with fidelity. The present chapter reviews the evidence for misperceptions as they impact men and boys who perpetrate and those who are bystanders who can intervene, specifically that violence-prone individuals who overestimate peer support for their attitudes and actions are more likely to perpetrate, and that bystanders who underestimate peer support for intervention are less likely to intervene. Correction of misperceptions regarding peer perpetration or peer support for violence can thus reduce perpetration and engage bystanders to prevent violence and is particularly suited to addressing the underlying causes of male violence. This chapter reviews 25 research articles as well as emerging intervention research as well as the impact of social norms on the perpetration of violence, as well as the utilization of the social norms approach to reduce aggression; highlighting the promising results of interventions which seek to correct misperceptions of social norms.

Keywords: Sexual Aggression, Social Norms, Norms Change, Sexual Assault, Misperception

Introduction

Interpersonal violence is a public health problem, with significant effects across the social ecology (Byrne & Sampson, 1986; Campbell et al., 2009; Lauritsen, 2001; Salzinger et al., 2002). Most interpersonal violence is perpetrated by men and boys, who in turn are most influenced by the attitudes and behaviors of other men and boys (Berkowitz, 2005; Fabiano et al., 2003; Gidycz et al., 2011). Thus, researchers and prevention specialists emphasize the need for men to take responsibility for preventing other men's violence (Berkowitz, 2002; Flood, 2019; Lonsway et al. 2009). Outcomes of interpersonal violence are severe (Campbell, 2002; Koss et al., 1991; Krug et al., 2002), and intergenerational (Black et al. 2010; Widom & Wilson, 2015), frequently affecting victims across the lifespan (Larkin et al., 2012; Niolon et al., 2017; Tuvblad & Baker, 2011) and resulting in cycles of violence that may be persistent and self-perpetuating (Arkow, 1995). Importantly, when not conceptualized and implemented carefully, attempts to prevent violence by men and boys may in some cases be iatrogenic (Fagan & Catalano, 2012; Taylor et al., 2013), and despite efforts to reduce them, problem behaviors can persist or increase (DeGue et al., 2014; Dishion et al., 2001). However, in spite of these challenges, intervention science illustrates that effective strategies can be employed to prevent and reduce men's violence by engaging non-violent men in its prevention (Coker et al., 2011; Douglas & Skeem, 2005; Rutherford et al., 2007) and by focusing on strategies that inhibit violent men. Among the different strategies to reduce violence (reviewed here in Chapter 12) is the Social Norms Approach (Berkowitz 2005, 2010), which is the subject of the present chapter.

The social ecological model (SEM) is highlighted by the Centers for Disease Control and Prevention as an important consideration to promote effective prevention strategies which address interconnected risk and protective factors at the individual, relationship, community, and

societal levels. The individual level of the SEM includes biological and personal history factors that may mitigate risk for involvement in violence (e.g. age, education, income, trauma history, substance use, mental health diagnoses). Research targeting the relationship level of the SEM explores how interpersonal relationships may impact risk for violence (e.g. a person's peer network, partners, and family members). Finally, the community and societal levels of the SEM include settings (e.g. schools, workplaces, and neighborhoods) where social relationships occur, and broader societal factors (e.g. social and cultural norms, economic policies, social inequalities) that may impact involvement in violence, respectively (CDC, 2020). The SEM recognizes that risk and protective factors exist at multiple layers of the social ecology and may need to be modified simultaneously at different levels to impact risk across a relational hierarchy (Dills et al., 2019). Thus, in order to be fully comprehensive, intervention models must consider the multiplicative risk factors across the social ecology, as well as how prevention at a certain level of the social ecology may impact other layers.

Consistent with CDC recommendations, targeting misperceived social norms and engaging in norms change strategies is a promising strategy for violence prevention and harm reduction (Espelage & Swearer, 2004; Foshee et al., 1998) that can be implemented at different levels of the social ecology. For example, the guide to promoting positive community norms published by the Centers for Disease Control and Prevention (2014) encourages interventionists to correct misperceived community norms through a continuum of developmentally appropriate activities (i.e. poster campaigns or public health messaging). Campaigns can be implemented in a range of settings, including workplaces, schools, community agencies, local governments, and state organizations in order to build competency across the social ecology and sustain prevention efforts over time (CDC, 2014).

Overview of the Social Norms Approach

The social norms approach (SNA) or norms correction strategy (NCS) is driven by the recognition that individuals are prone to incorrectly perceive the attitudes and/or behaviors of others in their interpersonal environment to be different from their own when in fact they are not. Carriers of social norms "misperceptions" can include peers, friends, family members, colleagues, social groups, or community members and leaders. "Misperceptions" of normative social behaviors commonly occur in relation to problem behaviors, which may be overestimated, as well as in relation to healthy or prosocial behaviors, which tend to be underestimated. This phenomenon of misperceptions has two components. The first, referred to as pluralistic ignorance (Miller & McFarland, 1991) occurs when the majority incorrectly perceives itself to be a minority. These misperceptions may cause individuals to alter their own behaviors in order to conform to the misperceived norm such that negative behaviors are amplified while healthy behaviors are inhibited, a phenomenon which is well-documented in relation to alcohol use (Lewis & Neighbors, 2004) as well as cigarette and marijuana use (Arbour-Nicitopoulos et al., 2010; LaBrie et al., 2010), traffic safety (Perkins et al., 2010), and green behaviors (Thomas & Sharp, 2013).

Pluralistic ignorance is bolstered by the "false consensus" effect, a second component of misperceptions, which is the false belief that others share similar beliefs, values, or behaviors, when in fact they do not (Ross et al., 1977). The "false consensus" effect may lead a minority (i.e. those holding unhealthy attitudes and beliefs) to perceive themselves as the majority (Ross et al., 1977). This phenomenon is also well-documented with respect to alcohol, with high-risk drinkers overestimating their peers' alcohol use to a greater extent than non-risky drinkers or abstainers, and assuming that their own drinking is normative when it is not (Berkowitz 2004;

2005; see also Berkowitz, 2016 for an annotated bibliography covering this literature in relation to men's violence).

The SNA hypothesizes that interventions designed to correct misperceptions through sharing the actual, healthy norm will have a beneficial effect on group or community members, including the non-problematic majority (pluralistic ignorance) and the problematic minority (false consensus). Furthermore, the SNA posits that knowledge of the actual norm (i.e. the "corrected" misperception) will reduce participation in problem or risk behaviors and encourage participation in prosocial behaviors. Information correcting misperceived norms can be impactful when tailored towards an individual ("personalized normative feedback"), a group ("the group Norms Challenging Approach") or to a community ("Social Norms Marketing"), thus demonstrating its usefulness at various levels of the social ecology. The SNA also relies on the theory of cognitive dissonance such that providing accurate information to correct a misperception serves to inform those who misperceive a norm that their perceptions are in error (Berkowitz, 2005). Utilization of the SNA may thereby induce cognitive dissonance and the motivation to correct the misperception if the new information is believable (Berkowitz, 2005; LaBrie et al., 2010). The social norms approach has been implemented internationally, extensively in North America and Europe as well as in Australia, New Zealand, and Africa (Jewkes et al., 2015; McAlaney et al., 2011).

The development of interventions grounded in the social norms approach is highlighted as a favorable avenue for reducing violence perpetration and victimization (Berkowitz, 2010, 2013; Orchowski, 2019). Numerous studies explore the application of the social norms approach to mitigate violence across diverse subject populations, including college and university students, high-school and middle-school populations, sorority and fraternity groups, student athletes, and

with wider campus communities (Berkowitz, 2004), as well as the military (Orchowski et al., 2017) and South African youth (Akande et al., 2019). Norms correction efforts target attitudes and behaviors that influence both the perceived acceptability of violence within a community and factors that encourage its perpetration, both in terms of bystanders' willingness to intervene (prevention) through reducing pluralistic ignorance and perpetrators' willingness to perpetrate (intervention), through reducing false consensus.

Social norms-based interventions serve to correct societal "norming of the negative," which can foster a misperception of the amount and acceptability of violence, both by bystanders and offenders. Because individuals rely on the public behavior of others to determine what is "normal" visible language and behavior (in this case pertaining to violence) is overestimated, and more hidden language and behavior (such as discomfort with violence) is underestimated (Miller & McFarland, 1987; 1991, Orchowski, 2019). Thus, if someone views a problematic event and no one in the vicinity seems bothered by the event or chooses to intervene, the observer may perceive the norm within that group or community to be accepting of problem behaviors or even conclude that the behavior itself is not problematic. The theory predicts that individuals will behave in accordance with their perceptions of anticipated/expected attitudes and behaviors of their peers, regardless of whether the perception is accurate (Berkowitz, 2003). Social norms theory also pertains to violent-prone individuals who overestimate others' approval or use of violence, with overestimation serving as an enabler for them to perpetrate (Bohner et al., 2006; Dardis et al., 2016). Considering the above, correcting misperceptions regarding unhealthy or violent norms can serve as a powerful tool for prevention (Casey et al., 2018; Neighbors et al., 2010).

Extensive research documents that certain misperceptions (pluralistic ignorance and false consensus) apply specifically to men's perceptions of other men. Thus, both violent and non-violent men routinely overestimate other men's adherence to masculine norms, the acceptability of violence, and sexism within their peer groups, often believing that their male peers are comfortable with exaggerated expressions of masculinity — including sexist, coercive, and derogatory comments and behavior toward women — when they are not (Berkowitz, 2011; Flood, 2010, 2019). Overestimation of the prevalence of violence-supportive attitudes may lead non-violent men to go along with violence-supportive behaviors because they may: 1) feel that they are in the minority for disagreeing with them (i.e. they are "pluralistically ignorant"); 2) fear other men's negative responses to intervening (social inhibition), such as disapproval or social rejection (Coulter, 2003), or; 3) fear having their masculinity called into question if they take action to "ruin another man's chances" (Carlson, 2008). Thus, norms correction interventions grounded in the social norms approach address potentially harmful misperceptions by sharing the "good news" about community health and values and about men and by addressing the underlying determinants of men's violence and other men's response to it (Berkowitz, 2011).

An extensive body of research documents that the strongest influence on men's behavior with respect to violence are peer influences and perceptions of peers (Schwartz & DeKeseredy, 1997; Swartout, 2013). Research also documents that influential peer perceptions are frequently in error, suggesting that their correction could serve as a powerful form of prevention (Berkowitz, 2010). Addressing men's misperceptions of other men is a particularly promising violence prevention strategy given the significant influence that men exert upon each other. Importantly, of the various contributors to violence and violent behavior, misperceptions are

among the most modifiable risk factors that may be addressed on an individual, group or community level (Berkowitz, 2010; Miller & Prentice, 2016; Paul & Gray, 2011).

The Social Norms Approach and Gender Transformational Approaches

Recent literature identifies gender transformational approaches as an important methodology for changing men's behavior and raises the question of whether or not norms correction approaches can be considered as gender transformational. Whereas interventions grounded in SNA do not attempt to change male norms and therefore are technically not gender transformational they may be considered to be indirectly gender transformational because they give men permission to act differently by revealing the true, healthy norms of their male peers, which in turn can transform men's attitudes and behaviors about masculinity, sexism, and men's violence, for example. Several scholars (Cislaghi & Berkowitz, under review; Cislaghi & Heise, 2019; Orchowksi, 2019) provide insights regarding how these two approaches are similar and how they differ, and when each can be most beneficially implemented separately or in combination. A benefit of the social norms approach is its focus on pre-existing positive aspects of masculinity (as opposed to negative attitudes and behaviors which may create a defensive reaction), which provides men with permission to behave in ways that more closely align with existing values and beliefs. Thus, while interventions grounded in the social norms approach break from the traditional pedagogy of change attempted by what may be considered "gender transformational" programs, they can also be considered to be gender transformational because they transform the way that men choose to act as men.

One key aspect of the social norms style of violence prevention program, one that demonstrates its transformational nature, is its potential to change men's behavior by leveraging the influence of existing structures of men's relationships and the interconnectedness

of male peer behaviors. As noted, men are greatly influenced by other men, particularly by what they think other men believe or how they think other men behave (Berkowitz, 2011; Flood, 2019; Schwartz & DeKeseredy, 1997; Swartout, 2013). Therefore, the underlying vector of change for interventions that choose to highlight existing positive attitudes and behaviors among men is the operationalizing of positive male influence, giving men permission to act in health-promoting and violence-reducing and supporting behaviors that are more authentic to their already-held values and beliefs, as well as by reducing fear of isolation from peer groups. The intervention serves to create a positive feedback loop, in which men can model for other men ways to explore authentic, pro-social masculinity which over time can serve to change actual male behaviors, reducing violence and supporting bystander intervention. Prosocial forms of positive peer pressure can also influence violent men, who are especially prone to overestimate other men's support for their violence, serving to inhibit their violence as they begin to realize that male peers do not support what their beliefs and actions.

Purpose of the Present Chapter

Research on interventions grounded in social norms theory is a burgeoning area of study, with existing studies focusing on individuals, groups and communities. Here we summarize findings that demonstrate the utility of norms correction as a strategy for reducing boys' and men's violence. For this purpose, we conducted a comprehensive review of existing literature on violence prevention interventions grounded in the social norms approach collected from ERIC, Google Scholar, PsycArticles, PsycINFO, and PubMed. In our summary of relevant literature, we examined which normative beliefs, attitudes, or behaviors were targeted for misperception correction within a given study (i.e. gender role, rape myth acceptance, acceptability of violence, rate of perpetration, or injunctive versus descriptive norms), whether the given intervention was

designed to address single or multiple layers of the social ecology (target), and whether interventions had long-term effects on attitudes, perpetration, and/or victimization (outcomes). We also outline potential areas for improvement and future directions. Unless otherwise stated, the studies and interventions reviewed here were designed as interventions for all-male target groups. For the purposes of this review, the research literature is divided into categories pertaining to the role of misperceptions in: 1) facilitating or inhibiting violence-prone men to perpetrate 2), facilitating or inhibiting male bystanders from intervening to prevent other men's violence, and, 3) evaluations of group and community-based social norms/norms correction interventions for boys and men.

Summary of Existing Research

The important function of social norms in orienting a group member actions suggests that an individual's perceptions or misperceptions of norms will influence their own attitudes and behaviors regarding both positive and negative behaviors. As mentioned previously, such consequences are well-documented by research examining misperceptions of descriptive and injunctive norms for a variety of individual health-risk behaviors, including alcohol, cigarette and marijuana use (Lewis & Neighbors, 2004; Perkins, 2002), risky sexual behavior (Miner et al., 2009), unsafe driving (Donmez et al., 2019) and gambling (Neighbors et al., 2007), among others. Studies consistently demonstrate that individuals who misperceive the social norm through overestimations of a behavior then engage in that behavior at an elevated frequency (Lewis & Neighbors, 2004), but may reduce the negative behavior upon misperception correction.

Provision of feedback on misperception of peer norms is an intervention strategy widely applied in social norms interventions for drinking and other substance-use behaviors, which seek

to reduce their frequency by presenting individuals with information on actual healthy norms to correct problematic misperceptions (Berkowitz, 2005; Perkins, 2002; Larimer et al., 2007; Lewis & Neighbors, 2004; Vallentin-Holbech, Rasmussen, & Stock, 2019). The success of social norms interventions in adolescent and young adult populations (Lewis et al., 2007) has led to a growth of literature examining their utility for reducing violent behaviors. To date, a wide body of research has documented the occurrence of normative misperceptions regarding sexual assault and domestic violence among men with a history of perpetrating those forms of abuse, as well as among those who are bystanders to their problematic language and behaviors.

Misperception of Peer Support for Rape Myths as a Facilitator for Violence-Prone Men to Perpetrate Sexual Assault and Domestic Violence

Early experimental work on social norms conducted by Eyssel and colleagues (2006) found that presenting college students with information about rape myth acceptance among their peers had a significant impact on their self-reported rape proclivity, independent of their personal endorsement of rape-supportive attitudes. Specifically, students who were presented with normative information indicating higher than actual rape myth acceptance among peers also reported higher rape proclivity at post-test. Bohner et al. (2006) replicated and extended Eyssel and colleagues' (2006) findings in a set of two studies which likewise showed that presenting college men with information indicating higher than actual rape myth acceptance among their peers led in turn to higher self-reported rape proclivity, and that effects were mediated by participants' own rape myth acceptance. Their second experimental study demonstrated that the effect of normative information was moderated by personal rape myth acceptance, such that men who were more likely to adhere to rape myths and who also perceived their peers to have high rape myth acceptance were most likely to demonstrate rape proclivity.

Other studies focus on perceived descriptive norms for perpetration behaviors. For example, Neighbors and colleagues (2010) examined perceived descriptive norms for IPV in a community sample and found that perpetrators of domestic violence consistently overestimated the percentage of other men who engaged in intimate partner violence (IPV). Misperceptions were positively correlated with participating men's own frequency of IPV perpetration in the previous 90 days. The association between perceived descriptive norms and perpetration is replicated in several subsequent studies of college students, which confirmed that students who have personally perpetrated IPV are more likely to overestimate descriptive norms for IPV among other students at their school, relative to those with no perpetration history (Witte & Mulla, 2013; Witte et al., 2015; Witte et al., 2017). Recent research similarly confirms Witte and colleagues' (2013; 2015; 2017) findings, documenting that men with a history of perpetration are significantly more likely to overestimate their peers' engagement in sexually aggressive behaviors, relative to non-perpetrators (Dardis et al., 2016); as well as that sexually aggressive men are more likely to misperceive and overestimate other men's sexual desires and behavior (Casey et al., 2020).

Studies using a prospective design, in which misperceptions predict future behavior, provide stronger evidence for the association between perceived norms and perpetration of sexual assault and domestic abuse. Thus, in one examination of risk factors associated with sexual assault perpetration among undergraduate men, Loh and colleagues (2005) found that participant's perception of rape myth acceptance among peers significantly predicted their own likelihood of perpetration at three-month follow-up. Duran and colleagues' (2018) mixed-gender study of Spanish undergraduate students similarly found that decreases in perceived descriptive

peer norms for dating violence perpetration among teenage boys predicted congruent decreases in personal dating violence perpetration over time.

Similar results were reported by Mulla and colleagues (2019) in an investigation that sought to replicate and extend earlier work by Eyssel and colleagues (2006) using experimental methods. Researchers randomly assigned college men and women participants to receive fabricated graphs that either indicated peers' descriptive norms for IPV to be high, indicated them to be low, or, as a control condition, received information on descriptive norms for non-violent behaviors. Data demonstrated a significant main effect of norm condition such that participants in the high norm condition reported significant increases in their perceptions of the injunctive norms and personal attitudes of other men regarding the acceptability of IPV, whereas those in the control and low-norm conditions did not. Significantly, increases in perceptions that other men were accepting of IPV were associated with higher self-reported propensity to engage in IPV in future situations.

Taken together, these studies provide evidence of the causal influence that perceived norms may have on men's violence perpetration. Whereas further work is needed to establish a reliable *causal* association between perceived norms and perpetration behavior, the extant data strongly supports the use of norms correction as a strategy for changing violent-prone men's behavior. Towards this goal, continued research using experimental as well as prospective research methodologies is needed.

Whereas the basic associations between misperceptions of peer norms and violence perpetration are well established, little research to date has examined how these associations may vary based on individual differences. An important development in this area is the exploration of pre-existing psychological characteristics that potentially moderate the influence of perceived

norms on an individual's likelihood of perpetrating violence. Investigations of background characteristics associated with violence against women show that men who endorse hegemonic and misogynistic traits and attitudes are especially prone to perpetrating sexual violence (Loveland & Raghavan, 2017). Recent studies have shown that these constructs may also interact with perceptions of peer norms to influence men's propensity to engage in violence.

Duran and colleagues (2018) assessed the direct and interactive effects of personal and perceived peer attitudes of hostile sexism (HS) on rape-proclivity among college men. Participants completed measures assessing their personal level of HS and were then given fabricated statistics indicating high or low HS among other males at their school. Results showed that both personal HS and perceived peer HS had significant positive main effects on participants' self-reported rape-proclivity. Furthermore, the association between higher perceived peer HS and self-reported rape-proclivity was moderated by men's personal level of HS, such that men who perceived HS to be high among peers and also endorsed higher personal levels of HS reported higher levels of rape proclivity than those who were lower in HS.

The interaction of HS and perceived peer norms for HS observed by Duran and colleagues (2018) suggests that misperceptions of sexist or violence-condoning attitudes among peers may have an especially salient influence on the men who personally endorse these attitudes. Thus, whereas sexist or violence-condoning attitudes may predispose men towards sexual aggression, the perception that other men share those attitudes may embolden them to verbally or physically express their aggression. Mulla and his colleagues (2019) found evidence of a similar effect when examining the impact of social dominance orientation (SDO) as a moderator of normative influence on personal IPV acceptance and IPV propensity among college men and women. Their results showed that individuals high in SDO who perceived peer attitudes

(i.e. injunctive norms) to be more accepting of IPV also reported significantly higher personal acceptance of IPV than those who were low in SDO. Furthermore, individuals who were both high in SDO and held higher perceptions of peer IPV acceptance reported the highest levels of IPV propensity.

The interactions between sexist and hegemonic traits described above provide preliminary support for a social disinhibition model of normative influence, with misperceptions of peers having a disinhibiting effect. Thus, the belief that most other men disapprove of violence may inhibit violence prone men from perpetrating violence due to the fear of being ostracized by their male peers. Conversely, false consensus perceptions that male peers support for violence may reduce concerns of negative social reactions to sexist or violent expressions and behaviors, and thus disinhibit violence-prone men from engaging in them. These possibilities highlight the potential utility of targeting violence prevention programming towards subgroups of individuals with predisposing risk factors for violence perpetration. Because individuals high in SDO and other stereotypically masculine traits are often dominant social actors in male social groups (i.e. those at the top of a social hierarchy, who are considered as "popular" individuals), interventions targeting these individuals may have the added benefit of initiating a "trickle down" effect, wherein high-powered actors are tasked with correcting harmful misperceptions of norms by communicating accurate information with individuals across lower levels of the social hierarchy.

In summary, the body of literature described above documents both the tendency of men to overestimate other men's agreement with violence-condoning attitudes and behavior, and the potential for false-consensus misperceptions to increase men's risk of perpetrating violence. Although limited, evidence from experimental studies suggests that these associations may be

causal in nature. Recent examinations of moderating factors suggest that the influence of misperceptions of peer norms on individuals' likelihood of perpetrating violence may be contingent on the presence of certain attitudes or traits related to a predisposition to violence against women. These findings may help to inform and optimize violence prevention programming. However, progress in this area will require further research to replicate and build on initial support for the social disinhibition model described above. For a full summary of findings regarding the impact of norms misperceptions on risk for violence perpetration, see Table 1.

The Influence of Misperceptions on Bystander Intervention among Non-Perpetrators

A growing number of studies explore the impact of normative misperceptions on men who have the potential to intervene against male-perpetrated violence as bystanders (Table 2). Extant literature in this area reliably demonstrates that men often hold inaccurate perceptions of their male peers' violence-related attitudes and these misperceptions may undermine their motivation to intervene against other men's perpetration of sexist and violent behaviors (Berkowitz, 2003; Brown & Messman-Moore, 2010; Fabiano et al., 2003).

Two multi-site quantitative studies of middle and high school students in diverse regional settings document the negative influence of misperceptions on bystander intervention. Henry and colleagues (2013) assessed the accuracy of perceived school norms for aggression and non-violent problem-solving strategies among two cohorts ($n = 852$; $n = 968$) of 6th grader boys and girls at 12 schools in Chicago, and found that students consistently overestimated their peers' support for aggression, and underestimated their peers' support for using non-violent problem-solving strategies. Analyses further showed that discrepancies between perceived and actual norms in 6th grade remained significant after accounting for demographic factors (e.g. gender and

ethnicity), aggression level, self-serving bias, and social desirability, and persisted through 8th grade. In another large-scale survey of U.S. adolescents in 30 schools across 6 states, Perkins and colleagues (2019) examined middle school and high school boys and girls' personal and perceived peer support for reporting weapons at school to authorities. Whereas most students supported telling an authority figure about weapons at school, between one-third to one-half of students across schools erroneously believed that most other students at their school would not agree with doing so. Moreover, students' perceptions of peer support for telling authorities about weapons on campus were strongly positively associated with their personal support for telling authorities.

Other research documents the impact of bystander misperceptions in college populations. Fabiano and colleagues (2003) quantitative examination of personal and perceived peer attitudes related to bystander behaviors in a sample of undergraduate men revealed that most men underestimated both the importance other men placed on consent, as well as other men's willingness to intervene against sexual violence. Furthermore, men's perception of their male peers' willingness to intervene in high-risk situations emerged as the *only* significant predictor of their own willingness to intervene. Similar outcomes were found by Stein (2007) in a quantitative study of men in their first year of college conducted. In general, participants overestimated the extent to which their friends endorsed rape supportive attitudes and behaviors and underestimated their friends' willingness to prevent rape. Additionally, perceptions of friends' attitudes, behaviors, and willingness to prevent rape significantly predicted men's personal willingness to prevent rape, independent of their personal attitudes towards it

Brown and Messman-Moore (2010) likewise examined the relative influence of personal characteristics and perceived peer norms on male college students' willingness to intervene

against sexual aggression. Their analyses showed that after controlling for demographic variables and social desirability bias, only perceived peer attitudes regarding sexual aggression emerged as a significant predictor of men's personal willingness to intervene against it. A study by Deitch-Stackhouse and colleagues (2015) also found that college men consistently perceived their peers to be significantly less bothered by violent behaviors and less likely to intervene against those behaviors than themselves. These under-estimations in turn predicted men's self-reported likelihood of engaging in prosocial bystander intervention to stop violent behaviors, independently of how personally bothered they were by those behaviors.

Taken together, the findings described above illustrate the high prevalence and significant consequences of pluralistic ignorance regarding bystander attitudes and behaviors among men. Whereas the misperception that many other men hold violence-supportive attitudes may disinhibit men who are prone to violence from perpetrating it, the misperceptions that few other men care about preventing violence may be one of the most important influences that inhibit men who are bystanders to violence from intervening against it.

The explanatory power of research demonstrating these associations has been limited by several conceptual and methodological shortcomings, however. For example, although a significant body of work has examined the associations between perceived peer norms and bystander intervention, only a handful of studies have used longitudinal methods or true experimental paradigms to test the causal and temporal nature of these associations. The relative influence of different types of perceived norms on bystander attitudes and behaviors has also received little attention thus far, and the mediating processes through which perceived peer norms inhibit or facilitate bystander intervention remain largely unexplored.

A valuable framework for further research addressing these issues is described by the situational model of bystander behavior (Latané & Darley, 1968), which describes five components involved in the decision to engage in bystander intervention: (a) noticing a problematic situation; (b) recognizing it as problematic and intervention-appropriate; (c) taking responsibility to address it; (d) assessing one's ability to intervene, and; (e) choosing to take action. The situational model has had a substantial influence on the development of research and prevention programming addressing bystander intervention against violence (Burn, 2009; Latané & Darley, 1968). However, its potential utility in guiding the development of more comprehensive conceptual models of bystander intervention has been largely untapped. The integration of perceived social norms and other social-cognitive constructs within the broader framework of the situational model may be especially valuable in illuminating the modifiable processes through which prosocial bystander behaviors can be increased, both by identifying the stages of change that men pass through when becoming active bystanders, and by removing the barriers present at each stage.

Preliminary support for this approach is demonstrated in recent longitudinal study of high school students by Mulla and colleagues (in press), which examined the influence of perceived norms on two steps leading towards bystander intervention identified by the situational model: (a) noticing a problematic situation; (b) recognizing it as problematic and intervention-appropriate. A series of multiple regression path analyses were used to assess and compare the direct associations of perceived descriptive and injunctive norms with student's personal attitudes regarding the acceptability and seriousness of abuse (conceptualized as analogs for noticing a problematic situation), and their recognition of high-risk situations for abuse perpetration (conceptualized as an analog for recognizing the situation as problematic and

intervention appropriate). The authors also assessed whether the direct influence of perceived norms on these constructs impacted engagement in bystander behaviors at baseline and 6-month follow-up, as proposed by the situational model. Data suggested that higher perceived injunctive norms (i.e. perceived peer acceptance towards violence) are more strongly associated with more personally accepting attitudes towards violence than perceived descriptive norms (i.e. perceived prevalence of violence perpetration among peers). Higher personal acceptance of violence was associated with lower perceptions of the seriousness of abuse, and lower ability to recognize perpetration risk in hypothetical situations. Lower abuse perceptions and risk recognition in turn predicted lower rates of self-reported engagement in prosocial bystander behavior when given the opportunity to intervene against violence, both at baseline and at 6-month follow-up.

Mediational analyses also showed that men's perceptions of violence-supporting attitudes among male peers indirectly influenced their likelihood of engaging in bystander intervention over 6-month follow up through personal attitudes, abuse perceptions, and risk recognition. This study supports the hypothesis that misperceptions may serve as barriers at different stages of the bystander model, and that injunctive norms may be more salient than descriptive norms.

Although additional research is needed to establish the reliability of the associations documented in studies of bystander misperceptions as inhibitors of bystander intervention, these findings are largely consistent with the outcomes observed in evaluations of existing violence prevention programs incorporating the social norms approach (Casey & Lindhorst, 2009; Fabiano et al, 2003; Orchowski et. al. 2018; Paul & Gray, 2011; Salazar et al, 2014; Tankard & Paluck, 2016). In the following section, we provide a review of interventions that use the social norms approach as a strategy for reducing perpetration and promoting prosocial bystander behaviors. We then discuss how insights from the recent research summarized above may be

applied to refine the conceptualization and methodology of current prevention approaches and increase their impact.

Evaluations of Norms-Correction Interventions to Prevent Men's Violence

Robust support for norms-correction as a violence prevention strategy is provided in a number of experimental evaluations using a variety of methods for delivering normative feedback, including community-wide social norms marketing campaigns, interactive small-group workshops, and web-based interventions in middle schools, high schools, colleges and universities, with reductions found for the experimental group in negative attitudes, sexism, and in some cases, actual violence, as well as increases in pro-social bystander behavior. In the summarized experimental studies, positive outcomes were consistently associated with correction of the respective misperceptions, providing empirical support for the theory of social norms. Table 3 presents findings from intervention research currently in the peer-reviewed literature. The discussion below also includes information regarding emerging interventions grounded in the social norms approach. As the final outcomes from these emerging studies are forthcoming, they are reviewed but not included in Table 3.

Interventions for youth and adolescents. Hillebrand-Gun and colleagues (2010) used a small-group norms approach to increase bystander intervention among high school boys. The intervention, based on the Men as Allies philosophy (Heppner et al., 2005), consisted of three 45-minute sessions incorporating activities to promote prosocial bystander attitudes and behaviors (e.g. discussions to encourage challenging of sexist attitudes and behaviors, messaging promoting bystander action delivered by male role models, practice of bystander intervention skills) and posters with accurate normative data which were presented during the workshops as well as displayed in the school. Participants in the control group engaged in regular

classroom activities. Dependent measures administered post-intervention and at 4-week follow-up indicated that boys who received the intervention reported more decreased (i.e. more accurate) perceptions of peers' participation in rape-supportive behaviors and comfort with sexist situations. The experimental group also showed significant decreases in their own rape-supportive attitudes.

Researchers have conducted similar investigations among youth in middle schools to examine bullying attitudes and behaviors, with both boys and girls as the target audience. For example, Perkins et al. (2011) surveyed students in five diverse middle schools in New Jersey to assess bullying perpetration and victimization, pro-bullying attitudes (self- and perceived), and reporting of bullying (who should be notified). Posters exhibiting all-school (i.e. not gender specific) positive norms were placed in the schools with follow-up surveys documenting significant decreases in perceptions of peer bullying attitudes, decreases in personal bullying behavior and victimization, and increased support for reporting bullying to adults among both boy and girl students.

Shorey and colleagues (2017) evaluated the efficacy and outcomes of "Dating it Safe" a multi-site intervention addressing teen dating violence among high school students. Researchers analyzed longitudinal survey data from 1,042 boys and girls across 7 public schools in Texas. Analyses included data on personal perpetration and perceptions of peers' perpetration of dating violence collected annually across 5 waves, starting in participants' freshmen or sophomore year of high school. Results indicated that perception of peers' dating violence perpetration was associated with actual perpetration at baseline, with decreases in perceptions of peers' perpetration of dating violence predicting decreases in personal perpetration at subsequent time points, with stronger associations for boys compared to girls.

In another school-based intervention targeting both genders, Wasco (2015) examined the efficacy of a two-year sexual violence prevention, social norms-bystander intervention program among high school students that was implemented by Pittsburgh Action Against Rape (PAAR). The goal of this social norms marketing campaign was to decrease seven problematic behaviors: (1) inappropriate name-calling, (2) sexual comments about students' bodies, (3) spreading false sexual rumors, (4) sexual gossip about others, (5) sending sexual picture texts, (6) unwanted harassing texts, and (7) unwanted touching. An eighth behavior, coercing another student for sexual activity was added during the second year of the study. The intervention utilized posters to present the positive norms to students. At follow-up, program participants reported significant decreases in perpetration and victimization rates of sexual harassment in all categories except for sexual gossip.

Orchowski, Malone, Pearlman, Rizzo and Zlotnick (2018) conducted a rigorous randomized group-cluster trial to evaluate a social norms-driven, multi-session sexual assault prevention program for high school students. The randomized control trial engaged 10th grade boys and girls at 27 high schools in New England. Intervention components included a series of 4 workshops designed to mitigate sexual and gender-based violence, and a targeted social norms poster campaign. Workshops directly addressed gender-based violence and measured outcomes based on gender identity. The third workshop was conducted in single-gender groups and focused on specifically gendered issues; the boys' group discussing masculinity, pornography, and myths around false reporting, and the girls' group discussing consent, pressure to engage in sex, rape myths, and risk reduction strategies. Students who did not identify along the gender binary were invited to attend whichever session they felt applied more to their lived experiences. In some cases, upon request from study sites, a mixed-gender group was facilitated that incorporated the

curriculum in a manner mindful of gender norms. Results of the open pilot trial highlighted the feasibility and acceptability of this approach, and results of a randomized cluster trial highlighted promising findings on rates of sexual victimization.

Orchowski and colleagues (2015) also conducted a group cluster trial to evaluate a social norms marketing campaign to prevent sexual and dating violence among middle school students. The trial engaged 6th-8th grade students at 7 middle schools in New England. Intervention components included a 12-week poster-based social norms marketing campaign designed to correct inaccurate perceptions of norms regarding violence, and targeted technical assistance programming based on school needs. The norms targeted in each of the 12 posters were based on the findings from a school-wide survey, implemented at the start of the fall semester. Students generated artwork for the posters, and the final poster topics were aligned with the most salient misperceptions of norms at each school. Social norms marketing materials addressed: 1) the acceptability of dating and sexual violence; 2) gender roles; 3) sexual activity; 4) sexual communication/consent; 5) support for victims; and 6) bystander intervention. Teachers at each intervention site also received annual training on how to appropriately respond to student *õkick backõ* about the campaign and foster discussions on the posters and were also provided a workbook on the campaign, and ways to support its implementation. Bi-weekly intercept interviews garnered information on the extent to which students say the campaign, believed the messaging, and talked about the messaging with their peers. Intercept interviews also offered an opportunity for the intervention staff to address *õkick-backõ* in real time. Technical assistance to support the campaign was provided on a bi-weekly basis and was delivered in a range of formats (i.e., school-wide assemblies, student advisory sessions, student council trainings, morning announcements, and short presentations delivered by the intervention staff). Data analysis

regarding the impact of the social norms intervention that was implemented for two consecutive years in each school on the prevalence of perpetration and victimization of various forms of violence is underway.

Research is also underway to examine the feasibility, acceptability and satisfaction associated with an integrated sexual assault and sexual risk intervention for young boys in South Africa. Notably, in a recent systematic review on integrated interventions for HIV and interpersonal violence (IPV) among adolescents in sub-Saharan Africa, only six interventions were found to concomitantly address HIV and IPV among adolescents, and none utilized a social norms approach (Righi, Orchowski & Kuo, 2019). To address this, an initial pilot trial of an integrated sexual assault and sexual risk intervention has been conducted (called *Safe South Africa*) that is grounded in the social norms approach (funded by NIMH, grant number R34MH113484; PI: Kuo). Safe South Africa is a behavioral intervention that targets individual-level behavior change for adolescent boys aged 15-17 years. The group-based intervention is facilitated by male role models in two 2-hour sessions held weekly for 2 weeks in a school-setting. The intervention promotes sexual health and reduce risky sexual behavior relating to acquisition or transfer of HIV and sexually transmitted infection; to prevent IPV; and to increase bystander behavior for prevention of IPV perpetration. The intervention is based on two individual behavior change theories: (a) the HIV risk prevention components were based on the Information-Motivation-Behavioral (IMB) theory; and (b) the IPV perpetration prevention components, which are grounded in social norms theory. Data from boys' social environment (in this case, the school they attend) is used to identify and correct misperceived social norms that might otherwise support engagement in risky sexual behavior and perpetration of sexual aggression. Using data informed debate, discussion, and role-play, boys discuss, challenge, and

practice preventive behavior change techniques that challenge problematic gender norms, relationship behaviors, and peer pressures that related to HIV and STI risk, and IPV. Adolescent boys consider their own potential for intimate and interpersonal violence (i.e., attitudes, beliefs and socialization experiences) and motivate and practice how to take a stand against violence perpetrated by others. The study consisted of a pilot of the intervention with 1- and 6-month follow-up with 80 adolescent boys (20 in an open pilot, and 60 in a randomized pilot trial). Boys regardless of HIV, sexual status, or previous perpetration behavior were eligible for inclusion. Misperceptions of social norms were also documented and targeted in the intervention. Preliminary data from the developmental research on *Safe South Africa* suggested that the intervention was highly acceptable to the audience, with 100% of boys rating the quality of the program as "good" or "excellent", saying that they would recommend the program to a friend, and feeling that the information would help address important life issues.

Interventions for college students. Mennicke and colleagues (2018) examined the efficacy of a social norms sexual violence prevention marketing campaign (see Berkowitz, 2013, Chapter 6) in changing college men's attitudes, beliefs and behaviors over a five-year period on a university campus. Annual survey data was analyzed to identify discrepancies between actual and perceived norms regarding consent, bystander intervention, rape myths, and sexual activity and was used to develop social marketing materials correcting related misperceptions. Data analysis demonstrated underestimation of support for bystander behavior and overestimation of rape myth endorsement. Cross-sectional analyses of actual and perceived peer norms across years one through five demonstrated a decrease in normative misperceptions that were correlated with increases in prosocial bystander attitudes and actual intervention behaviors, thus demonstrating the success of the social norms marketing campaign.

In an earlier study, Bruce (2002) utilized a quasi-experimental social norms intervention with eight groups (four male-only treatment groups and four mixed-gender control groups) on an undergraduate campus with the goal of reducing coercive sexual behaviors. The project included three major components: a social norms marketing campaign, a theatre presentation addressing masculine socialization, and male-to-male peer education. The "A Man's Campaign" successfully improved the accuracy of men's assessment of other men's sexually aggressive behaviors and reduced overestimation of problem behaviors among men participants. Whereas self-reported attitudes changed in a positive direction, self-reported perpetration behaviors ("I have sex when my partner is intoxicated") increased after the first year of the project. During the second year of the program, the project was expanded to include the entire campus. Year two evaluations found that treatment group improvements slightly declined but continued in a positive trajectory, whereas the campus group saw several positive changes, including a reduction in self-reported perpetration among men. Specifically, the campaign was followed by a significant increase in the proportion of men who indicated that they "stop the first time a date says no to sexual activity" and a decrease in those who said that "when I want to touch someone sexually, I try and see how they react."

Kilmartin and colleagues (2008) examined the efficacy of norms correction interventions for reducing the prevalence of sexist beliefs at a university in the southeastern United States. Men's perceptions of other men's sexist attitudes were assessed and corrected in a Small Group Norms Challenging Intervention (Far & Miller, 2003) in which participants in the experimental group were offered feedback on discrepancies between actual and perceived norms, with follow-up evaluation demonstrating a reduction in sexist attitudes for the experimental group.

In another study, Orchowski and colleagues (2018) developed and evaluated an intervention to decrease sexual aggression among college men who report heavy drinking. The intervention approach incorporated individual Brief Motivational Interviewing (BMI) to reduce alcohol abuse and thereby mitigate risk for sexual aggression. In the open trial phase, male facilitators delivered a three-session Sexual Assault and Alcohol Feedback (SAFE) program to 25 college men who were identified as heavy drinkers. Sessions totaling 5.5 hours provided personalized normative feedback regarding alcohol use, sexual activity, alcohol-related sexual consequences, consent, and bystander intervention. Workshops focused on social norms, empathy, masculinity, consent, and active practice of bystander intervention skills. Preliminary analysis of feasibility and acceptability yielded positive results. From baseline to post-test, men intended to drink fewer drinks per week and reported higher motivation to change their alcohol use. At 2-month follow up, participants reported increased use of strategies to limit drinking, less endorsement of rape myths, lower perceptions of peer alcohol use, lower engagement in sexual coercion, greater likelihood of bystander intervention, and greater confidence in intervening in situations that indicate a risk for violence. Of note, as discussed in further detail below, this intervention is currently being adapted for utilization in the military (see Orchowski et al. 2017).

Gidycz et al. (2011) evaluated the impact of a social norms and bystander intervention program among first-year college men. Participants in a Midwestern university were recruited from campus residence halls (N = 1,285) over the course of two years with a total of 12 residence halls participating in the study. The experimental group received (n = 635) a 1.5-hour sexual assault prevention program followed by a subsequent 1-hour booster session 4 months later. Participants completed assessments at baseline, 4-month follow up, and 7-month follow-up. Men in the experimental group reported experiencing less reinforcement for sexually

aggressive behavior, were less likely to associate with sexually aggressive peers, decreased consumption of sexually explicit material (i.e. pornography), and greater likelihood of perceiving that peers would intervene at both 4- and 7-month follow-up assessments. No changes were reported in rape myth acceptance, hypergender ideology, perception of peers' disapproval of aggressive behavior, and likelihood of intervening in dangerous situations. Men with a history of sexually aggressive behaviors were more likely to perceive other men as more willing to intervene in risky dating situations in comparison with control participants with similar histories. At the 4-month follow-up men in the experimental group reported a 75% reduction in sexually aggressive in comparison within the control group, but this reduction rebounded at 7-month follow-up, when there were no differences between the experimental and control group in actual perpetration of violence.

A similar but more intensive study, which ran for two hours a week for 11 weeks (Stewart, 2014), delivered a sexual assault prevention program utilizing social norms, bystander education, and empathy with a sample of undergraduate student leaders (N = 36) nomination by their peers. Baseline and follow-up assessments (1 week prior to start of program and two weeks after its conclusion) measured hostile sexism, benevolent sexism, rape myth acceptance, bystander efficacy, collective action willingness (to fight sexual assault), feminist activism, and gender-biased language. Results documented decreases in hostile sexism, benevolent sexism, rape myth acceptance, and gender-biased language and increases in collective action willingness, bystander efficacy, and feminist activism.

Finally, Salazar et. al.'s 2014 study examined the efficacy of RealConsent, a web-based, six-part, media-based and interactive bystander sexual violence prevention program using a sample of 743 undergraduate men (age 18-24) from a large urban university in the southeastern

United States. Participants were randomized to either receive the RealConsent program (N = 376) or a web-based general health promotion program (N = 367), completing assessments at baseline and 6-month follow-up. Primary measures included prosocial intervening behaviors and sexual perpetration with secondary measures of legal knowledge of sexual assault, knowledge of consent, intervention self-efficacy, intention, and outcome expectancies, normative beliefs regarding violence, rape myths, gender ideology, victim empathy, hostility towards women, attitudes toward date rape, and expectancies for engaging in nonconsensual sex. At 6-month follow-up RealConsent participants reported significantly higher rates of prosocial intervening behaviors than those in the general health group as well as significantly less sexual violence. Logistic regression determined that intervention participants were 73% less likely to perpetrate sexual violence compared to the control group. All secondary outcomes were significant except for self-efficacy to intervene.

Collectively, the experiment-control design studies summarized here provide extremely strong support for the social norms approach as a violence prevention strategy for boys and men, establishing that it is possible to reduce negative attitudes and sexism, increase pro-social bystander intervention, and in some cases reduce actual violence as a result of providing normative feedback in small groups and/or through media campaigns. From a theoretical perspective, the changes documented in men's sexism and men's negative behaviors suggest that it is appropriate to consider the social norms approach as a gender transformational as well.

Further work is needed, however, to increase the efficacy and impact of social norms-based interventions. A clearer understanding of the types of perceived norms (descriptive or injunctive) most relevant to changing certain forms of violence-related behaviors, and the mechanisms through which they influence behavior may help to better inform and advance

prevention programming. Recent studies show that elevated perceptions of the prevalence and acceptability of violence may increase perpetration risk among individuals with sexist or antisocial traits and reduce perpetration risk among other individuals lacking in those traits (Duran et al., 2018; Mulla et al., 2019).

Emerging evidence also suggests that elevated perceptions of peer acceptance of violence may decrease prosocial bystander behavior by decreasing individuals' perceptions of the seriousness of abuse, as well as their ability to recognize the risk of it being perpetrated (Mulla et al., in press). The potential for misperceptions of peer attitudes to "norm the negative" and foster other attitudes and perceptions that may prevent individuals from taking action against sexual violence highlights the need for comprehensive prevention programming that simultaneously addresses normative misperceptions as well as other cognitions involved in the decisional process leading to bystander intervention.

Interventions for military samples. Extending the intervention development work completed by Orchowksi et al.(2016) to design and pilot a social norms driven alcohol and sexual assault intervention for heavy drinking college men, Orchowksi and her colleagues (2017) are currently adapting this integrated alcohol and sexual assault prevention program to meet the needs of male soldiers to who consume risky levels of alcohol. This intervention maintains a strong focus on social norms change as a strategy for reducing alcohol as well as sexual aggression, and also promoting bystander intervention to address risky behaviors among other soldiers. The research is supported by data suggesting that soldiers hold significant misperceptions regarding the rape supportive attitudes among their peers (Berry-Caban et al., 2020) that may in turn be associated with increased violence or decreased bystander intervention.

Conclusions and Future Directions

An expanding body of research on interpersonal violence has led to growing scientific and professional consensus on both the importance of addressing men and boys' role in the perpetration of violence, and the necessity of intervening at multiple layers of the social ecology to do so effectively. Consistent with these insights, the social norms approach to violence prevention provides a strategy that is especially conducive to the social-scaffolding of male-perpetrated violence, one which is adaptable to multiple layers of the social ecology. In this chapter, we have provided a conceptual overview of the social norms approach and a summary of extant literature in support of its application in prevention programs targeting male-perpetrated violence.

Our review included three main areas of research and found that each demonstrated converging lines of evidence supporting the utility of norms correction as a strategy for reducing the perpetration of violence by men and boys. The first area of research demonstrates that misperceptions of norms may facilitate violence-prone men to perpetrate, and that correcting misperceptions regarding violence acceptability or frequency may reduce men's risk of perpetrating (Loh et al., 2005; Duran et al., 2018; Mulla et al. 2019). The second demonstrates that misperceptions of norms may inhibit male bystanders from intervention to prevent other men's violence, and that correcting such misperceptions may facilitate prosocial bystander intervention by men (Coker et al., 2011; Douglas & Skeem, 2005; Rutherford et al., 2007). The efficacy of addressing the misperceptions documented in the first two lines of research discussed is corroborated by the third group of studies reviewed, which assessed the outcomes of norms correction interventions. Taken together, the present body of evidence shows that interventions grounded in the social norms approach provide a favorable avenue for reducing violence perpetration and victimization (Berkowitz, 2010, 2013; Orchowski, 2019).

Mechanisms of change. The research findings synthesized suggest that there are several mechanisms of change which explain the success of the social norms approach and are therefore important to implementing it effectively. Social norms theory predicts that individuals will behave in accordance with their perceptions of anticipated/expected attitudes and behaviors of their peers, regardless of whether the perception is accurate (Berkowitz, 2003). The relevance of social norms theory to mitigation of violence behavior also pertains to the perpetration risk of violent-prone individuals who overestimate others' approval or use of violence, with overestimation serving as an enabler for them to perpetrate (Bohner et al., 2006; Dardis et al., 2016). Accordingly, correcting misperceptions of approval or use of violence can serve as a powerful tool for prevention (Casey et al., 2018; Neighbors et al., 2010). One important element for the success of interventions using the social norms approach to reduce male-perpetrated violence is that they provide men with accurate information about other same-gender peers. Male socialization emphasizes the importance of being accepted, respected and perceived positively by other men (Hartley, 1959; Maccoby, 1990), and men go to great lengths to avoid negative evaluations from other men (Costrich et al., 1975). In addition, proving one's masculinity by having sex with women and behaving in dominant ways is often promoted as a desirable standard of masculine behavior. However, the studies reviewed in this chapter demonstrate that what men think about other men's violence-related attitudes and behaviors is often inaccurate, and that pertinent misperceptions serve to facilitate perpetration among violence prone men and inhibit intervention by men who are bystanders.

Norms correction is effective with men because it targets the most important influence on men – other men – and transforms the potentially negative influence of social norms into a positive one by revealing the truth about men to each other, serving in turn to debunk and

undermine cultural myths of masculinity. The research reviewed in this chapter confirms these theoretical assumptions, supports the causal mechanisms associated with them, and establishes the efficacy of all-male norms correction approaches when they are properly conceptualized and implemented. It is important to note that there may be other mechanisms through which norms correction produces change in behavior, e.g. personal attitudes, risk recognition (as suggested by our bystander paper), and others, but that further work is needed in this area.

Implementation challenges. Collecting data to document misperceptions of norms, providing normative feedback to the target audience, and addressing concerns about the believability of the data is a complex and intensive process. When each of the outlined steps (i.e. data collection, feedback provision, and addressing kickback) are not taken with fidelity, social norms interventions can be ineffective, as has also been suggested by others in the field (Thombs et al., 2004). Specifically, it is important that interventions incorporate a core component of the social norms approach ó the utilization of personal-, group-, or community-level data to correct a misperception of the norm by an individual, group, or sub-population within a community (Haines, Perkins, Rice, & Barker, 2005).

The process of selecting which norm is to be corrected is also essential. In this regard, some researchers suggested that presenting students with normative data to encourage positive bystanding is òlimited when youth are embedded in peer networks where interpersonal violence perpetration is commonö (Miller et al., 2020, p. 404). This concern points to critical issues, specifically the question of *which* norms should be corrected, especially in peer networks which display a variety of more and less positive norms. Research suggests that even when norms for violence are high, that other attitudinal and other norms are healthy (Caban et al., 2020). In these cases, correcting misperceptions of attitudinal norms can serve as a pathway to addressing

problematic behavior in communities where engagement in such behavior is higher. A good example of this approach is provided in a study of fisherman's norms for illegal fishing activity (Bova, et al 2017). This research which provided support for the assumptions of the SNA approach, such that individuals overestimated the negative attitudes and engagement in problematic behavior of other anglers, and individuals with the highest misperceptions engaged in the most problematic behavior. As noted by the authors "with only 44.5% of the anglers compliant to all regulations (actual norm), the initial conclusion might be that this fishery may be unsuitable for the SNA. However, when examining individual regulations, angler compliance to individual regulations (actual norm) was well over the 50% (ranging from 75% for size limits to 90% for marine-protected areas), and therefore suited to SNA" (Bova et al., 2017; p. 121). A similar approach can be taken in violence prevention, especially considering findings from Deitch-Stackhouse et al. (2015) noting that norms and misperceptions for different types of violence vary.

Another challenge inherent in the social norms approach is that the activity of presenting individuals with corrective information showing that what they think about their peers is in fact untrue creates cognitive dissonance which can cause recipients to reject the intervention by finding ways to question the data and its believability (Berkowitz, 2004b, Orchowski, 2019). Social norms interventions must therefore incorporate sustained efforts to address the concerns and disbeliefs generated by providing normative feedback. A social norms intervention also requires the infra-structure necessary to collect and analyze appropriate data, train key stakeholders in the premises of the model, and to deliver carefully designed interventions, whether individually, in group, through social media, or some combination of access methods, as implemented among high school students by Orchowski et. al. (2017) and among middle school

students by Orchowski et al., (2015). In these studies, the correction of a variety of misperceived norms via a poster campaign was supplemented with other strategies aimed at fostering attitude and behavior change (i.e., workshops, technical assistance, peer modeling, active practice of skills). Further, social norms interventions require close monitoring of how interventions are being received in order to make the necessary mid-course corrections. Considering the above, it is important to emphasize that efforts to implement the social norms approach require training to ensure that challenges are appropriately addressed and that the approach is rigorously implemented with fidelity.

Recommendations regarding audience composition and format

The research reviewed here suggests that providing men and boys with normative feedback about their male peers in is efficacious and a best practice which is best delivered in all-male formats. Whereas normative feedback can also be delivered to mixed-gender audiences with positive outcomes, as is the case for some of the studies reviewed here, the strongest outcomes are found in all-male programs. Thus, though it may be necessary for practical reasons to offer combined programs for both genders, the ideal, recommended best practice is to offer single-gender programming which relies on the fact that boys and men are most influenced by what they think other boys and men believe and do.

The current state of the research also suggests that normative feedback can be integrated into existing interventions that include other components. Thus, data on misperceptions and information about accurate norms can be incorporated into multi-component interventions that are not restricted to normative feedback. For example, some interventions have utilized a model of combining social norms campaign materials and in-person information sessions that highlight

norms data, with other strategies such as bystander intervention training, consent education, and risk reduction strategies (Orchowski et al., 2018).

Other preliminary research indicates that the impact of social norms interventions on propensity to perpetrate violence may vary by student, indicating that not all individuals are equally impacted by normative feedback (Mulla et al., 2019). The relative impact of social norms interventions based on participant characteristics is an area that requires more research to determine whether participant differences have implications for practice and audience composition. In any case, even if all individuals are not equally impacted by normative feedback, the data suggests that many violence-prone men are inhibited by it. Social norms-based interventions are therefore particularly promising models to utilize when aiming to reduce perpetration of sexual or gender-based violence by men and boys.

Finally, although the social norms approach can be implemented using either descriptive norms or injunctive norms, or both, we do not yet know the causal mechanism of norms change with respect to the type of norm chosen for feedback, and if one might be primary or more influential. Studies comparing the influence of perceived descriptive and injunctive norms on environmental intentions (Smith et al., 2012) and health-risk behaviors such as marijuana use (Napper et al., 2016) and sun protection (Bodimeade et al., 2014) suggest that injunctive norms may have a more salient influence on individuals personal attitudes and behaviors. However, only one study to date examines the relative influence of descriptive and injunctive norms on violence-related attitudes and bystander behaviors (Mulla et al., 2019), which remains a topic in need of additional research.

Summary

In conclusion, the research and studies reviewed here confirm that norms correction for men and boys is a potent and effective best-practice for changing the culture of violence that results in men perpetrating sexual violence on women and girls. Whereas additional research is needed and some theoretical questions remain, the cumulative impact of this growing body of research confirms that normative feedback provided to men about men, preferably in all male audiences, is an evidence-based best practice for preventing men's and boys' violence against women and girls.

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Table 1**Misperception of Peer Support for Rape Myths Facilitates Violence-Prone Men to Perpetrate Sexual Assault and Domestic Violence**

Authors	Location	Participant Characteristics	Study Description	Results
Loh et al. 2005	Large Midwestern University, United States	Undergraduate men ($N=325$; $n=215$ completed all waves) Ages: 18-19 (71%) Demographics: 91.7% White, 96.6% heterosexual	Prospective evaluation of risk factors for sexual assault perpetration. Participants completed self-report measures of all study variables at baseline, and completed measures of sexual assault perpetration at posttest, 3-month, and 7-month follow up sessions.	Participants' perception of rape myth acceptance among peers significantly predicted their likelihood of perpetration at 3- month follow-up. Sexual assault perpetration at any assessment period was predictive of perpetration during the subsequent follow-up period.
Bohner, Siebler, & Schmelcher, 2006	University of Mannheim, Germany	College men Experiment 1 ($n = 90$) $M_{age} = 24.0$ years Experiment 2 ($n = 174$) $M_{age} = 22.6$ years	Participants received feedback on RMA norms among other students either before (Experiment 1) or after (Experiment 2) completing a measure of their own RMA, and then completed an assessment of rape proclivity.	Experiment 1: perceived peer norms for RMA were positively associated with personal rape proclivity, and this effect was mediated by personal RMA. Experiment 2: norm feedback and personal RMA had main effects on RP. The effect of norms was also moderated by personal RMA, such that it was most strongly associated with RP among individuals high in personal RMA.

Eysse, Bohner, & Seibler, 2006.	University of Bielefeld, Germany	College men ($N=139$) Demographics: primarily German	Participants completed an initial measure of RMA and were then presented with one of 4 randomly assigned manipulations that provided low versus high information regarding RMA norms among peers, and low versus high anchor values regarding peers RMA. Lastly, they completed posttest measures of rape proclivity, perpetration history, and demographics.	Peersø level of RMA was significantly positively associated with participants self-reported RP, independent of format (norm feedback or anchoring). There was also a significant positive association between self-reported RMA at pretest and self-reported RP at posttest.
Neighbors et al., 2010	n/a	Community sample of non- adjudicated IPV perpetrating men ($N=124$)	Participants completed measures of personal IPV perpetration and the perceived prevalence (descriptive norm) of those behaviors in other men.	IPV perpetrators significantly overestimated the prevalence of perpetration among other men. Furthermore, misperceptions (overestimates) were positively associated with their own perpetration of violent behaviors toward their partner in the previous 90 days.
Witte & Mulla, 2013	Small private college in the Southeastern United States.	College students ($N = 328$) $M_{age} = 18.89$ years Demographics: 55% women; 87% White	Participants completed survey measures assessing their past perpetration of IPV behaviors and their perceptions of descriptive norms for those behaviors among same-gender peers	Both perpetrators and non-perpetrators overestimated the prevalence of IPV among other students. Participants with a history of perpetration perceived descriptive peer norms for IPV to be significantly higher than non-perpetrators did.

Dardis et al., 2016	Large Midwestern university	Dyads of undergraduate men who identified as close friends ($N=100$, 200 men total) Ages: 18-19 (73.6%) Demographics: 80.1% White, 90% heterosexual	Participants completed measures assessing demographic information, personal attitudes towards rape and women, their perceptions of their friend/dyad mate's endorsement of those attitudes, and their history and likelihood of perpetrating sexual aggression.	Men's personal attitudes regarding rape and women were positively associated with their perceptions of friends and average students' attitudes, but not with friends' actual reported attitudes. Perpetrators of sexual assault were significantly more likely to overestimate their friends' involvement in sexually aggressive behaviors than were non-perpetrators.
Shorey et al., 2017	Public schools in rural, urban, and suburban areas in Southeast Texas, United States.	High school students from 7 public schools ($N= 1,042$) $M_{age} = 15.09$ years Demographics: 56% women; 27.9% African American, 29.4% White, 31.4% Hispanic	Analyses included data on personal perpetration and perceptions of peers' perpetration of dating violence collected annually across 5 waves, starting in participants' freshmen or sophomore year of high school.	Decreases in perceptions of peers' perpetration of dating violence predicted decreases in personal perpetration at subsequent time points. Association were stronger for men compared to women
Witte, Hackman, & Mulla, 2017	Large public university in the Southeastern United States.	College students ($N = 560$) $M_{age} = 20.29$ years Demographics: 64% women; 80% White	Participants completed survey measures assessing their past perpetration of IPV behaviors and their perceptions of descriptive norms for those behaviors among same-gender peers	Both perpetrators and non-perpetrators overestimated the prevalence of IPV among other students. Participants with a history of perpetration perceived descriptive peer norms for IPV to be significantly higher than non-perpetrators did.

Duran, Jegias, & Moya, 2018	University in the South of Spain.	College men ($N=134$) $M_{age} = 21.50$ years Demographics: 100% Caucasian, native Spanish, and heterosexual	Participants completed measures of sexism and were then presented with information indicating high vs low levels of hostile and benevolent sexism among peers. Participants then completed dependent measures of rape proclivity.	There was a significant interaction between personal and perceived peer HS; the positive association between perceived peer HS and rape proclivity was significant for Men high in HS, but not for those low in HS.
Mulla et al., 2019	Large public university in the Southeastern United States.	Undergraduate students Study 1 ($N = 136$) $M_{age} = 18.97$ years Demographics: 75% female; 71.1% White Study 2 ($N = 422$) $M_{age} = 20.29$ years Demographics: 64.3% female; 81.2% White Study 3 ($N = 258$) $M_{age} = 18.64$ years Demographics: 69.0% female; 82.2% White	Study 1: participants completed measures of IPV perpetration and perceptions of descriptive IPV peer norms at baseline and 3-month follow-up. Study 2: participants completed cross-sectional measures of perceived descriptive and injunctive IPV norms, personal acceptance of IPV, and IPV perpetration history. Study 3: participants completed measures of demographics and social dominance orientation, and were then assigned to receive normative information indicating the prevalence of IPV behaviors to be low or high among peers, or receive normative information on the prevalence of neutral behaviors (control condition). Participants then completed measures of perceived injunctive IPV norms,	Study 1: perceptions of descriptive IPV peer norms at Time 1 predicted IPV perpetration at Time 2, but IPV perpetration at Time 1 did not. Study 2: perceived descriptive IPV norms had an indirect positive effect on IPV perpetration through perceived injunctive norms and personal IPV acceptance respectively. Study 3: Providing information indicating descriptive IPV norms to be high among students led to corresponding increases in perceived injunctive norms, personal IPV acceptance, and IPV propensity, respectively. Furthermore, the associations between perceived injunctive norms, personal IPV acceptance, and IPV propensity

Casey et al., 2020	National sample	Adult men (N = 497)	personal IPV acceptance, and IPV propensity.	were especially salient for individuals high in social dominance orientation.
			Participants were presented with sexual scenarios varying in acts, partner types, and circumstances. Participants completed measures of perpetration history.	Participants overestimated the typicality of all sexual situations for other men. Sexually aggressive men overestimated the desirability of traditional masculinity scenarios compared to their non-perpetrating peers.

Table 2**The Influence of Misperceptions on Bystander Intervention Among Non-Perpetrators**

Authors	Location	Participant Characteristics	Study Description	Results
Fabiano et al., 2003.	Western Washington University (WWU) in Bellingham, Washington	Undergraduate students <i>N</i> = 618 71.5% women 81.1 % White	Participants completed survey measures assessing personal and perceived peer attitudes regarding the importance of consent for sexual intimacy and willingness to intervene against behaviors that could lead to sexual assault.	Men significantly underestimated both, the importance most men and women placed on consent, as well as other men's willingness to intervene against sexual violence. Additionally, men's perceptions of peer norms were the strongest predictor of their own willingness to adhere to consent and take action against sexual violence.
Stein, 2007.	Large public university in the Northeastern United States	College freshmen men <i>N</i> = 156 Ages: 18-21 years Demographics: 38% White, 44% Asian	Participants completed survey measures assessing personal attitudes and perceptions of close friends' attitudes regarding rape and rape prevention, as their exposure to sexual assault peer educators, and their willingness to prevent rape.	Men perceived their friends to hold more rape supportive attitudes, be more comfortable with sexism, and less willing to prevent rape, relative to themselves. Furthermore, perceptions of peers' willingness to prevent rape significantly predicted participants' own willingness to prevent rape, independent of their personal attitudes.
Brown & Messman-Moore, 2010.	Medium-sized public university in the Midwestern United States	Undergraduate men <i>N</i> = 395 <i>M</i> _{age} = 19.34 years Demographics: 94.7% White; 98% heterosexual	Participants completed survey measures assessing social desirability and personal and perceived peer support for sexual aggression, rape myth acceptance, and willingness to intervene against sexual aggression.	After accounting for demographic characteristics, social desirability, personal attitudes, and perceived peer attitudes, respectively, only perceived peer attitudes remained a significant predictor of men's willingness to intervene against sexual aggression.

Hillebrand-Gun et al., 2010.	Two high schools in the Midwestern United States	High school students $N = 212$ $M_{\text{age}} = 16.58$ years 60.3% boys 83% White	Participants were assigned to a control group (usual classroom activities) a 3-session bystander intervention incorporating social norms statistics on healthy peer norms related to sexual violence. Measures of personal and perceived peer rape-supportive attitudes and behaviors were completed pre- and post-intervention.	Boys who received the intervention showed significant decreases in their perceptions of peers' sexist attitudes and rape-supportive behaviors. Boys who received the intervention also showed significant decreases in their own rape-supportive attitudes compared to men in the control group. Associations of social desirability with the dependent variable of rape-supportive attitudes were nonsignificant among female students.
Henry et al., 2013.	Chicago, Illinois, United States	Students entering 6 th grade. Cohort 1 ($N = 839$) Demographics: 48.9% girls; 41.1% African American, 10.3% non-Hispanic White, and 48.6% Hispanic Cohort 2 ($N = 879$) Demographics: 51.7% female, 40.2% African American, 10.7% non-Hispanic White, and 49.1% Hispanic.		Students consistently overestimated their peers' support for aggression, and underestimated their peers support for using non-violent problem solving strategies. Furthermore, discrepancies remained significant after accounting for demographic factors, aggression level, self-serving bias, and social desirability, and persisted through 8 th grade.
Perkins, Perkins, & Craig, 2019.	30 schools of varying sizes located in diverse regional settings in six states	Students in grades 5-12 ($N = 12,903$) Ages: $M_{\text{age}} = 14.2$ Demographics: 75% White at most schools	Participants completed surveys assessing personal and perceived peer support for telling school authorities about weapons at school.	The majority of students personally endorsed telling authorities about weapons at school, but a significant portion believed their peers did not support doing so. Furthermore,

	(Arizona, Idaho, Indiana, New Jersey, New York, and Maine).			perceived peer support for telling authorities was the strongest predictor of personal support for telling authorities.
Deitch-Stackhouse et al., 2015	Medium-sized residential college in the Northeastern United States	College students ($N = 449$) Demographics: 62% women; 76.1% White	Participants completed survey measures assessing personal and perceived peer experiences of IPV, interpretations of abuse as problematic, and likelihood to intervene against IPV	Participants consistently perceived their peers to be significantly less bothered by violent behaviors, and less likely to intervene against them compared to themselves. Perceptions of how bothered peers were by IPV were significantly positively associated with personal likelihood of intervening against IPV.
Mennicke et al., 2018.	Large public university in the Southeastern United States	College men ($N = 4,158$) $M_{\text{age}} = 20.2$ years Demographics: 69% White; 91% heterosexual	Participants completed survey measures assessing personal and perceived peer attitudes, beliefs, and behaviors related to sexual violence each year over a 5-year period. Survey data on actual norms was used to inform the development of materials implemented concurrently as part of a marketing campaign targeting normative misperceptions related to sexual violence.	Participants perceived their peers' support for victims of sexual violence and bystanders who intervene against it to be lower than the actual norm, and perceived peers' endorsement of rape myths to be higher than the actual norm. Baseline discrepancies between actual and perceived peer norms significantly decreased over the course of the marketing campaign, while prosocial bystander attitudes and behaviors increased, suggesting the intervention was efficacious.

Table 3**Evaluations of Social Norms Interventions**

Study	Location	Participant Characteristics	Study Description	Results
Kilmartin et al. 2008	Southeastern United States; medium-sized university	M_{age} : 19.2 years 86.2% White Experiment 1: unacquainted N = 65 (Baseline) N = 61 (Follow-up) Intervention ($N=31$); Control ($N=30$) Experiment 2 $N=63$, acquainted male participants	Social norms intervention addressing men's sexism, consisting of a presentation with feedback on discrepancies between actual and perceived norms within groups. Assessments at baseline and 3-week follow-up. Program implemented among groups of unacquainted and acquainted men.	At follow-up, experimental groups saw a decreased ratings of others' hostile sexism and increased ratings of others' discomfort with sexism. Unacquainted groups also reported decreased benevolent sexism and adversarial sexual beliefs. No changes were observed in control group.
Orchowski et al., 2018	Northeastern United States; large university	M_{age} : 19.4 years 92% White N = 25 (Baseline) N = 20 (Follow-up)	The Sexuality and Alcohol Feedback and Education Program (SAFE) included a 5½ hour intervention across 3 sessions, with two core sessions and a booster session. Included motivational interviewing, personalized normative feedback, and a workshop targeting misperceived norms. Program implemented with heavy-drinking college men.	At 2-month follow up, participants reported increased use of strategies to limit drinking, less endorsement of rape myths, lower perceptions of peer alcohol use, lower engagement in sexual coercion, greater likelihood of bystander intervention, and greater confidence in intervening in situations that indicate a risk for violence.

Perkins et al. 2011	New Jersey, United States; five middle schools	Age: 11-14, grades 6-8 Three schools 85% or higher White Two schools ~50% white ~53% female Baseline N = 2,589 Post-intervention N = 3,024	"Survey of Bullying at Your School" anonymous online survey followed by social norms poster intervention displaying accurate norms from survey results	Significant reductions overall from pre- to post-intervention in perceptions of peer bullying and pro-bullying attitudes, personal bullying of others, and victimization. Support for reporting bullying to adults increased.
Gidycz et al. 2011	Medium-sized Midwestern university	N = 635 college men 18-19 years old (98%) Heterosexual (98.1%) White (91.8%)	Single-sex sexual assault prevention (men) or risk-reduction (women) programs. Men's program consisted of social norms and bystander intervention education - 1.5-hour prevention program and 1-hour booster session at 4-month FU. Assessments completed at baseline, 4-month follow-up, and 7-month follow-up	Program group reported finding sexually aggressive behavior to be less reinforcing, decreased associations with sexually aggressive peers, decreased exposure to sexually explicit material, and increased perception in peers' likelihood to intervene when they witnessed inappropriate behaviors.
Stewart 2014		N = 36 undergraduate students Age: 18-22 Men N = 35 86% heterosexual 28% in fraternity	Men's Project 6 sexual assault program that targets college men by integrating social norms, empathy, and bystander education programs into one program for men. Surveys completed before and after intervention	From baseline to posttest, participants reported reductions in hostile and benevolent sexism, rape myth acceptance, and gender language use. Additionally, program participants reported increased rates in collective action willingness, feminist activity, and bystander efficacy

Salazar et al. 2014	Large, urban university located in southeastern US	Undergraduate men N = 743 Age: 18-24 $M_{age} = 20.38$ years Program N = 376 Control N = 367 Race: 44.1% white, 22.3% African American, 19.6% Asian American, 10.8% Hispanic 75.2% single, 12.1% in fraternities, 8.5% athletes,	RealConsent ó web-based approach to sexual violence prevention, in enhancing prosocial intervening behaviors and preventing sexual violence perpetration. Contained six 30-minute media-based and interactive modules covering knowledge of informed consent, communication skills regarding sex, the role of alcohol and male socialization in sexual violence, empathy for rape victims, and bystander education. Assessments at baseline and 6-month follow-up.	At follow-up assessment, program participants reported increased rates of intervention and decreased rates of sexual violence perpetration. Additionally, program participants reported significant positive changes in secondary outcomes except for self-efficacy to intervene.
Wasco 2015	High school in Pittsburgh, Pennsylvania	High school students, grade 9-12 Program N = 314 Control N = 191	PAARø Social Norms Marketing Project ó social norms poster campaign designed to decrease seven problematic behaviors: (1) inappropriate name-calling, (2) sexual commenting about studentsøbodies, (3) spreading false sexual rumors, (4) sexual gossip about other students, (5) sending sexual picture texts, (6) unwanted harassing texts among students, and (7) unwanted touching among students; two-year intervention with assessments at baseline and year-end.	At follow-up, program participants reported significant decreases in perpetration and victimization rates of sexual harassment in all categories except for sexual gossip.