

THESIS

EVALUATION OF SPEAK UP!: A SEXUAL VIOLENCE PREVENTION PROGRAM FOR
MIDDLE SCHOOL YOUTH

Submitted by

Hope M. Cornelis

Department of Human Development and Family Studies

In partial fulfillment of the requirements

For the Degree of Master of Science

Colorado State University

Fort Collins, Colorado

Spring 2017

Master's Committee:

Advisor: Nathaniel Riggs

Shelley Haddock

Marc Winokur

Copyright by Hope M. Cornelis 2017

All Rights Reserved

ABSTRACT

EVALUATION OF SPEAK UP!: A SEXUAL VIOLENCE PREVENTION PROGRAM FOR MIDDLE SCHOOL YOUTH

Sexual violence (SV) is a pervasive crime that disproportionately affects young people. Despite the need for SV prevention initiatives with young adolescents, a majority of documented efforts to understand and prevent SV have targeted college-aged individuals. The purpose of this study was to evaluate Speak Up!, an intensive, school-based, gender-separated SV prevention program for middle school youth. The evaluation utilized pre and post-test data from 76 students, aged 11-15, who participated in Speak Up! during the 2014-2015 academic year. Participants completed self-report surveys, developed by the implementing organization, at baseline and immediately after the intervention. The survey measure assessed participants' adherence to unhealthy relationship/sexual norms, self-efficacy for bystander intervention, and rigidity in gender ideology. Main effects and moderating associations were examined using repeated measures analyses of covariance (RM ACOVAs) and Cohen's *d* effect size estimates comparing participants' pre and post-test mean scores. Results revealed significant improvements in participants' adherence to unhealthy relationship/sexual norms from pre to post-test, regardless of implementation modifications and gender. Additionally, findings indicated that girls showed greater pre-post changes on the outcomes than did boys (marginally significant). Although strong conclusions about program impact could not be derived due to study limitations, this study illuminates the promise of SV prevention with youth and the need for further exploration of how to effectively prevent SV with this population.

ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to my advisor, Dr. Nate Riggs for the immense amount of time, energy, expertise, and guidance he has shared with me as I completed my thesis. His mentorship enabled me to pursue a thesis project I am extremely passionate about, and greatly assisted in my development as a researcher and writer. I would also like to thank my thesis committee member, Dr. Shelley Haddock for her thoughtful feedback, supportive presence, and advice. I would also like to thank my outside department committee member, Dr. Marc Winokur for dedicating his time and offering helpful insights throughout this process.

Additionally, I would like to thank the staff of the Sexual Assault Victim Advocate (SAVA) Center for allowing me to use their data to evaluate Speak Up!. I am especially thankful for the valuable time and resources Katie Ashby and Julia Luciano invested in providing me with the information I needed to complete my thesis. Most importantly, I am grateful to have had the opportunity to learn about a program that fills a crucial need in the community.

Lastly, I would like to thank my friends and family members who have served as a support system to me throughout my thesis process. Their love, encouragement, and belief in me kept me motivated and optimistic. The support and investment of all those mentioned above contributed greatly to the development and completion of my thesis, for which I am incredibly grateful.

TABLE OF CONTENTS

ABSTRACT.....	ii
ACKNOWLEDGEMENTS	iii
INTRODUCTION.....	1
LITERATURE REVIEW.....	4
CURRENT STUDY.....	17
METHODS.....	19
ANALYSIS PLAN.....	27
RESULTS.....	31
DISCUSSION.....	36
IMPLICATIONS AND FUTURE DIRECTIONS.....	44
CONCLUSION.....	47
REFERENCES.....	48
APPENDIX A.....	56
APPENDIX B.....	59

INTRODUCTION

Sexual violence (SV) is a national public health problem in the United States (DeGue et al., 2012). The U.S. Centers for Disease Control and Prevention (CDC) broadly defines sexual violence as “any attempted or completed sexual act, sexual contact, or noncontact sexual behavior in which the victim does not consent or is unable to consent or refuse” (DeGue et al., 2012, p. 1211). The first ever National Intimate Partner and Sexual Violence Survey Report (NISVS) in 2010 revealed that nearly 1 in 5 women and 1 in 71 men experience completed or attempted sexual assault in their lives, uncovering the high prevalence of SV in the United States (Black et al., 2011). The increased understanding of the widespread gravity of SV has illuminated the great need for SV prevention efforts.

The consequences of SV are complex and numerous. SV is associated with many deleterious physical effects for survivors, including gynecological problems, increased risk for STIs, HIV, unintended pregnancy, and physical injuries from the assault (Campbell, 2002; DeGue et al., 2012). In addition, SV survivors’ mental health outcomes are adversely affected; those who experience SV are at a greater risk for exhibiting post-traumatic stress disorder, depression, suicidal tendencies, anxiety, insomnia, and substance abuse (Campbell, 2002; DeGue et al., 2012). The financial costs of SV are also immense. In 1996, the National Institutes of Justice estimated that victim costs alone for sexual violence (i.e., medical and mental health costs for victims) exceed \$126 billion in the United States every year, making sexual assault one of the most costly violent crimes in the country (Miller, Cohen, & Wiersema, 1996). More recently, DeLisi (2008) conservatively estimated that a single rape costs approximately \$151,423 in victim and justice-

related costs. Clearly, the impact of SV is broad and tragic, affecting individual, relational, and societal domains.

Experiencing SV is common in the early years of life (Black et al., 2011; Butchart, Garcia-Moreno, & Mikton, 2010; Ybarra & Mitchell, 2013). According to the NISVS, a majority of female rape victims experienced their first assault before the age of 25, with approximately 42.2% being raped prior to age 18 (Black et al., 2011). Young women aged 16 – 25 have been identified as the highest-risk group for SV victimization (Black et al., 2011). Rates of SV perpetration are surprisingly high in young people as well. Approximately 1 in 10 individuals between the ages of 14 and 21 report having perpetrated some form of SV in their lives, with age 16 as the most common age of first perpetration (Ybarra & Mitchell, 2013).

The World Health Organization (WHO) recently emphasized early and primary prevention efforts as global priorities for the SV prevention field, claiming, “The generating of evidence and the incorporation of well-designed outcome evaluation procedures into primary prevention programmes are top priorities everywhere” (Butchart et al., 2010, p. 34). Despite the compelling evidence of the crucial need to prevent SV long before young adulthood, a vast majority of efforts to understand and prevent SV have targeted college-aged individuals (Butchart et al., 2010; DeGue et al., 2014; Tharp et al., 2012). Although college is a time of great risk for SV perpetration and victimization (Black et al., 2011), many risk factors for SV are likely to be deeply ingrained by the time one reaches young adulthood, such as rape myth acceptance, rigid gender ideology, and bystander behavior (Butchart et al., 2010; Tharp et al., 2012). It is likely that SV prevention efforts for young adolescents could be more effective at primary prevention of SV than college-focused programs (Butchart et al., 2010). However, there are far fewer documented efforts to prevent SV with younger populations (DeGue et al., 2014), and very few of these ef-

forts have demonstrated consistent positive outcomes (DeGue et al., 2014; Meyer & Stein, 2004; Smith & Welchans, 2000). Thus, a better understanding of whether and how SV prevention strategies are effective for youth is greatly needed to propel initiatives to end sexual violence.

The current study examined the effectiveness of Speak Up!, a school-based SV prevention program for middle school youth developed and implemented by the Sexual Assault Victim Advocate (SAVA) Center in Colorado. This study aimed to achieve three primary goals:

1. Determine the extent to which Speak Up! impacts participants' unhealthy sexual/relationship norms, self-efficacy for bystander intervention, and rigidity in gender ideology.
2. Examine potential moderators of program impact (i.e., baseline risk level, program duration, and referral status).
3. Inform future iterations of Speak Up! for improvements.

Each of these goals is intended to contribute to the SV prevention field by informing best practices for preventing SV with young adolescents and examining who benefits most from SV prevention.

LITERATURE REVIEW

Theoretical Framework

Various SV prevention strategies have been developed over the past 30 years (DeGue et al., 2014; Tharp et al., 2012). Initial efforts focused primarily on preventing victimization by teaching women self-defense and rape resistance strategies (Coker et al., 2011; DeGue et al., 2012). Advocates for victim-focused approaches argue that rape avoidance strategies are advantageous because teaching protective tactics to potential victims is more feasible than altering deeply held attitudes and beliefs of potential perpetrators (Sochting, Fairbrother, & Koch, 2004; Ullman, 2007). However, victim-focused approaches are limited in their capacity to combat SV for two crucial reasons. First, they fail to address the attitudes, beliefs, behaviors, and social norms that condone and perpetuate SV (DeGue et al., 2012). Second, rape resistance strategies have great potential to promote victim blaming by placing the responsibility to stop SV on victims, rather than bystanders and perpetrators themselves (DeGue et al., 2012). Therefore, national SV prevention efforts have shifted in emphasis from possible victims to potential perpetrators and bystanders (DeGue et al., 2012; Coker et al., 2011; Tharp et al., 2012).

With this shift has come the adoption of the public health approach to prevention. This approach stresses the incorporation of empirically supported risk and protective factors associated with a public health problem into the development and dissemination of prevention programs (DeGue et al., 2012). Risk and protective factors of SV are referred to as any distinct characteristics or predictors that distinguish SV perpetrators from nonperpetrators (Tharp et al., 2012). Risk factors increase the likelihood for SV perpetration and are consequently more commonly demonstrated in perpetrators, and protective factors serve as buffers that mitigate the risks for SV

perpetration (Tharp et al., 2012). Speak Up! adheres to the public health approach by targeting evidence-based risk and protective factors for SV with the aim of preventing SV perpetration and bystander behaviors (K. Ashby, personal communication, October 21, 2015).

In addition, Speak Up! integrates principles of the theory of planned behavior (TPB), a theory designed to predict and explain human behavior. Although SAVA did not explicitly use this framework to guide program design, the author's thorough analysis of Speak Up! objectives, activities, program logic, and materials revealed an alignment with these assumptions. SAVA staff have confirmed the accuracy of this alignment (J. Luciano, personal communication, April 19, 2016). According to the TPB, behavioral intentions are the primary predictors of action; therefore, modifying one's intentions will consequently alter one's behaviors (Ajzen, 1991). The TPB posits that intentions are derived from three distinct sources: *attitudes* about the behavior, *subjective norms* regarding the behavior, and *perceived behavioral control* over carrying out the behavior (Ajzen, 1991; Ajzen, 2002). The TPB has been found to reliably predict many human behaviors (Ajzen, 2002). For example, attitudes, subjective norms, and perceived behavioral control have all been linked to intentions and actions involving risky sexual behaviors, such as condom use and casual sex (Ajzen, 2002; Albarracin, Johnson, Fishbein, & Muellerleile, 2001).

In line with the TPB, Speak Up! aims to reduce behaviors conducive to SV by modifying risk/protective factors associated with the sources of behavioral intention. Speak Up! primarily targets three modifiable factors, each of which has a strong empirical link to SV: unhealthy relationship/sexual norms, influenced by *subjective norms* and *attitudes*; self-efficacy for bystander intervention, influenced by *perceived behavioral control* and *subjective norms*; and rigidity in gender ideology, influenced by *attitudes* and *subjective norms*.

Unhealthy Relationship/Sexual Norms

Adherence to societal norms that trivialize rape and endorse victim blaming is consistently associated with SV perpetration risk (Carr & VanDeusen, 2004; Smith & Welchans, 2000; Tharp et al., 2012). Victim blaming of sexual assault often coincides with the acceptance of rape myths: false beliefs that deny the validity and severity of SV with justifications that cast doubt on the victim's credibility (Burt, 1980; Lonsway & Fitzgerald, 1994). Examples of rape myths include beliefs that women 'cry rape' to destroy the reputation of a former partner, women provoke rapists (e.g., flirting, wearing revealing clothing), and rapists act out of sexual passion, rather than violence or power assertion (Burt, 1980). The importance of rape myth acceptance (RMA) in SV perpetration risk has been replicated numerous times (Tharp et al., 2012), such that RMA is far more common among rapists than non-rapists (Farr, Brown, & Becket, 2004; Reyes & Foshue, 2013) and is reliably associated with rape proclivity (Carr & VanDeusen, 2004). Therefore, addressing RMA is integral to SV prevention (Burt, 1980; DeGue et al., 2012; Lonsway & Fitzgerald, 1994).

Exposure to victim blaming and rape myths contributes to the development of *subjective norms* that normalize SV and lead to its continued perpetuation (Lonsway & Fitzgerald, 1994). Rape myths are often promoted in society, providing messages that coercive sexual behaviors are acceptable and sometimes encouraged (Burt, 1980; Lonsway & Fitzgerald, 1994). For example, rape myths are perpetuated when a victim's behavior or clothing are used as justification for rape to defend a perpetrator in court or in the media (Franiuk, Seefeldt, & Vandello, 2008). Rape myths and victim blaming are widely prevalent in U.S. media, and this exposure can lead to highly destructive *attitudes* and *subjective norms* about SV, especially because they often come from well-respected others (e.g., journalists, celebrities, politicians; Franiuk et al., 2008; Lon-

sway & Fitzgerald, 1994). Reception of numerous messages that trivialize rape and diminish victim credibility can result in the internalizing of such attitudes. For example, exposure to victim blaming in the media has been associated not only with stronger RMA, but also with increased self-reports of the likelihood one would rape if they knew they would not get caught (Franiuk et al., 2008).

The prevalence of RMA in college has been widely studied, revealing that over half of college students endorse at least some rape myths, with men being more likely to exhibit RMA than women (Aronowitz, Lambert, & Davidoff, 2012). However, less is known about RMA in younger samples (Anderson, Simpson-Taylor, & Herrmann, 2004). One study found that RMA was predictive of sexual aggression in adolescent boys, especially those with a history of peer aggression and physical dating violence (Reyes & Foshee, 2013). Additionally, there is evidence that youth exhibit high adherence to rape-supportive rules, which are similar to rape myths (Anderson et al., 2004). Rape-supportive rules are unwritten rules that place guidelines on the contexts in which it is acceptable for men to force sex on women (Anderson et al., 2004). One example is the belief that when a man pays for a date, he deserves sex in return; if his date refuses, it is acceptable to force or coerce her to have sex (Anderson et al., 2004). Rules such as these are *attitudes* that provide justifications for rape. Rape-supportive rules have been found to be significantly more common among middle school students than high school and college students (Anderson et al., 2004), demonstrating the great need for prevention efforts with this age group. Because early adolescence is a time in which youth begin to develop gendered cognitions, sexual attitudes, and initiate sexual encounters (Wolfe, Crooks, Chiodo, & Jaffe, 2009), middle school is a critical developmental period to prevent unhealthy *subjective norms* and *attitudes* such as

rape-supportive rules, victim blaming, and rape myths from manifesting (Anderson et al., 2004; Burt, 1980; DeGue et al., 2012).

Self-Efficacy for Bystander Intervention

The TPB assumes that individuals are inclined to behave in ways that are consistent with their perceptions of what is acceptable to important others around them (i.e., *subjective norms*) (Ajzen, 1991). Furthermore, one's *attitudes* about certain behaviors are influenced by their social context (Ajzen, 1991). These assumptions are supported by numerous studies in which peer approval of, or engagement in SV is a consistently significant indicator distinguishing men who have committed SV from those who have not (Abbey et al., 2007; Farr et al., 2004; Tharp et al., 2012). One example is a reliable finding that those in all-male hypermasculine groups, such as fraternities or varsity sports, are more likely to adhere to rape myths and perpetrate SV (Carr & VanDeusen, 2004; Murnen & Kohlman, 2007; Tharp et al., 2012). These studies have revealed that groups with high adherence to *attitudes* conducive to SV (e.g., RMA, rape-supportive rules) create perceptions of *subjective norms* that coercive sexual behaviors are permissible and even desirable, leading to a greater likelihood of SV perpetration and bystander behavior among members (Murnen & Kohlman, 2007).

The strong empirical link between peer influences and SV behaviors is particularly concerning during adolescence, a period in which peer influences are heightened in general, and self-regulation strategies are low (Wolfe et al., 2009a). In fact, peer influences on sexual behavior are evidenced as young as middle school (Tolman et al., 2003). In Tolman and colleagues' (2003) examination of sexual harassment in middle school, boys expressed a great deal of perceived peer pressure to be sexual aggressors. The boys in the study spoke of pressures to say demeaning comments to girls in front of others and to engage in minor sexual acts with girls in

front of their peers, such as kissing or sexual dancing. These perceived expectations do not diminish after adolescence. On the contrary, they often become stronger in college or young adulthood (Carr & VanDeusen, 2004). For instance, in a study of college men, approximately 26% reported having friends who pressure them to have sex with women, and 35% reported having friends who approve of getting women drunk or high to have sex with them (Carr & VanDeusen, 2004).

Clearly, one's peers can actively provide influence to engage in sexually coercive behaviors; however, passive influences also contribute to SV, specifically through bystander behavior. The bystander effect is a social phenomenon in which individuals do not intervene in unjust or dangerous situations because of assumptions that someone else will, fears or lack of confidence about intervening, and/or acceptance that if others are not intervening, there is no need to intervene (Coker et al., 2011; Latane & Rodin, 1969). Bystander intervention of SV occurs when an individual prevents or stops a sexually coercive act or speaks up in opposition to comments that perpetuate SV (e.g., rape myths, sexist remarks, victim blaming) (Coker et al., 2011). Intentions to intervene in SV scenarios are heavily influenced by one's *perceived behavioral control* over the intervention behavior (Berkowitz, 2002). Perceived behavioral control is low when the bystander effect is occurring for many reasons, including potential threats of social ridicule and rejection or lack of confidence in intervention strategies (Berkowitz, 2002). Such barriers can lead to perceptions that intervention is not possible or highly undesirable.

In regards to SV, the bystander effect is associated with boys' *subjective norms* about the sexual attitudes and behaviors of others (Berkowitz, 2002; Fabiano, Perkins, Berkowitz, Linkenbach, & Stark, 2003). For instance, the bystander effect has been linked with individual misperceptions that most men are more comfortable with sexist comments and acts towards women

than themselves (Berkowitz, 2002). In addition, it is associated with inaccurate appraisals of the values others place on sexual consent, with beliefs that most people are less concerned with obtaining and giving consent in sexual encounters than they actually are (Fabiano et al., 2003). These misperceptions contribute to *subjective norms* that others would not intervene in coercive sexual situations, thus decreasing the likelihood that they themselves will intervene (Berkowitz, 2002; Fabiano et al., 2003). Bystander intervention strategies have been implemented on many college campuses (DeGue et al., 2012), and modifying individuals' perceived control and subjective norms about bystander intervention of SV has led to positive behavioral changes in this regard (Berkowitz, 2002; Coker et al., 2011). Therefore, it is likely that targeting self-efficacy for bystander intervention among younger samples would also be effective (DeGue et al., 2012).

Rigid Gender Ideology

Gender ideology refers to an individual's internal perceptions of what it means to identify as a particular gender on a personal, relational, and societal level (Doucet & Lee, 2014). Individuals with rigid gender ideologies have very limited perceptions of what is acceptable gendered behavior and exhibit high levels of adherence to traditional gender role stereotypes (Bem, 1981). This type of rigidity, which is more common in men than women, is one of the most consistent individual risk factors for SV perpetration (Tharp et al., 2012). It is associated with a greater likelihood of perpetration of bullying (Wolfe et al., 2009a), sexual harassment (Wolfe et al., 2009a), and sexual violence (Reidy, Smith-Darden, Cortina, Kernsmith, & Kernsmith, 2015) in adolescence, as well as higher rates of RMA and SV perpetration in adult men (Burt, 1980; Luddy & Thompson, 1997, Tharp et al., 2012).

An individual's gender ideology is influenced by both *subjective norms* that condone or condemn various enactments of gender and personal *attitudes* that denote the values an individu-

al associates with traditional vs. less traditional gender roles (Doucet & Lee, 2014). The relative importance one places on each of these dimensions is likely predictive of their gendered ideology and behavior. Gendered expectations tend to be highly influential because violations of gender norms have negative social consequences, such as ridicule and ostracization, especially for boys and men (Smith, White, & Moracco, 2009). This is problematic because several prominent traits associated with masculinity are conducive to violence against women, including ideals of men as competitive, aggressive, unemotional, and lacking in empathy (Bem, 1981; Tharp et al., 2012). These cultural expectations about gender are manifested in actual behaviors, with men being far more likely to perpetrate SV (Butchart et al., 2010) and be convicted of violent crimes (Smithey & Straus, 2002) than women.

Evidence suggests that rigid gender ideology may be a mechanism through which other risk factors for SV are manifested (Burt, 1980; Reidy et al. 2015). These risk factors include adversarial sexual beliefs, acceptance of violence, and gender-related anxieties (Burt, 1980; Reidy et al., 2015; Tharp et al., 2012). For example, rigid gender ideology in boys can lead to masculine discrepancy stress, or stress induced by feelings of being insufficiently masculine (Reidy et al., 2015). Masculine discrepancy stress has been associated with higher rates of RMA and SV perpetration among adolescent boys compared to those who do not report this type of stress (Reidy et al., 2015). This finding illuminates an example of the devastating consequences associated with strong perceived pressures to adhere to subjective gender norms. Breaking down problematic gender stereotypes is a common SV prevention strategy that has demonstrated success (Coker et al., 2011; DeGue et al., 2012). Gendered pressures are especially salient in adolescence, positioning this developmental period as a pivotal time to intervene to prevent rigid gender ideology and the negative outcomes associated with it (Smith, White, & Moracco, 2009).

Middle School SV Prevention Efforts

A majority of SV prevention efforts target college students, with a smaller amount directed to high school students, and even fewer designed for middle school (Anderson & Whiston, 2005; Butchart et al., 2010; Tharp et al., 2011). Of the documented programs aimed at middle school students, most do not primarily target SV, but emphasize the prevention of dating violence, peer aggression, substance abuse, and/or bullying (Espelage, Low, Polanin, & Brown, 2013; Foshee et al., 2005; Taylor, Stein, Mumford, & Woods, 2013; Wolfe et al., 2009b). Furthermore, one of only two “evidence-based” adolescent dating violence prevention programs identified by the World Health Organization is targeted to 8th and 9th grade students; the other is designed for high school (Butchart et al., 2010; Wolfe et al., 2009). Therefore, despite the need, a dearth of literature on effective middle school SV prevention exists (Tharp et al., 2012). This scarcity poses challenges to understanding best practices for prevention with this demographic.

Several strategies that have been used in middle school SV and dating violence prevention efforts include social-emotional learning curricula (Espelage et al., 2013), law and justice information (Taylor, Stein, & Burden, 2010; Taylor et al., 2013), school building-wide initiatives (Foshee et al., 2005; Taylor et al., 2013), role playing (Weisz & Black, 2001), gender role discussions (Foshee et al., 2005), and dating violence and healthy relationship education (Foshee et al., 2005; Wolfe et al., 2009b). Outcomes from these prevention programs are somewhat mixed. Several positive outcomes have been found including reductions, ranging from 26% - 53%, in the likelihood for physical peer aggression (Espelage et al., 2013), sexual harassment victimization and perpetration (Taylor et al., 2013), peer SV victimization and perpetration (Taylor et al., 2013), SV victimization by a dating partner (Taylor et al., 2013), and physical dating violence in boys (Wolfe et al., 2009b). In addition, reductions in reports of psychological, sexual, and phys-

ical dating violence perpetration (Foshee et al., 2005), improved attitudes about gender equality, and decreased acceptance of teen dating violence (RWJF, 2013) have been observed. Despite these positive outcomes, nonsignificant and/or contradictory findings are common among evaluations of these programs (DeGue et al., 2014), and a lack of study replication limits the ability to identify the most advantageous elements of SV prevention for middle school youth.

SAVA's Speak Up! program includes common SV prevention strategies such as dating violence and healthy relationship education, gender role discussions, and role playing, and incorporates detailed information on sexual violence, provides bystander intervention training, and maintains a central focus on breaking down gender stereotypes and norms. Evaluating SAVA's unique approach to SV prevention targeted directly to middle school youth contributes to the understanding of SV prevention with this population.

Moderators of SV Prevention Impact

A significant challenge to comprehensive evaluation of SV prevention efforts is to assess differential program effects (Macias et al., 2008; Rossi et al., 2004). This type of assessment is referred to as moderation analysis. Moderation analyses strengthen evaluations by exploring beyond overall mean program effects to uncover potentially critical subgroups in which programs are substantially more or less effective (Rossi et al., 2004). Such analyses can be particularly beneficial if, for example, a program demonstrates no overall program effects, but a subgroup of those most in need of the program show significant improvements (Rossi, 2004). The opposite scenario could also be uncovered: the program shows significant overall effects, but those most in need, or the intended targets, do not show improvement. Thus, moderation analyses are extremely informative in understanding prevention program effectiveness (Macias et al., 2008).

Common moderation analyses of program impact include examinations of demographic

characteristics, program duration, need for services, and impact-relevant variables (Macias et al., 2008; Rossi et al., 2004). Program procedures that vary across sites should be carefully examined to determine the ways in which certain program aspects may differentially influence program impact (Rossi et al., 2004). For example, how participants are recruited and variations in program duration are important factors that may influence participant outcomes. In SV preventive interventions, longer program duration has been consistently associated with stronger program impact (Anderson & Whiston, 2005; Meyer & Stein, 2004). Brief interventions such as one-day workshops that provide information about rape and consent have shown very little positive, sustainable change compared to longer, more comprehensive interventions (Coker et al., 2011; Meyer & Stein, 2004).

Additionally, need for prevention, or the extent to which participants exhibit risks associated with the problem, may influence prevention outcomes (Rossi et al., 2004). It is common for individuals in greatest need of prevention to benefit most from prevention efforts, especially among universal programs (i.e., programs designed for the general population as opposed to high-risk groups; Rossi et al., 2004). This tendency is likely due to the fact that those who are more at risk have a greater capacity for improvement (Rossi et al., 2004). One of the most salient risk factors for SV perpetration is male gender, with men being far more likely to perpetrate SV than women (Tharp et al., 2012). Therefore, in universal programs, boys are often identified as being at greater risk for SV perpetrations than girls. Previous SV prevention evaluation studies have evidenced that boys often tend to demonstrate greater improvements after program participation than girls (Smith & Welchans, 2000; Wolfe et al., 2009b).

Another prominent indicator of SV perpetration risk is rigid gender ideology. Because individuals are socialized into gender from birth, gender ideology is deeply rooted (Kusalanka,

Weiner, & Russell, 2013), and gendered structures and pressures permeate society (Doucet & Lee, 2014; Smith et al., 2009). Rigid gender ideology often tends to co-occur with other prominent risk factors of SV perpetration, such as rape myth acceptance and masculine discrepancy stress (Burt, 1980; Lonsway & Fitzgerald, 1994; Reidy et al., 2015). Additionally, in Tharp et al.'s (2012) review of literature on risk factors for SV, two broad categories of SV risk were identified: acceptance of violence and adversarial sexual attitudes/beliefs. Both of these categories are reliably and consistently associated with rigid gender ideology (Burt, 1980; Lonsway & Fitzgerald, 1994; Tharp et al., 2012), placing gender ideology as a key indicator of participants' risk for SV perpetration. Therefore, gender ideology may be a unique and powerful predictor of one's receptivity and need for SV prevention, with those higher in rigidity in greater need for prevention. Furthermore, the saliency of gender during young adolescence could make this variable particularly important for this age group (Smith et al., 2009).

Speak Up! Sexual Violence Prevention Program

Speak Up! was developed by the Sexual Assault Victim Advocate (SAVA) Center, a local non-profit organization in northern Colorado, to fill the need for SV prevention for young adolescents. SAVA's mission is to provide support to individuals affected by SV through crisis intervention, therapeutic services, advocacy, and prevention programming (SAVA Center, 2017). Speak Up! offers groups for middle school students aimed to reduce participants' risks and increase protection against SV. Boys and girls are separated into gender-specific groups capped at 15 participants. The standard intervention has approximately 17-20 lessons that span the course of one academic year (covered in 25-30 one-hour sessions), and there is a modified 9-13 session curriculum implemented in one semester for schools that cannot accommodate the full program.

Speak Up! was developed as a universal program, not targeted toward participants with a specified level of risk. A majority of participating schools offer Speak Up! as a voluntary program in which interested participants sign up; however, a small number of schools offer the program on a referral-only basis, in which teachers or counselors refer youth to participate. Although some students may be referred due to a counselor's concerns about a student's risk for SV or unhealthy relationships, most counselors intentionally refer students from varied backgrounds, abilities, and risk levels. This referral strategy is done to create diverse Speak Up! groups comprised of students who may not typically interact. SAVA staff members have expressed interest in understanding how these differing recruitment strategies might influence participant outcomes (J. Luciano, personal communication, Sept. 9, 2016).

Adhering to the public health model for prevention, Speak Up! was designed to address prominent risk and protective factors for SV. Sessions cover a range of topics relating to SV which include: power and violence, gender stereotypes, sexual harassment, bullying, male privilege, healthy/unhealthy relationships, media representations, responding to violence, and more. Each session has a theme and includes a portion of time spent by the facilitator presenting information on the topic, personal reflection and group discussion, interactive group activities, and sometimes relevant movie or documentary clips are presented. As previously described, Speak Up! was developed under assumptions of the TPB, suggesting that modifying proximal determinants of intention will ultimately influence behavior (Ajzen, 1991). Therefore, Speak Up! primarily targets three factors: attitudes and subjective norms contributing to unhealthy sexual/relationship norms, perceived behavioral control and subjective norms regarding self-efficacy for bystander intervention, and attitudes and subjective norms influencing rigidity in gender ideology. An example lesson from the Speak Up! curriculum can be found in Appendix A on p. 56.

CURRENT STUDY

The study purpose was to test the overall effectiveness of Speak Up! and determine moderators of program impact using a single group pretest-posttest design. This study aimed to contribute to literature on SV prevention by providing a comprehensive evaluation of a sexual violence prevention program for young adolescents, a critical developmental period in which little is known about how to effectively prevent SV (Butchart et al., 2010). The study was guided by the following hypotheses.

Hypothesis 1. Speak Up! participants demonstrate increases in protective factors and decreases in risk factors for SV perpetration from pre to post-test.

Hypothesis 1a. Speak Up! participants demonstrate a significant decrease in adherence to unhealthy relationship/sexual norms from pre to post-test.

Hypothesis 1b. Speak Up! participants demonstrate a significant increase in self-efficacy for bystander intervention of SV from pre to post-test.

Hypothesis 1c. Speak Up! participants demonstrate a significant decrease in rigidity in gender ideology from pre to post-test.

Hypothesis 2. Speak Up! participants with higher baseline risk levels for SV perpetration demonstrate significantly greater improvements in targeted risk and protective factors from pre to post-test than those with lower baseline risk levels.

Hypothesis 2a. Rigidity in gender ideology moderates Speak Up! effects such that participants with more rigid gender ideologies at baseline show greater improvements in targeted risk and protective factors from pre to post-test than those with less rigid gender ideologies.

Hypothesis 2b. Gender moderates Speak Up! effects such that boys show greater improvements in targeted risk and protective factors from pre to post-test than girls.

Hypothesis 3. Program duration moderates Speak Up! effects such that those who participated for one full academic year (i.e., 25-30 sessions) demonstrate greater improvements in targeted risk and protective factors than those who participated for one semester (i.e., 9-13 sessions).

Hypothesis 4. Referral status moderates Speak Up! effects such that participants from referral-only schools differ in their outcomes from students at self-referral schools. This is an exploratory hypothesis.

METHODS

Participants

Study participants were all students ($N = 76$) who participated in Speak Up! during the 2014-2015 academic year. Participant age at pretest ranged from 11 to 15 years ($M = 13.07$). Sample demographic information is displayed in Table 1. The majority of participants were 13 years old ($n = 49, 64.5\%$), and 68.4% of participants were female ($n = 52$). This sample included approximately 57.9% White/Caucasian participants ($n = 44$) and 88.2% who identified as heterosexual ($n = 67$). Twenty-five participants (32.9%) were from referral-only schools, and 51 participants (67.1%) were from voluntary schools. Lastly, 30.3% ($n = 23$) received the modified, shorter curriculum, with 69.7% ($n = 53$) receiving the full curriculum. This small sample was not nationally representative in terms of race/ethnicity, such that there were fewer Whites/Caucasian and Black participants in this sample than national averages (76.3% for Whites and 13.7% for Blacks), and there were more Hispanic/Latino and multiracial participants in this sample than the national averages (16.9% for Hispanics/Latinos and 2.9% for Multiracial; U.S. Census Bureau, 2013). There were also higher percentages of Hispanics/Latinos and lower percentages of Whites in this sample than Larimer County averages (83.2% for Whites and 11.2% for Hispanics/Latinos; U.S. Census Bureau, 2015). In addition, there were more girls in this sample than boys.

Table 1
Demographic Characteristics (N = 76)

Characteristic	<i>n</i>	%
Age		
11	2	2.6
12	9	11.8
13	49	64.5
14	14	18.4
15	2	2.6
Gender		
Female	52	68.4
Male	24	31.6
Other	0	0
Race/Ethnicity		
White/Caucasian	44	57.9
Hispanic	16	21.1
Black	2	2.6
Asian	1	1.3
Native American	0	0
Multiracial	11	14.5
N/A: Other	1	1.3
Sexual Orientation		
Heterosexual	67	88.2
Lesbian	0	0
Gay	0	0
Bisexual	5	6.6
Queer/Questioning	4	5.3
Referral Status		
Self-referred	51	67.1
Other-referred	25	32.9
Duration		
Full Curriculum	53	69.7
Modified/short	23	30.3

Procedures

Sampling Procedures. Participants were recruited from eight middle schools within two local school districts in which Speak Up! was offered. Of these eight schools, two offered Speak Up! only to students who were referred from a school counselor. Students from these two schools could be referred from 7th and 8th grades. Counselors intentionally referred students from differing backgrounds, friend groups, and activity involvement, in order to obtain diverse

Speak Up! groups. SAVA did not collect referral forms and did not have information regarding why individuals were referred to Speak Up!. Participation was required for referred students, as long as parental permission was obtained. At the remaining six schools, all 8th grade students were eligible to take part in Speak Up! on a voluntary basis. One voluntary school offered Speak Up! to both 7th and 8th grade students, due to the school's small number of students. At voluntary schools, students could still be referred from an outside source; however, their participation was not required. Primarily, students from these schools were recruited through 5 to 10-minute orientations developed and presented by Speak Up! facilitators and school counselors during students' health or science classes.

At all eight schools, parental permission slips were distributed to referred students and students at the orientation sessions. Interested students and referred students then returned the parental permission forms to their school counselors. Only those students who returned their parental permission forms were allowed to participate in Speak Up!. Student assent was obtained at the first Speak Up! session during an activity in which participants created group guidelines and signed it individually, agreeing to follow the guidelines and participate fully in Speak Up!. There were no costs to participants or added incentives for participating in the program (J. Luciano, personal communication, April 14, 2016).

Program Procedures. Speak Up! groups began in the fall semester of 2014. Each group met weekly at participating schools for approximately one hour. Speak Up! was held during the lunch period at two schools, in the morning before classes at one school, and during the homeroom/study hall period at the remaining five schools. All Speak Up! groups were facilitated by trained SAVA staff. Speak Up! facilitators received a comprehensive sexual assault training prior to implementing the program that provided them with a thorough background

knowledge of the content they would present. Facilitators must have facilitated at least one Speak Up! session with a supervisor prior to facilitating on their own, and they worked directly with a supervisor throughout program implementation to ask questions, discuss issues, and receive feedback.

At six of the eight schools, the standard curriculum was administered, which consisted of approximately 17-20 lessons, delivered over the course of the full academic year in about 25-30 sessions. One school implemented the modified one-semester curriculum in both the fall of 2014 and the spring of 2015. The modified curriculum covered the same general topics, but more briefly and less in-depth. At the end of the spring semester of 2015, all Speak Up! groups convened for a community field trip followed by an end of year celebration (J. Luciano, personal communication, April 14, 2016).

Data Collection. Data for the proposed study was collected by SAVA staff as part of a single group pretest-posttest design. Speak Up! facilitators administered the pre-test survey measure, developed by SAVA staff, to all participants at the beginning of the first Speak Up! session. At the last session, participants completed post-test surveys. Surveys were administered in paper format and read by participants. Speak Up! facilitators were available to answer participants' clarifying questions about items on the survey as needed. The surveys included participants' initials and birthdates, which were used to match the surveys from pre to post-test. Speak Up! facilitators administered and collected all surveys, and gave them to the Prevention Education and Outreach Director, who then entered the survey data into Excel. After data were entered, the Prevention Education and Outreach Director filed the surveys in an administrative folder that was not accessible to others in the office. This procedure was done to ensure participant anonymity and confidentiality. (J. Luciano, personal communication, April 14, 2016).

Measures

Demographic Information. Participants were asked to provide the following information about their personal backgrounds at pre-test: gender, school, grade, age, ethnicity, and sexual orientation.

Speak Up! Program Assessment Measure (SUPAM). SAVA staff developed the SUPAM, a 32-item self-report survey (see Appendix B on p. 59), to assess program impact. The items were developed using research on risk and protective factors for SV, other validated measures of similar constructs, and Speak Up! curriculum content. The first seven items assess demographic information listed above. The last five items are short response questions asking about the program that were not used in the current analyses. The rest of the survey consists of a 20-item self-report scale that primarily assesses three major constructs: unhealthy relationship/sexual norms (URN), rigidity in gender ideology (RGI), and self-efficacy for bystander intervention (SBI). Although SAVA staff did not explicitly intend to assess the above major constructs during the development of the SUPAM, careful examination of the items, curriculum, and SV literature by the author led to the emergence of these three constructs in their measure. SAVA staff has confirmed the accuracy of this alignment (J. Luciano, personal communication, April 14, 2016). Item response choices range from 1 (*Strongly disagree*) to 5 (*Strongly agree*). Items were reverse coded as needed such that higher scores indicated more positive responses (i.e., greater self-efficacy for bystander intervention, lower endorsement of unhealthy relationship norms, and less rigid gender ideology).

Because the reliability and validity of the SUPAM had yet to be established, reliability and validity analyses were conducted using baseline data. Pre-test data from 2014-2015 and 2015-2016 Speak Up! implementations were combined to create a large enough sample size to

conduct factor analyses ($N = 159$). To assess the validity of the SUPAM, a principle axis factor analysis with a Varimax rotation was first performed on the 20 items. An orthogonal rotation was used because it allowed the eigenvectors to remain independent while improving the ease of interpretation of the findings. Only items with factor loadings greater than .30 for only one factor were considered to represent each factor. Only factors with eigenvalues greater than 1.0 were included in the model (i.e., Kaiser's Stopping Rule). Seven factors emerged with eigenvalues greater than 1.0. These seven factors cumulatively accounted for approximately 60% of the total variance, and the first three factors accounted for only 36.2%. The items within each of the seven factors did not align with theoretical and conceptual hypotheses, and conceptual themes could not be determined based on these factors.

A three-factor principal axis factor analysis with an orthogonal rotation was then performed. This additional analysis was done to determine the extent to which the three hypothesized factors would emerge more clearly with this constraint. However, the three factors that emerged did not align with *a priori* hypotheses, and the items within each factor did not lead to conclusions about conceptual themes found in the data. Again, these three factors accounted for 36.2% of the variance. Because the factors did not account for a substantial amount of variance and did not appear to be capturing conceptually cohesive themes, no factors were retained from these analyses.

Next, Chronbach's Alpha was calculated on each of the three hypothesized subscales to assess scale reliability. Although the subscales did not emerge from the factor analyses described above, these three hypothesized factors were used because no other clear themes had emerged, and SAVA had intended for these three constructs to be measured with the SUPAM. This analysis only included data used in the current study (i.e., 2014-2015 implementation). The

first construct was hypothesized to assess unhealthy relationship/sexual norms (URN) and included 10 items. Measurement reliability on the URN subscale was marginally acceptable, with an alpha of .64. The next construct was hypothesized to assess self-efficacy for bystander intervention (SBI) and included seven items. Internal consistency for the SBI subscale was marginally acceptable with an alpha of .65. Lastly, rigidity in gender ideology (RGI) was hypothesized to be measured using three items. Internal consistency of the RGI scale was inadequate with an alpha of .39. Because rigidity in gender ideology did not form an acceptable subscale to be used in subsequent analyses, each of the three individual items that were intended to measure RGI was examined as a separate indicator of this construct. Although this decision led to an increased number of analyses, it was important to assess how different dimensions of this construct were related to participants' outcomes. Descriptions of the subscales used for analyses are below.

Unhealthy relationship/sexual norms (URN) subscale. This subscale of the SUPAM is comprised of 10 self-report items assessing the extent to which participants agree with statements depicting sexist and/or abusive attitudes about sex or relationships. Sample items include “If your partner won’t have sex at first, just keep trying” and “A boy who makes his girlfriend or partner jealous on purpose deserves to be screamed at” which are rated from 1 (*Strongly disagree*) to 5 (*Strongly agree*). Cronbach’s alpha reliability estimate for the current sample was .65. Participants’ mean scores on the URN subscale were used in analyses.

Self-efficacy for bystander intervention (SBI) subscale. This subscale of the SUPAM was comprised of seven self-report items assessing participants’ likelihood of intervening in examples that describe opportunities for bystander intervention. Sample items include “If I see a guy and his girlfriend physically fighting at school, it is none of my business” and “Your friend told you he took away his girlfriend’s cell phone because she was texting with someone who he

is jealous of. You would tell your friend it's not ever okay to take away your girlfriend's cell phone" which are rated from 1 (*Strongly disagree*) to 5 (*Strongly agree*). Cronbach's alpha reliability estimate for the current sample was .65. Participants' mean scores on the SBI subscale were used in analyses.

Rigidity in gender ideology (RGI) subscale. This construct was measured with three individual self-report items assessing the extent to which participants agree with statements that represent strict limits on what is acceptable behavior for boys/men and girls/women. The three items are as follows: "A woman should never disagree with her boyfriend or partner in public when other people can hear" (i.e., RGI1), "A boy who sends a Valentine's Day card to another boy is asking to get teased" (i.e., RGI2), and "Gender stereotypes can lead to sexual violence" (i.e., RGI3) which are rated from 1 (*Strongly disagree*) to 5 (*Strongly agree*). Participants' mean scores on each of the three items were used in analyses.

ANALYSIS PLAN

Main Effects

Pre-post scores on total SUPAM, SBI, URN, RGI1, RGI2, and RGI3 were analyzed using unadjusted and adjusted models. First, repeated measures analyses of variance (RM ANOVAs) were performed to examine pre-post differences for each outcome variable. Second, adjusted models were tested using repeated measures analyses of covariance (RM ANCOVAs) to examine pre-post differences for all outcome variables, controlling for participant gender and school implementation. For hypotheses to be supported, significant pre-test and post-test difference scores (in the hypothesized directions) were required in the adjusted models.

Due to the small sample size, power to detect statistically significant effects was limited. Therefore, Cohen's *d* effect size estimates were calculated for each outcome variable to complement significance testing. Effect size estimates are unaffected by sample size and provide insight into the magnitude of differences in mean scores from pre-test to post-test. Larger effect sizes were needed to provide evidence for greater pre-post change and offer additional support for hypotheses 1-1c. Smaller effect sizes were informative in understanding the magnitude of pre-post differences and supporting nonsignificant findings. According to Cohen's (1988) guidelines, an effect size of .2 or lower is considered small, an effect size of .5 is considered medium, and an effect size of .8 or greater is considered large. Effect size estimates, in conjunction with p-values, provided a more comprehensive picture of pre-post changes in mean scores.

Moderation

Baseline RGI, school implementation (i.e., referral status and duration), and gender were all dichotomized and tested as moderators of pre-post change in total SUPAM scores. For each

of the three items, baseline RGI was dichotomized using a median split method in which participants who scored 4 or greater were considered to have low rigidity, and those who scored 3 or below were considered to have high rigidity. New variables were computed using each RGI item dichotomizing participants' pre-test scores as either 0 = low or 1 = high. RGI1 contained 53 participants in the low group and 23 in the high group. RGI2 contained 56 participants in the low group and 20 in the high group, and RGI3 contained 44 participants in the low group and 32 in the high group. A new dichotomized variable labeled Implementation was created and coded as either 0 = standard (i.e., full curriculum with self-referral, $n = 51$) or 1 = modified (i.e., shorter curriculum and/or other-referred, $n = 25$). This method was chosen because a large majority (92%) of students who received the shorter curriculum were also other-referred. Therefore, due to the high degree of covariance, the two variables were combined to examine both implementation modifications together. Lastly, gender was coded 0 = male ($n = 24$), 1 = female ($n = 52$).

Moderation was tested using five RM ANCOVAs in which interactions between each moderating variable and participants' pre-post change in total SUPAM scores were examined, while controlling for gender and school implementation. Specifically, the moderating effect of RGI on program impact was assessed by examining the interaction between pre-post change and each RGI split variable, controlling for school and gender. The moderating effect of program implementation was explored by examining the interaction between pre-post change and the dichotomized Implementation variable, controlling for gender. The influence of gender was assessed by examining the interaction between pre-post change and the gender variable, controlling for implementation. Significant or marginally significant interactions were examined further by calculating Cohen's d effect sizes for the dichotomized groups to examine the magnitudes of change based on group membership.

Preliminary Analyses

Distributions of all outcome variables were examined for outliers, normality, and for missing data. There were six items with missing data throughout the data set. Missing variable analyses revealed that no individual item had more than one instance of missing data, and no participant was missing data on more than one item. Thus, there did not appear to be a pattern of the missing data. Because missing data were considered missing at random, the data contained very few instances of missing data, and the sample size was small, imputation procedures were deemed unnecessary and case deletion was considered inappropriate for this study (Tabachnik & Fidell, 2013). Therefore, missing data were replaced with sample means. As demonstrated in Table 2, no outcome variables were highly skewed. However, pre-test SBI scores were highly kurtotic. Several exponential transformations were performed on the pre-test SBI variable; however, the transformations did not yield a sufficiently normal distribution. Therefore, for the ease of interpretation of the data, this variable was left un-transformed.

Table 2 illustrates pre-test mean scores and standard deviations for continuous variables along with correlation analyses. Many of the outcome variables were correlated with one another, indicating that the subscales assessed similar constructs. As expected, total SUPAM was highly and significantly correlated with each outcome variable, $p < .01$. URN was significantly correlated with all other outcome variables, $p < .01$. SBI was significantly correlated with URN; however, it was not significantly associated with the RGI variables. RGI1 and RGI2 were significantly correlated, $p < .05$, but no other correlations were significant among the three RGI variables, suggesting that these items assessed different aspects of RGI.

To determine whether gender was associated with the outcome variables, an independent samples t-test was conducted with boys' and girls' post-test total SUPAM scores. Gender was

found to be significantly associated with the outcome, $t(74) = -2.92, p = .005$, with boys' post-test scores, $M = 3.81$, significantly lower than girls' post-test scores, $M = 4.12$. Therefore, gender was controlled for in main effects analyses, along with implementation.

Table 2
Pre-test Descriptive Statistics and Correlations Among Variables

Variable	<i>M</i>	<i>SD</i>	Skewness	Kurtosis	1	2	3	4	5
Total SUPAM	3.82	0.41	0.33	0.20					
URN	3.69	0.47	0.47	-0.34	.94**				
SBI	3.95	0.50	-1.24	5.71	.79**	.58**			
RGI1	3.95	1.02	-0.83	0.30	.45**	.38**	.20		
RGI2	4.14	0.87	-0.54	-0.88	.48**	.49**	.21	.29*	
RGI3	3.68	0.70	0.28	-0.54	.34**	.31**	.18	.16	.03

* $p < .05$; ** $p < .01$

RESULTS

Main Effects

Unadjusted models. Hypotheses 1 – 1c were first examined with unadjusted models that demonstrated significant or marginally significant pre-post differences on all outcome variables in the hypothesized directions. Speak Up! participants demonstrated increased scores in self-efficacy for bystander intervention (SBI) and decreased scores for rigidity in gender ideology (RGI) and adherence to unhealthy relationship/sexual norms (URN). RM ANOVAs yielded significant pre-post differences for participants' total SUPAM scores, URN, RGI1, and RGI2. Marginally significant differences were detected for SBI and RGI3. Results of the unadjusted models are displayed in Table 3.

Table 3
Speak Up! Unadjusted RM ANOVA Main Effects Results

Outcome Variable	<i>df</i>	<i>Error df</i>	<i>F</i>	η_p^2
SUPAM Total	1	75	21.60**	.224
URN	1	75	30.48**	.289
SBI	1	75	2.77†	.036
RGI1	1	75	6.69*	.082
RGI2	1	75	12.96*	.147
RGI3	1	75	2.87†	.037

Note. ** $p < .001$; * $p < .05$; † $p \leq .10$

Adjusted models. Hypotheses 1 – 1c were further explored with six repeated measures analyses of covariance (RM ANCOVAs) with gender and implementation included as covariates. Although the covariates did not contribute significantly to changes on the outcome variables,

their inclusion attenuated the significance of the main effects. Once gender and implementation were accounted for, the only remaining significant pre-post differences were in participants' adherence to unhealthy relationship/sexual norms. Table 4 illustrates pre-post changes on each outcome, accounting for gender and implementation, as well as the influence of each covariate on main effects.

Moderation

Additional RM ANCOVAs, controlling for implementation and gender when appropriate, tested the moderating effects of baseline RGI, implementation, and gender on pre-post differences in total SUPAM scores. Moderation results are presented in Table 5. The three indicators of baseline RGI were not significant moderators of pre-post differences. For each of the three RGI items, those with higher baseline rigidity exhibited lower SUPAM scores than the low rigidity group across assessment points, RGI1: $p < .05$; RGI2: $p < .05$; RGI3: $p < .10$. However, changes from pre to post-test did not significantly differ between these groups. Implementation group also did not significantly moderate pre-post changes in total SUPAM scores. Participants in the modified implementation group scored significantly lower on the SUPAM than those in the standard group at both pre and post-tests, $p < .05$, but pre-post changes did not differ significantly based on implementation group. A marginally significant moderating effect of gender, $p < .10$, was found for pre-post changes in SUPAM scores, such that girls' scores, $MD = .248$, increased more from pre-test to post-test than boys' scores, $MD = .096$ (See Figure 1). Gender accounted for 3.7% of the variance in pre-post differences in participants' SUPAM scores.

Table 4

Speak Up! Pre-Post Differences on All Outcomes in Adjusted Models

IV/Covariate	Total SUPAM		URN		SBI		RGI1		RGI2		RGI3	
	F	η_p^2	F	η_p^2	F	η_p^2	F	η_p^2	F	η_p^2	F	η_p^2
Implementation	0.12	.002	0.84	.011	0.05	.001	0.12	.002	2.02	.027	0.21	.003
Gender	2.80†	.037	1.42	.019	1.48	.020	0.01	.000	2.10	.028	2.07	.028
Time (Pre-post change)	1.47	.020	5.21*	.067	0.04	.001	1.72	.023	2.54	.034	0.01	.000

Note. IV is pre-post change on each outcome variable. Covariates include Implementation and Gender.

* $p < .05$; †, $p < .10$.

Table 5
Moderating Effects on Pre-post Changes in Total SUPAM Scores

Moderator Variables	(df)	F	η_p^2
Pre-Post Change x Implementation	(1,73)	0.12	.002
Pre-Post Change x Gender	(1,73)	2.80 [†]	.037
Pre-Post Change x Baseline RGI1	(1,72)	0.43	.006
Pre-Post Change x Baseline RGI2	(1,72)	0.12	.002
Pre-Post Change x Baseline RGI3	(1,72)	1.16	.016

Note. Covariates included Implementation and Gender, when appropriate.

[†] $p < .10$.

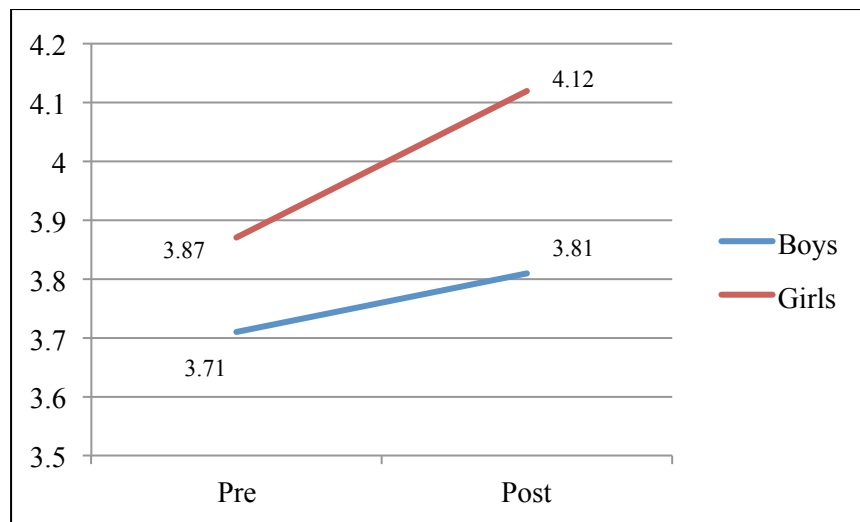


Figure 1. The moderating effect of gender on pre-post differences in total SUPAM scores.
Note. $p < .10$. Boys: $n = 24$; Girls: $n = 52$

Cohen's d effect size estimates were calculated separately for boys and girls to gain further insight into differences in magnitude of pre-post changes by gender. Significance tests were not conducted on each of the associations examined with effect sizes because of the small sample

size and the large number of analyses already conducted. Thus, effect size estimates should be considered for illustrative purposes only. As shown in Table 6, girls demonstrated larger changes from pre to post-test than boys on every outcome variable. Boys showed no changes from pre to post-test on their reports of self-efficacy for bystander intervention and very small changes in RGI2 and RGI3. Both boys and girls showed the greatest pre-post changes in scores on adherence to unhealthy relationship/sexual norms. See Table 6 for Cohen's *d* effect size calculations on each of the outcome variables for boys, girls, and all participants.

Table 6
Effect Size Calculations

Outcome Variable	Boys (<i>n</i> = 24)		Girls (<i>n</i> = 52)		Total (<i>N</i> = 76)	
	<i>d</i>	Interpretation	<i>d</i>	Interpretation	<i>d</i>	Interpretation
Total SUPAM	.22	Small	.62	Med/Large	.46	Medium
URN	.40	Medium	.69	Med/Large	.57	Medium
SBI	.00	No effect	.27	Sm/Med	.17	Small
RGI1	.25	Sm/Med	.36	Sm/Med	.31	Sm/Med
RGI2	.18	Small	.67	Med/Large	.45	Medium
RGI3	.05	Small	.41	Medium	.25	Sm/Med

Note. Effect size interpretations were derived from Cohen's (1988) guidelines.

DISCUSSION

Despite the promise of sexual violence (SV) prevention efforts in early adolescence, very few SV prevention strategies have targeted this population (DeGue et al., 2014). To better understand this approach to prevention, this study evaluated a school-based SV prevention program with middle school youth. Because the evaluation did not contain a comparison group, study results do not offer definitive conclusions about program impact. Rather, they provide information about the extent to which any preliminary support for the hypotheses was demonstrated. The results suggested that program participation may have reduced some of the risk associated with SV perpetration, and that girls tended to show greater pre-post improvements than boys. This study illuminates the potential for SV prevention with middle school students and elucidates the need for further development and rigorous assessment of SV prevention strategies with this demographic. However, future research with larger sample sizes and comparison groups is needed.

Program main effect hypotheses were partially supported. Before taking covariates into account, participants demonstrated significant or marginally significant pre-post differences in the hypothesized directions on all outcomes. However, once gender and school implementation were accounted for, significance of the main effects was attenuated. Only pre-post differences in participants' adherence to unhealthy relationship/sexual norms (URN) remained significant. This finding was surprising, given that the covariates were not highly or significantly associated with the outcome variables. It could be that the loss of two degrees of freedom in this small sample contributed to the attenuated significance. Despite this issue, Speak Up! participation was associated with improvements in URN regardless of gender and implementation. Still, the

adjusted analyses failed to suggest that Speak Up! participation was associated with improvements in participants' self-efficacy for bystander intervention (SBI) and rigidity in gender ideology (RGI).

Testing for moderation provided additional insight into potential reasons for the findings in main effect analyses. Hypothesis 2 regarding the moderating influence of baseline risk was also only partially supported. Contrary to hypothesis 2a with regard to participants' baseline levels of rigidity in gender ideology, the moderation analysis did not yield a significant moderating effect of baseline RGI on pre-post differences in total SUPAM scores. Participants with higher RGI (i.e., those exhibiting greater risks for SV perpetration) did not differ from participants with lower RGI in their pre-post changes on the outcome variables. This nonsignificant finding could be due to several factors. First, RGI was assessed with three individual items and therefore involved three different analyses. Assessing RGI using an individual item may not have fully captured participants' levels of rigidity. A comprehensive, reliable, and valid measure of RGI could have provided a more accurate assessment of the possible moderating influence of RGI on pre-post changes. Second, the high and low RGI groups were unequal on all three items, with those in the lower-risk group outnumbering those in the higher-risk group in each of the three analyses. This inequality led to a very small group size for the higher-risk group, thus decreasing the statistical power to detect significant differences between the two groups. Third, it is possible that rigidity in gender ideology did not influence participants' pre-post changes in the outcomes. Other indicators of risk, such as adherence to rape myths and unhealthy relationship/sexual norms (Farr et al., 2004; Reyes & Foshee, 2013), peer influences (Abbey et al., 2007; Tharp et al., 2012) or a history of physical aggression (Reyes & Foshee, 2013; Tharp et al.,

2012), may have had stronger influences on pre-post differences on the outcome variables than RGI.

Contrary to hypotheses regarding the moderating influence of implementation modifications, these modifications did not significantly moderate pre-post changes on program outcomes. It was expected that those who received the longer, standard curriculum would demonstrate greater pre-post changes (i.e., improve more) compared to those who received the modified, shorter curriculum. It was also hypothesized that participants from referral-only schools would exhibit different outcomes than those who self-selected to participate. However, because almost all participants who received the modified curriculum were also other-referred, these two implementation hypotheses could not be explored individually. Taken together, those who received the shorter curriculum and/or were referred did not improve any more or less compared to those who self-referred and received the full curriculum. Similar to the RGI moderation analyses, implementation groups were unequal, with those in the standard implementation group outnumbering the modified group. Again, the inequality of groups and small sample size limited the power to detect statistically significant differences between implementation groups.

Lastly, contrary to hypothesis 2b which predicted that boys would improve more than girls, results demonstrated that girls tended to show greater improvements after participating in Speak Up! than did boys (although only marginally significant). Cohen's *d* effect size estimates revealed that girls' pre-post changes (in the hypothesized directions) were greater than boys' on all outcome variables. Effect sizes for boys' pre-post differences were small on all outcomes except adherence to unhealthy norms. These results are contradictory to past research in which gender either did not influence program outcomes (Weisz & Black, 2001) or boys improved

more than girls after participating in an SV prevention program (Smith & Welchans, 2000; Wolfe et al., 2009b).

There are several potential reasons for these findings. One explanation is that SAVA's measure did not adequately capture the content of the boys' curriculum as well as it captured the girls' curriculum. Although each curriculum covers the same broad topics (e.g., gender stereotypes, violence against women), they are presented and discussed in different ways to be applicable to the gendered groups. It is possible that the SUPAM was more effective at assessing outcomes based on the girls' curriculum than the boys'. For example, the item stating, "I feel confident I would be able to go out with someone without feeling obligated to engage in sexual activity (any activity ranging from kissing, touching, oral sex, etc., to sexual intercourse)" may have been more relevant to the girls' curriculum than the boys'.

Secondly, boys could have misperceived their level of need for prevention at the baseline assessment. It is possible that prior to exposure to the complex information about SV, its causes, and societal factors that perpetuate it, young male adolescents misjudged their proficiencies and beliefs about such topics. An example of this phenomenon was highlighted in Taylor et al.'s (2010) evaluation of a middle school SV prevention program. At the 6-month follow-up assessment, participants reported reductions in peer violence perpetration and victimization; however, reports of SV in dating relationships actually increased. The authors discussed that SV, especially within the context of dating relationships, is not as well understood as other forms of violence. Therefore, Taylor and colleagues (2010) proposed that the increased reports of SV within dating relationships was indicative of a greater understanding of what SV is and ways it can manifest, rather than an actual increase in incidents of SV. The authors stated, "...as students were exposed to these lessons, they may have reflected on past behaviors associated with dating that had

previously seemed normal, and now after the treatment, they viewed as acts of violence” (Taylor et al., 2010, p. 436). In the current study, boys’ baseline answers may have been inflated due to inaccurate perceptions of their own attitudes at the pretest assessment. Then, after participating in Speak Up!, those misperceptions could have been illuminated and corrected, thus leading to small changes from pre to post-test.

Third, it is probable that female participants processed the information differently and more carefully than male participants. According to the selectivity hypothesis (Meyers-Levy, 1989), men tend to process new information selectively using singular cues, whereas women tend to process new information more comprehensively. This hypothesis suggests that boys process information based on their perceived Need for Cognition (NFC), or the extent to which they perceive information as important or relevant to them. Furthermore, men often utilize heuristics that rely on highly salient, simple cues that activate commonly held and easily accessible notions (Meyers-Levy & Loken, 2014). In contrast, the selectivity hypothesis suggests that women tend to process information more fully regardless of their NFC. Women often use less accessible and more distally relevant information when making judgments and drawing conclusions with new information (Meyers-Levy & Loken, 2014).

Hence, an interpretation of the moderating influence of gender on pre-post changes using the selectivity hypothesis is as follows. Although boys are at a much greater risk for perpetrating SV than girls (Tharp et al., 2012), male participants of Speak Up! may have misperceived their level of risk and therefore underestimated the relevance of the information presented in Speak Up! sessions. Consequently, boys were less inclined to identify the material as applicable to their lives and failed to fully process the information, leading to small pre-post changes on the outcomes. Conversely, the selectivity hypothesis proposes that female participants may have

processed the new information more comprehensively than boys, even if they did not perceive the information as personally relevant. However, because of the high prevalence of female survivors of SV, girls may have perceived a higher level of personal risk as potential victims than boys. As a result, information regarding societal norms and stereotypes that perpetuate SV and methods for intervening may have been recognized as more personally relevant to them. The greater likelihood for females to comprehensively process information could have aided them in identifying the information as relevant and understanding themselves as playing an active role in preventing sexual violence. Comprehensively processing the information, then, could have led to greater pre-post improvements among girls than boys.

Limitations

This research must be considered in light of its limitations, many of which are common to the utilization of secondary data from a community organization (Rossi et al., 2004). First is the small sample size limiting the power to detect statistically significant effects. This issue was especially salient when covariates were included in analyses and when examining moderating effects, because these analyses had fewer degrees of freedom and, in some cases, separated a small sample into smaller subgroups. Additionally, the lack of a comparison group presented barriers to inferring causality of Speak Up! effects. Although findings offer support for the potential of program effectiveness, particularly among girls, conclusions about program impact are not possible. Therefore, the significant improvement in participants' URN scores, for example, cannot be attributed to Speak Up! participation. Other plausible explanations for this change, such as maturation or social desirability, cannot be ruled out as potential causes (Rossi et al., 2004).

Third, SAVA's SUPAM measure failed to demonstrate adequate validity for the three subscales. Factor analyses did not produce factors that represented the three hypothesized con-

structs, and the emerged factors did not represent conceptually cohesive themes. Therefore, it was not possible to conclude that the SUPAM measured the three constructs it was designed to assess. Reliability analyses were sufficient for URN and SBI, but the reliability of the RGI subscale was not supported. This resulted in assessing RGI with three individual items, which is not a preferred method for measuring a complex construct. Although reliability and validity issues posed challenges to this study, the analyses were informative and beneficial for SAVA, who was seeking insight into the adequacy of their measure. Fourth, measuring RGI with three individual items necessitated the use of additional analyses. Especially with a small sample size, multiple analyses contribute to an inflated potential for Type I errors. Thus, the chance of finding a spurious significant result was increased in this study. However, strategic efforts were made to reduce the data, and multiple analyses were needed to test hypotheses beyond simple program main effects.

In addition, specific implementation modifications (i.e., referral status, reasons for referral, and program duration) could not be explored individually. Because SAVA did not collect information regarding participants' reasons for referral, it was unknown whether students were referred to Speak Up! due to risk levels or to create diverse groups. It is likely that participants who were referred for risk concerns demonstrated different outcomes than those who were referred simply to add to group diversity. Also, nearly all students in the one-semester implementation group were other-referred, thus eliminating the possibility to examine these modifications individually. It is important for SAVA to understand any potential differences in effectiveness based on program duration. Such differences would have implications for the ongoing development and implementation of Speak Up!.

Furthermore, without follow-up assessments, the extent of changes in participants' outcomes over time could not be determined. It is possible that positive results could have faded, or that program messages became more ingrained and improved over time (Rossi et al., 2004). Lastly, the inclusion of behavioral outcomes in SV prevention efforts has been identified as critical in concluding whether a program is truly effective (DeGue et al., 2014). However, the SUPAM only included items assessing attitudes, beliefs, and self-reports about the likelihood for engaging in bystander intervention. Without assessing participants' sexually violent behaviors and their acts of bystander intervention, it cannot be concluded that the program affected behavior, and thus prevented sexual violence.

IMPLICATIONS AND FUTURE DIRECTIONS

Implications for Speak Up! Systematic Program and Evaluation Improvement

Despite study limitations, implications for both SAVVA and the SV prevention field emerge. First, the small pre-post changes among male participants warrant further investigation and action. The several explanations described above are among the many potential reasons for these findings. Because boys are at far greater risk of SV perpetration than girls, it is imperative that various potential explanations are explored and addressed in future iterations and evaluations of Speak Up!. Such an iterative process is necessary to enhance understanding of how to effectively prevent SV with those most at risk. SAVVA may consider conducting focus groups or structured interviews with former male participants of Speak Up! to gain insight into aspects/content of the program that resonated and were impactful for them, and those aspects that were not as impactful. Insights gleaned from these focus groups could then be utilized to make modifications to the boys' Speak Up! curriculum.

Additionally, the selectivity hypothesis could be considered in the continued development of content, format, and delivery of information in boys' Speak Up! sessions. For example, because boys tend to selectively process information they perceive as personally relevant, greater use of simple, applicable examples and narratives could be beneficial in program sessions. Furthermore, the SUPAM's questionable reliability and validity suggest that it be re-examined and modified to better evaluate program outcomes and adequately assess both the boys' and girls' curricula. Future collaborations with researchers and/or program evaluators to incorporate other validated measures that assess similar constructs into the SUPAM is recommended.

The nonsignificant findings regarding implementation modifications could also have implications. Past research has demonstrated that longer prevention programs tend to be more effective than brief, one-session workshops (DeGue et al., 2014). However, there is little available evidence for the ideal length of an effective SV prevention program (DeGue et al., 2014). Speak Up! offers two variations of their program, both of which are much higher in dosage and more intensive than a brief workshop. The nonsignificant moderating effect of implementation may suggest that the one-semester version of Speak Up! is just as beneficial as the one-year program. For SAVA, broad implementation of the one-semester curriculum could allow for a greater allocation of resources and the ability to reach a greater number of participants. For the SV prevention field, this finding sheds light on the question of adequate program length, suggesting that a one-semester program may be as advantageous as a full year program. However, these findings are not conclusive, and this issue warrants further examination with rigorous and controlled study designs.

Implications for Sexual Violence Prevention Research

This study sheds light on the potential for middle school SV prevention initiatives in reducing adolescents' risks for SV and highlights areas in need of further development. However, it is evident that much more work is needed from researchers, service providers, and advocates to contribute to the collective understanding of how to successfully prevent SV. Given the vast amount of research demonstrating that adolescence is the period of onset for sexually violent behaviors (Black et al., 2011; Ybarra & Mitchell, 2013), future initiatives for primary prevention of SV must target young adolescents. These efforts should continue to draw upon current empirically supported risk and protective factors of SV that are specific to this developmental stage (DeGue et al., 2014). Furthermore, strategies should incorporate cultural norms, community

needs, and gender considerations in the development and implementation of prevention programs (Butchart et al., 2010; DeGue et al., 2014; Meyers-Levy & Loken, 2014).

Not only is it essential that developmentally appropriate and evidence-based prevention strategies continue to be developed and refined, but study designs must employ rigorous evaluations to assess them. Several characteristics of rigorous evaluations are recommended in the continued exploration of SV prevention initiatives. Future evaluations should include comparison groups to enhance the ability to draw conclusions about program impact and effectiveness. They should involve adequately large sample sizes with the power to detect significant differences and examine complex associations among subgroups. It is crucial for evaluations to utilize reliable and valid measures of outcome variables, including behavioral outcomes that assess actual SV behaviors and acts of bystander intervention. Additionally, multi-year follow-up assessments will be instrumental in understanding whether program effects lasted and actually prevented SV over time. Findings gleaned from such rigorous evaluations can then be used and expanded to conduct cost-effectiveness analyses for prevention programs. Cost-effectiveness analyses are capable of illuminating the impact and enhancing societal buy-in to invest in promising SV prevention strategies. These elements of program evaluations are vital to identifying what works best and with whom in preventing sexual violence (DeGue et al., 2014).

CONCLUSION

Sexual violence is a public health problem occurring at alarming rates in the United States (Black et al., 2011). It is a crime that disproportionately affects young people, and is associated with a multitude of negative consequences on individual, relational, community, and societal levels (Butchart et al., 2011). Early adolescence is a critical developmental period in which to prevent SV (DeGue et al., 2014; Wolfe et al., 2009). However, past research has provided little evidence for consistent, positive and effective elements of SV prevention with this age group (DeGue et al., 2014). To better understand the potential of youth SV prevention, this study evaluated a high dosage, school-based SV prevention program for middle school youth called Speak Up!. Results suggested that Speak Up! participation may reduce some of the risks for SV perpetration among youth, particularly for girls. However, outcomes were less promising for boys. Several potential explanations for these findings were explored, and program-specific recommendations were proposed to better understand and address these results.

In conclusion, this study lends support for the continued development and implementation of intensive SV prevention efforts with young adolescents, and offers insight into areas for program improvements and future research. The immense amount of work to be done to identify critical elements of SV prevention is evident. Further advancements in developmentally timed and evidence-driven prevention strategies, paired with rigorous evaluations, will be imperative in the quest for successfully preventing SV. This work, although immense, is essential to ensuring that future generations of youth will develop in a society that has eliminated the threat of sexual violence.

REFERENCES

- Abbey, A., Parkhill, M. R., Clinton-Sherrod, A. M., & Zawacki, T. (2007). A comparison of men who committed different types of sexual assault in a community sample. *Journal of Interpersonal Violence, 22*, 1567-1580. doi:10.1177/0886260507306489
- Ajzen, I. (1991) The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179-211. doi:10.1016/0749-5978(91)90020-T
- Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior. *Journal of Applied Social Psychology, 32*, 665-683.
doi:10.1111/j.1559-1816.2002.tb00236.x
- Albarracín, D., Johnson, B. T., Fishbein, M., & Muellerleile, P. A. (2001). Theories of reasoned action and planned behavior as models of condom use: A meta-analysis. *Psychological Bulletin, 127*(1), 142-161. doi:10.1037/0033-2909.127.1.142
- Anderson, L. A., & Whiston, S. C. (2005). Sexual assault education programs: A meta-analytic examination of their effectiveness. *Psychology of Women Quarterly, 29*, 374-388.
doi:10.1111/j.1471-6402.2005.00237.x
- Anderson, V. N., Simpson-Taylor, D., & Herrmann, D. J. (2004). Gender, age, and rape-supportive rules. *Sex Roles, 50*(1-2), 77-90. doi:10.1023/B:SERS.0000011074.76248.3a
- Aronowitz, T., Lambert, C. A., & Davidoff, S. (2012). The role of rape myth acceptance in the social norms regarding sexual behavior among college students. *Journal of Community Health Nursing, 29*(3), 173-182. doi:10.1080/07370016.2012.697852
- Bem, S. L. (1981). Gender schema theory: A cognitive account of sex typing. *Psychological Review, 88*, 354-364. doi:10.1037/0033-295X.88.4.354

- Berkowitz, A. D. (2002). Fostering men's responsibility for preventing sexual assault. In P. A. Schewe, P. A. Schewe (Eds.), *Preventing violence in relationships: Interventions across the life span* (pp. 163-196). Washington, DC, US: American Psychological Association. doi:10.1037/10455-007
- Black, M. C., Basile, K. C., Breiding, M. J., Smith, S. G., Walters, M. L., Merrick, M. T., ... Stevens, M. R. (2011). *The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 summary report*. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention. Retrieved from <http://www.cdc.gov/violenceprevention/nisvs/>
- Burt, M. R. (1980). Cultural myths and supports for rape. *Journal of Personality and Social Psychology*, 38(2), 217-230. doi:10.1037/0022-3514.38.2.217
- Butchart, A., Garcia-Moreno, C., Mikton, C. (2010). *Preventing intimate partner and sexual violence against women: taking action and generating evidence*. Geneva: World Health Organization. Retrieved from http://www.who.int/violence_injury_prevention/
- Campbell, J. C. (2002). Health consequences of intimate partner violence. *The Lancet*, 359(9314), 1331-1336. doi:10.1016/S0140-6736(02)08336-8
- Carr, J. L., & VanDeusen, K. M. (2004). Risk factors for male sexual aggression on college campuses. *Journal of Family Violence*, 19(5), 279-289.
- Centers for Disease Control and Prevention (2014). National data on intimate partner violence, sexual violence, and stalking. Retrieved from www.cdc.gov/violenceprevention/nisvs/
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Earlbaum Associates.
- Coker, A. L., Cook-Craig, P. G., Williams, C. M., Fisher, B. S., Clear, E. R., Garcia, L. S., &

- Hegge, L. M. (2011). Evaluation of Green Dot: An active bystander intervention to reduce sexual violence on college campuses. *Violence Against Women, 17*, 777-796.
doi:10.1177/1077801211410264
- DeGue, S., Simon, T. R., Basile, K. C., Yee, S. L., Lang, K., & Spivak, H. (2012). Moving forward by looking back: Reflecting on a decade of CDC's work in sexual violence prevention, 2000–2010. *Journal of Women's Health, 21*, 1211-1218. doi:10.1089/jwh.2012.3973
- DeGue, S., Valle, L. A., Holt, M. K., Massetti, G. M., Matjasko, J. L., & Tharp, A. T. (2014). A systematic review of primary prevention strategies for sexual violence perpetration. *Aggression and Violent Behavior, 19*(4), 346-362. doi:10.1016/j.avb.2014.05.004
- Delisi, M. (2010). Murder by numbers: Monetary costs imposed by a sample of homicide offenders. *The Journal of Forensic Psychiatry & Psychology, 21*, 501-513.
doi:10.1080/14789940903564388
- Doucet, A., & Lee, R. (2014). Fathering, feminism(s), gender, and sexualities: Connections, tensions, and new pathways. *Journal of Family Theory & Review, 6*(4), 355-373.
doi:10.1111/jftr.12051
- Espelage, D. L., Low, S., Polanin, J. R., & Brown, E. C. (2013). The impact of a middle school program to reduce aggression, victimization, and sexual violence. *Journal of Adolescent Health, 53*, 180-186. doi:10.1016/j.jadohealth.2013.02.021
- Fabiano, P. M., Perkins, W., Berkowitz, A., Linkenbach, J., & Stark, C. (2003). Engaging men as social justice allies in ending violence against women: Evidence for a social norms approach. *Journal of American College Health, 52*(3), 105-112.
doi:10.1080/07448480309595732

- Farr, C., Brown, J., & Beckett, R. (2004). Ability to empathize and masculinity levels: Comparing male adolescent sex offenders with a normative sample of non-offending adolescents. *Psychology, Crime & Law, 10*(2), 155-167. doi:10.1080/10683160310001597153
- Faul, R., & Erdfelder, E. (1992). *GPOWER: A priori, post-hoc and compromise power analyses for MS-DOS*. Bonn, FRG.
- Foshee, V. A., Bauman, K. E., Ennett, S. T., Suchindran, C., Benefield, T., & Linder, G. F. (2005). Assessing the effects of the dating violence prevention program 'Safe Dates' using random coefficient regression modeling. *Prevention Science, 6*, 245-258. doi:10.1007/s11121-005-0007-0
- Franiuk, R., Seefeldt, J. L., & Vandello, J. A. (2008). Prevalence of rape myths in headlines and their effects on attitudes toward rape. *Sex Roles, 58*, 790-801. doi:10.1007/s11199-007-9372-4
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*(1), 1-55
- Kuvalanka K. A., Weiner, J. L. & Russell, S. T. (2012). Sexuality in families: The (re-) creation of sexual culture. In G. W. Peterson & K. R. Bush (Eds.), *Handbook of Marriage and the Family* 3rd ed. (pp. 423-447). New York: Springer.
- Latane, B., & Rodin, J. (1969). A lady in distress: Inhibiting effects of friends and strangers on bystander intervention. *Journal of Experimental Social Psychology, 5*, 189-202. Retrieved from <http://web.natur.cuni.cz/~houdek3/papers/Latané%20Rodin%201969.pdf>
- Loh, C., Orchowski, L. M., Gidycz, C. A., & Elizaga, R. A. (2007). Socialization and sexual aggression in college men: The role of observational influence in detecting risk cues. *Psychology of Men & Masculinity, 8*(3), 129-144. doi:10.1037/1524-9220.8.3.129

- Lonsway, K. A., & Fitzgerald, L. F. (1994). Rape myths: In review. *Psychology of Women Quarterly*, *18*(2), 133–164. doi:10.1111/j.1471-6402.1994.tb00448.x
- Luddy, J. G., & Thompson, E. J. (1997). Masculinities and violence: A father–son comparison of gender traditionality and perceptions of heterosexual rape. *Journal of Family Psychology*, *11*, 462-477. doi:10.1037/0893-3200.11.4.462
- Macias, C., Jones, D. R., Hargreaves, W. A., Wang, Q., Rodican, C. F., Barreira, P. J., & Gold, P. B. (2008). When programs benefit some people more than others: Tests of differential service effectiveness. *Administration and Policy In Mental Health And Mental Health Services Research*, *35*(4), 283-294. doi:10.1007/s10488-008-0174-y
- Meyer, H. & Stein, N. (2004) Relationship violence prevention education in schools: What’s working, what’s getting in the way, and what are some future directions. *American Journal of Health Education*, *35*(4), 198-204.
- Meyers-Levy, J. (1989). Gender differences in information processing: A selectivity interpretation. In P. Cafferata, & A. Tybout (Eds.), *Cognitive and affective responses to advertising* (pp. 219–260). Lexington, MA: Lexington Books.
- Miller, T. R., Cohen, M. A., & Wiersema, B. (1996) *Victim costs and consequences: A new look*, Volume 3. U.S. Dept. of Justice, Office of Justice Programs: National Institute of Justice. Retrieved from <https://www.ncjrs.gov/App/publications/Abstract.aspx?id=155282>
- Murnen, S. K., & Kohlman, M. H. (2007). Athletic participation, fraternity membership, and sexual aggression among college men: A meta-analytic review. *Sex Roles*, *57*(1-2), 145-157. doi:10.1007/s11199-007-9225-1
- Muthén, L. K., & Muthén, B. O. (1998-2015). *Mplus user’s guide*. Seventh Edition. Los Angeles, CA: Muthén & Muthén

- Reidy, D. E., Smith-Darden, J. P., Cortina, K. S., Kernsmith, R. M., & Kernsmith, P. D. (2015). Masculine discrepancy stress, teen dating violence, and sexual violence perpetration among adolescent boys. *Journal of Adolescent Health, 56*, 619-624.
doi:10.1016/j.jadohealth.2015.02.009
- Reyes, H. M., & Foshee, V. A. (2013). Sexual dating aggression across grades 8 through 12: Timing and predictors of onset. *Journal of Youth and Adolescence, 42*, 581-595.
doi:10.1007/s10964-012-9864-6
- Robert Wood Johnson Foundation. (2013) *Start Strong: Building healthy teen relationships evaluation summary*. Retrieved from
<http://www.rwjf.org/content/dam/farm/reports/evaluations/2013/rwjf407673>
- Rossi, P. H., Lipsey, M. W., & Freeman, H. E. (2004). *Evaluation: A systematic approach (7th ed.)*. Thousand Oaks, CA: Sage.
- Smith P., & Welchans S. (2000). Peer education: Does focusing on male responsibility change sexual assault attitudes? *Violence Against Women, 6*, 1255-1268.
doi:10.1177/10778010022183622
- Smith, P. H., White, J. W., & Holland, L. J. (2003). A longitudinal perspective on dating violence among adolescent and college-age women. *American Journal of Public Health, 93*, 1104-1109. doi:10.2105/AJPH.93.7.1104
- Smithey, M., & Straus, M. A. (2002). Primary prevention of intimate partner violence. In H. Kurry & J. Obergefell-Fuchs *Crime Prevention: New Approaches*. (pp. 1-30). New Hampshire: University of New Hampshire.
- Söchting, I., Fairbrother, N., & Koch, W. J. (2004). Sexual assault of women: Prevention efforts and risk factors. *Violence Against Women, 10*(1), 73-93. doi:10.1177/1077801203255680

- Speak Up! - SAVA Center. (2017). Retrieved on January 18, 2017 from <http://savacenter.org>.
- Tabachnik, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (6th ed.). Boston, MA: Pearson.
- Taylor, B. G., Stein, N. D., Mumford, E. A., & Woods, D. (2013). Shifting Boundaries: An experimental evaluation of a dating violence prevention program in middle schools. *Prevention Science, 14*(1), 64-76. doi:10.1007/s11121-012-0293-2
- Tharp, A. T., DeGue, S., Valle, L. A., Brookmeyer, K. A., Massetti, G. M., & Matjasko, J. L. (2013). A systematic qualitative review of risk and protective factors for sexual violence perpetration. *Trauma, Violence, & Abuse, 14*(2), 133-167. doi:10.1177/1524838012470031
- Tolman, D. L., Spencer, R., Rosen-Reynoso, M., & Porche, M. V. (2003). Sowing the seeds of violence in heterosexual relationships: Early adolescents narrate compulsory heterosexuality. *Journal of Social Issues, 59*(1), 159-178. doi:10.1111/1540-4560.t01-1-00010
- Ullman, S. E. (2007). A 10-year update of 'review and critique of empirical studies of rape avoidance.'. *Criminal Justice And Behavior, 34*(3), 411-429. doi:10.1177/0093854806297117
- U.S. Census Bureau (2013). 2011-2013 3-year American community survey. Retrieved from <http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>
- U.S. Census Bureau (2015). Quick facts: Larimer County, Colorado. Retrieved from <http://www.census.gov/quickfacts/table/PST045215/08069#headnote-js-b>
- Weisz, A. N., & Black, B. M. (2001). Evaluating a sexual assault and dating violence prevention program for urban youths. *Social Work Research, 25*(2), 89-102. doi:10.1093/swr/25.2.89

- Wolfe, D. A., Crooks, C. C., Chiodo, D., & Jaffe, P. (2009a). Child maltreatment, bullying, gender-based harassment, and adolescent dating violence: Making the connections. *Psychology of Women Quarterly*, 33(1), 21-24. doi:10.1111/j.1471-6402.2008.01469.x
- Wolfe, D. A., Crooks, C. C., Jaffe, P., Chiodo, D., Hughes, R., Ellis, W., Stitt, L., Donner, A. (2009b). A school-based program to prevent adolescent dating violence: A cluster randomized trial. *Archives of Pediatrics and Adolescent Medicine*, 163, 692-699. doi:10.1001/archpediatrics.2009.69
- Ybarra, M. L., & Mitchell, K. J. (2013). Prevalence rates of male and female sexual violence perpetrators in a national sample of adolescents. *JAMA Pediatrics*, 167, 1125-1134.

APPENDIX A

Sexual Assault Victim Advocate Center – Speak Up! Girls’ Curriculum Lesson Example

4. Girl’s Stereotypes - “Girl World”

Material Options: Talking Ball, Markers / Pens, Blank Poster Paper, Girl Box (handout)

Check-in:

- *Feelings*
- *Follow up from last session - thoughts/feelings; successes or challenges during the week related to the Speak Up! group?*

Review from last sessions:

- **Power** – how some groups of people may have more or less power and privileges (advantages) based on the history in our culture – not based on our choice.
- The **Cycle of Violence** – how some people choose to pass hurting on to others (in other groups, their own, groups, themselves).
- **Hurting** - We all know what it’s like to be hurt (Hearts & Shields).
- Being **Allies** or **Change Agents** – making our own choices for what we want, and how we choose to treat others, how we talk about people, how we talk to people
- Today we’re going to focus on our experience as young women.

What is a stereotype?

The Girl World Box - *Write responses inside a box drawn on a poster paper.*

- Think back to when you were very young. What were the first messages you ever received about being a girl?
- Were they mostly negative or positive messages?
- When did you first notice that being a girl made a difference at all?
- Were there things you had to wear or do because you were a girl?
- Were there things you were told you could not do because you were a girl?
- What are the general expectations that people have about what girls and women are supposed to **be like**?
- What are the messages girls get when they are told to **act like** “ladies,” or to be “good girls?”
- What messages do girls get from **boys & men**?
- What messages do girls get from the **media**? (Ex: fairy tales, Disney)
- Where else do girls get messages about this box/stereotype? (Ex: *TV, magazines, fashion, peers, movies, school, parents...*)
 - *Looks: perfect, pretty, clean, sexy but not too sexy – not sexual, dresses, heels, long hair, make-up, perfect skin, posture, ‘right’ body size/thin, tall...*

- *Behavior: polite, nurturing, manners, quiet, respectful, uncomplaining, good listener, make no trouble, welcoming, graceful, legs crossed, no bodily noises, no rough-housing, housework, produce kids, chores, clean, cook, errands,*
- *Personality: nice, emotional, not too smart, sweet, humble,* ○ *Relationships: look after others first, puts needs aside, do what you're told, please others, submissive, dependent, passive, available to men/interested, superwoman, protected, rescued/saved, housewife, not in charge, speak when spoken to, tease/hard to get, "no" = "yes"...*
- Is this box/stereotype true for all girls? (no)
- How hard is it to always live in this box/stereotype?
 - *There are many parts of us that don't fit in this box! A box is tight and cramped, and stuffy, there's not much room ...*
- Remember the Power Chart? How do those power groups relate to this box/stereotype?
 - *Ex: more stereotypes with each More /Less-Power Group. (African American, Latina, Arab, Native American, Asian American, White, Poor, Body sizes, disabled...)*
 - *Our main "power" = sexuality, ...to gain a relationship, produce children, nurture others...*
- One reason we know it's a "box" is that when young women step outside of it – they are often called insults by guys and girls. What **insults** do young women get called? (keep insults in speak up) (optional question to add: does anyone know why we use a "box" as our metaphor for stereotype? Does it make sense to you?)
 - *Bitch (female dog that is bred), Tom Boy... ○ Slut, Whore/ Ho, Skank ○ Prude, Virgin, Tease ○ Lesbian, Gay, Fag, Homo, Dyke*
 - *Cunt*
 - *Ugly, Fat, Anorexic*
 - Nearly every insult for women has to do with our **Sexuality**: too sexual, not sexual enough, having a different sexuality than heterosexual, or for an appearance that is stereotyped to affect our sexuality.
 - Over 200 words to insult a woman based on sexuality alone!!!
- What is the purpose of these names? ○ *Push girls back in the box, control, power, etc...*
 - How do these names control girls' behavior?

Review insults and when girls are called them.

Often what we're being insulted for has nothing to do with sexuality. These words put a lot of pressure on our sexuality.

- *Ex: But what makes someone a "slut" or "whore"?*
- *Ex: Bitch - standing up, being assertive, rejecting a guy...*

What are some of the consequences of these insults?

Ex: The girl who is labeled a slut might become isolated; a girl might learn that she can only get attention with her body; a girl might become quiet...

- How many of you have ever used these words against girls? *Discuss.*

- *Girls can put other girls in the “box”!*
- Girls hurting girls is a part of The Cycle of Violence, a way to try to get power back.
- Girls often don’t realize that their actions bring all girls down.

Girls and Women Get Blamed

Insults are one form of Violence. Accepting and using insults begins the acceptance of many other forms of violence.

- The box/stereotype also holds excuses for when women are hurt and often even **blames** women for being hurt.
- How are girls and women blamed when they get hurt?
 - *Ex: “It’s her fault because of the way she dressed, or acted, or talked” – or anything that didn’t fit the box...*
 - But No woman is to blame if she’s hurt! o No one ever asks for or deserves to be hurt. No matter what choices they made.
 - Hurting should never be a consequence for a choice.
- Does staying in the box/ acting like the stereotype really keep us safer? (No.)

Sexism

We named “Sexism” on the Power Chart: discrimination based on sex.

- The behavior, conditions, attitudes, expectations, pressures, blaming and violence that foster these stereotypes are part of Sexism. o Sexism is one of the “heart attacks” that many girls experience. o *Ex: How much money do women make compared with men? (.77 / \$1.00)* o For generations we have learned these ideas and can start to think they’re normal. o We all deal with the box and we all have choices of what to do with it.

What can we do?

What do you want to do about the box/stereotypes?

- *Ex: Speak Up! & Decide for yourself who you want to be. o Ex: live without a box – for girls and guys there’s really no right or wrong way to be*
- *Ex: Speak up for others.*

Personal Challenge

Using the Interview Handout - Ask a woman in your life about their thoughts on being a woman. Ask them how girls treated other girls when they were your age. *(That’s what we’re going to talk about next week.)*

Check Out

Ex: Who supports you to be yourself? o Ex: What’s one thing you’ll try to never say again to another girl/woman?

- *Ex: What will you do this week about the box?*

APPENDIX B

Speak Up! Program Assessment Measure (SUPAM)

Your Initials (*First Middle Last*) _____

Your Birthday (*mm/dd/yyyy*) ____/____/____

Speak Up! 2014-2015

Thanks for being a part of the Speak Up! Group. This survey is *anonymous* – we won't know who filled it out. There is no right or *wrong* answer – these are all questions about your opinions. Your answers help us learn how to make the group better.

Part 1: Your Opinions:

1. I am bothered by how men and women are portrayed on TV, movies, and video games.
2. A woman should never disagree with her boyfriend or partner in public when other people can hear.
3. A boy who makes his girlfriend or partner jealous on purpose deserves to be screamed at.
4. While spending time with your 8 year old cousin, she tells you she wants to start dieting because she feels fat. ***You would tell her she is beautiful no matter what size she is.***
5. Sometimes violence is the only way to express your feelings.
6. If a girl gets really drunk and has unwanted sex it is partly her fault.
7. I feel confident I would be able to refuse sexual activity (any activity ranging from kissing, touching, oral sex, etc, to sexual intercourse) I'm not comfortable with.
8. Your friend told you he took away his girlfriend's cell phone because she was texting with someone who he is jealous of. ***You would tell your friend it's not ever okay to take away your girlfriend's cell phone.***
9. A boy who *sends a Valentine's Day card to another boy* is asking to get teased.
10. I can make a difference at reducing gender violence at my school.
11. I would like my body to look like the people on TV.
12. You see a group of girls you recognize from math class slapping guys' butts as they walk through the doorway. ***You would decide to tell a teacher you trust.***
13. I am bothered by violence against women as portrayed on TV, movies, and video games.
14. It can't be rape if a couple has had sex before.
15. If I see a guy and his girlfriend physically fighting at school, it is **none** of my business.
16. Gender stereotypes can lead to sexual violence.
17. A friend tells you she really wants a gay best friend to go shopping with. ***You would laugh about how fun that would be for her.***
18. I feel confident I would be able to go out with someone without feeling obligated to engage in sexual activity (any activity ranging from kissing, touching, oral sex, etc, to sexual intercourse).
19. If your partner won't have sex at first, just keep trying.
20. Your group project partner asks if you want to see a nude picture of a classmate that someone just texted him. ***You ask him to text it to you.***

Answer options include:

Strongly Disagree
Disagree
Unsure
Agree
Strongly Agree

Part 2: Your Background:

Please fill in the blank for your response about your personal background.

What is your gender? _____

What is your sexual orientation? _____

What school do you attend? _____

What grade are you in? _____

What is your age? _____

*What is your ethnic/racial background? Please write in how you racially/ethnically **identify**.*

Part 3: Short Response

- 1. Was Speak Up! a space where you felt you belonged? Do you feel your interactions in Speak Up! were different than in other school settings?**
- 2. How do you think the media influences the way guys and girls relate to each other?**
- 3. How would you help a friend who told you they were sexually assaulted?**
- 4. How comfortable are you communicating with your partner about physical intimacy?**
- 5. Is there anything else you would like to say?**