

Integrated Intimate Partner Violence and HIV Interventions among Adolescents in  
Sub-Saharan Africa: A Systematic Review

and

A Qualitative Analysis of Sexual Consent among High School Students

By

Mary Kirtley Righi

B.A., Middlebury College, 2014

Thesis

Submitted in partial fulfillment of the requirements for the  
Degree of Master of Public Health in the Brown University School of Public Health

PROVIDENCE, RHODE ISLAND  
MAY 2018

This thesis by **Mary Kirtley Righi** is accepted in its present form  
by the Brown University School of Public Health as satisfying the  
thesis requirements for the degree of Master of Public Health.

Date\_\_\_\_\_

\_\_\_\_\_  
Caroline Kuo, D.Phil., Advisor

Date\_\_\_\_\_

\_\_\_\_\_  
Lindsay M. Orchowski, Ph.D., Advisor

Date\_\_\_\_\_

\_\_\_\_\_  
Patrick M. Vivier, M.D., Ph.D.  
Director, Master of Public Health Program

Approved by the Graduate Council

Date\_\_\_\_\_

\_\_\_\_\_  
Andrew G. Campbell, Dean of the Graduate School

## ACKNOWLEDGMENTS

“A qualitative analysis of sexual consent among high school students” analyzed data collected in the context of a larger study of sexual assault prevention programming for high school adolescents supported by U01CE002531, awarded to Rhode Island Hospital (L. Orchowski: PI).

I would like to extend my deepest appreciation to my advisors Dr. Caroline Kuo and Dr. Lindsay Orchowski for their patience, guidance, and support throughout this thesis process. It has been a privilege to learn from such accomplished scholars and caring mentors.

To Katherine Bogan and Dr. Orchowski’s exemplary research team, thank you for your support and assistance throughout the Your Voice Your View qualitative research project.

Thank you to my family and friends for their endless love and encouragement.

## Table of Contents

### *Integrated Intimate Partner Violence and HIV Interventions among Adolescents in Sub-Saharan Africa: A Systematic Review*

|                                  |    |
|----------------------------------|----|
| Abstract.....                    | 1  |
| Background.....                  | 2  |
| Methods.....                     | 6  |
| Results.....                     | 7  |
| Discussion.....                  | 17 |
| Conclusion.....                  | 27 |
| References.....                  | 28 |
| Appendix: Search Strategies..... | 39 |

### *A Qualitative Analysis of Sexual Consent among High School Students*

|                 |    |
|-----------------|----|
| Abstract.....   | 50 |
| Background..... | 51 |
| Methods.....    | 55 |
| Results.....    | 58 |
| Discussion..... | 65 |
| Conclusion..... | 72 |
| References..... | 73 |

## **List of Tables and Figures**

### *Integrated Intimate Partner Violence and HIV Interventions among Adolescents in Sub-Saharan Africa: A Systematic Review*

#### Figure 1

Flowchart for Study Selection.....44

#### Table 1

Integrated IPV/HIV interventions among adolescents in Sub-Saharan Africa.....45

#### Table 2

Implications of the Review for Practice, Policy, and Research.....49

### *A Qualitative Analysis of Sexual Consent among High School Students*

#### Table 1

Demographic Characteristics of Enrolled Participants.....80

#### Table 2

Kappa Statistics for Study Themes.....81

# **Integrated Intimate Partner Violence and HIV Interventions among Adolescents in Sub-Saharan Africa: A Systematic Review**

## **Abstract**

Adolescents in Sub-Saharan Africa are at disproportionately high risk for intimate partner violence (IPV) and human immune-deficiency virus (HIV). The interconnected risks for IPV and HIV present the opportunity for interventions to concurrently seek to reduce violence and sexual risk behaviors among young people. The development of efficacious integrated IPV/HIV prevention approaches is an important component of comprehensive IPV and HIV research in Sub-Saharan Africa. Accordingly, the present systematic review evaluates interventions that concomitantly address IPV and HIV risk among adolescents in Sub-Saharan Africa. We systematically reviewed electronic databases for studies meeting the following criteria: use of randomized control trials (RCT) or quasi-RCT in Sub-Saharan African countries; inclusion of adolescents aged 13-18 years; use of a comparison group (wait-listed, designated to a comparative treatment, or treatment as usual); and incorporation of IPV and HIV outcome assessments. Results suggested that eight studies have utilized rigorous research methodologies to evaluate integrated IPV/HIV interventions, however few have targeted adolescents. The eight studies meeting inclusion criteria indicate that current research on IPV/HIV is conducted with rigorous study designs among target populations with high IPV/HIV risk, using gender-specific risk reduction activities. The studies report promising results for IPV/HIV risk reduction. Our findings indicate there is also the need for consistent application of valid and reliable outcome measurements of IPV and HIV risk. Additional research is needed to identify best practices for reducing IPV and HIV incidence among vulnerable adolescent populations in Sub-Saharan Africa.

## **Background**

Sub-Saharan Africa is disproportionately affected by the global burdens of intimate partner violence (IPV) and human immune-deficiency virus (HIV). According to the World Health Organization, IPV is defined as a subset of gender-based violence (GBV) in which acts or threats of physical, sexual, and emotional violence are perpetrated by a current or former intimate partner (World Health Organization, 2013). In the African region, 36.6% of women reported experience of physical or sexual intimate partner violence, compared to 23.2% in high income regions (World Health Organization, 2013). Sub-Saharan African countries also account for 64% of all new HIV infections (UNAIDS, 2017). Further, an estimated 25.5 million adults and children are living with HIV in Sub-Saharan Africa and ten countries alone are home to 80% of the global population of individuals living HIV (UNAIDS, 2014; UNAIDS, 2017). The high prevalence rates of IPV and HIV in Sub-Saharan Africa underscore the importance of intervening to address these dual public health concerns.

In Sub-Saharan Africa, adolescence marks a period of increased risk for both IPV and HIV (Flisher, Myer, Mèrais, Lombard, & Reddy, 2007; UNAIDS, 2017). One study among South African adolescents reported that 49.8% of the boys and 52.4% of the girls in Grades 9-12 had experienced or perpetrated physical violence in a dating relationship (Swart, Stevens, & Ricardo, 2002). Among the global population of adolescents living with HIV, nearly 85% live in Sub-Saharan Africa (UNICEF, 2017). There are several potential reasons why adolescents show elevated risk for both IPV and HIV. Sexual debut is common in adolescence, and can be associated with increased risk for negative health outcomes such as acquisition of sexually transmitted infections (STIs), unintended

pregnancies, and sexual violence (Kotchick, Shaffer, Forehand, & Miller, 2001). In fact, by the age of 16, 50% or more of South African and Tanzanian youths have become sexually active (Eaton, Flisher, & Aarø, 2003; Munguti et al., 1997). High rates of transactional sex among young women 12-19 years of age in Sub-Saharan Africa may increase risk for both IPV and HIV due to power dynamics and condom negotiation within relationships (Dunkle et al., 2004a; Kaufman & Stavrou, 2002). Additionally, high rates of engagement in age-disparate sexual relationships may also increase risk for both IPV and HIV (Evan et al., 2016). A systematic review by Eaton et al. (2003) found that high rates of force, coercion, and male-dominated sexual relationships may also exacerbate HIV risk among South African adolescents (Eaton et al., 2003).

Research emerging from Sub-Saharan Africa suggests that adolescents and particularly young women who experience IPV are at higher risk for HIV and other STIs (Jewkes, Dunkle, Nduna, & Shai, 2010; Teitelman et al., 2016). Experiences of IPV can increase risk for HIV through several pathways (Dunkle et al., 2004b; Dunkle & Decker, 2013; Garcia-Moreno & Watts, 2000; Jewkes et al., 2010; Li et al., 2014; Maman et al., 2002; van der Straten et al., 1998). First, experiences of sexual victimization among women often result in tearing of sexual tissue, which can increase susceptibility to HIV infection (Kim, Martin, & Denny, 2003). Other studies suggest that power inequality in violent dating relationships is negatively associated with women's ability to negotiate condom use and refuse unwanted sexual activity (Garcia-Moreno & Watts, 2000; Pettifor, Measham, Rees, & Padian, 2004). Research also demonstrates an association between IPV and increased engagement in sexual risk behavior among women, including engaging in sexual activity with multiple sexual partners, substance use, and transactional

sex (Dunkle & Decker, 2013). HIV positive women may also face increased risk of IPV as a result of HIV status disclosure, and some women may choose not to disclose their status to sexual partners due to fear of violence (Maman, Mbwapbo, Hogan, Kilonzo, & Sweat, 2001).

Currently, several reviews document the efficacy of IPV and HIV interventions for adults in Sub-Saharan Africa. For example, an evaluation of IPV prevention strategies in Sub-Saharan Africa and other low- and middle-income countries found that structural interventions are potentially effective in reducing male perpetration of IPV (Bourey, Williams, Bernstein, & Stephenson, 2015). Another review of IPV interventions in Sub-Saharan Africa reported promising results from community-based interventions that aim to change gender attitudes and the community's tolerance of IPV (McCloskey, Boonzaier, Steinbrenner, & Hunter, 2016). Problematically, both of these recent reviews lacked attention to the specific inclusion of adolescents in these interventions; a particularly high risk group. One systemic review assessed IPV interventions targeting adolescents, but did not focus specifically on Sub-Saharan Africa (De Koker, Mathews, Zuch, Bastien, & Mason-Jones, 2014).

Reviews of HIV preventive interventions specifically targeting adolescents in Sub-Saharan Africa suggest various intervention strategies and designs currently demonstrate mixed results (Harrison, Newell, Imrie, & Hoddinott, 2010; Michielsen, Temmerman, & Van Rossem, 2013; Paul-Ebhohimhen, Poobalan, & van Teijlingen, 2008). For example, Harrison et al. (2010) reviewed eight HIV interventions for South African adolescents and found that prevention strategies which targeted social and structural factors for HIV risk, as well as causal HIV risk pathways specific to the region,

had the biggest impact of sexual risk behavior reduction. Michielsen et al. (2013) reviewed HIV prevention among adolescents in Sub-Saharan Africa and attributed the limited effectiveness of current strategies to factors related to the intervention design, implementation, and evaluation. Paul-Ebhohimhen's et al. (2008) review suggests that school-based HIV prevention have a greater statistically significant impact on outcomes related to HIV knowledge and attitudes than outcomes related to HIV-risk behavioral change.

Taken together, whereas previous reviews of the literature document the efficacy of interventions targeting adults at risk for *either* IPV or HIV in Sub-Saharan Africa, research to date is lacking on the efficacy of interventions that concurrently address IPV and HIV. In fact, to our knowledge, the only review evaluating interventions addressing both HIV and IPV risk in Sub-Saharan Africa is specific to identifying interventions that could be led by nurses in health care settings (Anderson et al., 2013). No studies to date have reviewed the efficacy of interventions that concurrently target IPV and HIV risk among adolescents in Sub-Saharan Africa.

Adolescence offers a crucial window of opportunity for reducing IPV and HIV incidence by preventing or curtailing problematic relationship (De Koker et al., 2014) and sexual behaviors (Pedlow & Carey, 2004) to preclude continuing patterns of violence and sexual risk into adulthood. Given the prevalence of IPV and HIV among adolescents in Sub-Saharan Africa, and the potential for interventions to address these intersecting public health concerns concurrently, the present systematic review sought to evaluate the current evidence base on interventions that concurrently target the prevention of HIV and IPV for adolescents in this region.

## **Methods**

### **Search Strategy**

We used a Boolean search strategy to find studies in three electronic databases (PubMed, Embase, PsychInfo, CINAHL). The following search terms were expanded and modified, if necessary, for each electronic database: HIV, intimate partner violence, adolescent, and Sub-Saharan Africa. The search terms for each database can be found in the appended search protocol (see Appendix A).

### **Inclusion Criteria**

Studies were included in the systematic review if they (a) sampled people living in Sub-Saharan African countries, (b) utilized a randomized control trial (RCT) or quasi-RCT design, (c) targeted both IPV and HIV as primary outcomes for either prevention or risk reduction, (d) included a control or comparison group that received standard care (including treatment as usual/no intervention), a wait-list control group, or comparative treatment intervention, and (e) targeted, or included, adolescent participants 13 to 18 years of age (inclusive). Studies were excluded from the systematic review if the intervention (a) did not measure both IPV and HIV as outcomes or (b) lacked a comparison group. Because we were interested in reviewing all past and currently existing IPV/HIV interventions, we did not confine our search to a pre-defined publication period. The electronic databases were searched during October 2017 and yielded 727 unique reports. A preliminary review resulted in the exclusion of 702 articles as their titles or abstracts did not fulfill the inclusion criteria. After full-text review of the remaining 25 articles, 17 were excluded from analysis because they did not (a) provide an integrated IPV/HIV prevention or risk reduction intervention, (b) measure both IPV and

HIV, or (c) include a control or comparison group. Figure 1 presents a PRISMA diagram depicting a graphical representation of the study selection process. Specific details were extracted from the included studies: study design, sample characteristics, format and dosage of activities, assessments, results, and follow-up times. When key study information was not provided, we contacted the authors directly for clarification. Study information was then assessed using thematic analysis with the findings presented below.

## **Results**

### **Overview**

Eight studies that met inclusion criteria were included in the systematic review. These studies describe interventions targeting prevention or risk reduction for both IPV and HIV among adolescents in Sub-Saharan Africa. Table 1 provides details for these eight studies including a description of study samples and intervention elements. The eight studies were all published in the past 12 years including the IMAGE study (Pronyk et al., 2006), Stepping Stones (Jewkes et al., 2008), Kalichman et al.'s field trial (2009), SASA! (Abramsky et al., 2014), Safe Homes and Respect for Everyone (SHARE) (Wagman et al., 2015), PREPARE (Mathews et al., 2016), Vijana Vijiweni II (Kajula et al., 2016), and Stepping Stones and Creating Futures (Gibbs et al., 2017).

### **Study Design**

Seven of the eight studies used a cluster RCT design (Abramsky et al., 2014; Gibbs et al., 2017; Jewkes et al. 2008; Kajula et al. 2016; Mathews et al. 2016; Pronyk et al., 2006; Wagman et al., 2015) and one study utilized a quasi-experimental trial design (Kalichman et al., 2009). Seven studies implemented fully powered trials to examine the efficacy of interventions (Abramsky et al., 2014; Jewkes et al., 2008; Kajula et al., 2016;

Kalichman et al., 2009; Mathews et al., 2016; Pronyk et al., 2006; Wagman et al., 2015) and one anticipated a fully powered trial pending completion of follow-up assessments.

### **Geography**

Five studies took place in South Africa (Gibbs et al. 2017; Jewkes et al. 2008, Kalichman et al. 2009; Mathews et al. 2016; Pronyk et al. 2006), two studies were implemented in Uganda (Abramsky et al. 2014; Wagman et al. 2015), and one was conducted in Tanzania (Kajula et al. 2016). No studies from western or central Africa were identified.

### **Target Population**

The target populations varied considerably. Importantly, only two of the eight studies included in our review specifically targeted youths or young adults (Jewkes et al., 2008; Mathews et al., 2016). The age range criteria in the youth-tailored interventions were defined as 16-23 years (Jewkes et al., 2008) and Grade 8 adolescents (Mathews et al., 2016). Six of the eight studies included, but did not target, adolescents, with inclusion criteria for age ranges defined as 15 years and older (Kajula et al., 2016), 15-49 years (Wagman et al., 2015), 18-30 years (Gibbs et al., 2017), 18-49 years (Abramsky et al., 2014), and 18 years and older (S. Kalichman, personal communication, March 22, 2018). One study did not provide age specifications for direct recipients of the intervention, but gathered data on intervention impact from two cohorts of participant household members 14-35 years old (Pronyk et al., 2006).

Among the six studies that did not specifically target adolescents or students, participants were recruited based on their identification as general community members (Abramsky et al., 2014; Kalichman et al., 2009), residence in informal settlements (Gibbs

et al., 2017), membership in “camps” or social networks (Kajula et al., 2016), enrollment in existing cohort studies (Wagman et al., 2015), or loan eligibility (Pronyk et al., 2006). Among the eight studies, two exclusively recruited male participants (Kajula et al., 2016; Kalichman et al., 2009) and one delivered the intervention exclusively to female participants, but gathered additional outcome data from male and female community members (Pronyk et al., 2006).

### **Control Condition**

Half of the studies’ used control groups that were wait-listed to receive the intervention after the trial was complete (Abramsky et al. 2014, Gibbs et al. 2017; Kajula et al. 2016; Pronyk et al. 2006), two control groups received routine health services (Wagman et al. 2015, Mathews et al. 2016), and two control groups received one 3-hour session on HIV risk, without mention of IPV (Jewkes et al. 2008; Kalichman et al. 2009).

### **Intervention Dose and Format**

The eight studies implemented the intervention activities in group settings. The interventions typically prescribed lengths for each session, ranging from 1-hour (Mathews et al., 2016; Pronyk et al., 2006) to 3-hours (Gibbs et al., 2017; Jewkes et al., 2008; Kalichman et al., 2009). Three studies did not include or prescribe specific lengths for intervention activities (Abramsky et al., 2014; Kajula et al., 2016; Wagman et al., 2015). The dosages of the interventions sessions varied considerably. Kalichman et al. (2009) implemented five 3-hour sessions over the course of five consecutive days. Other studies implemented intervention activities on a weekly or biweekly basis over the course of six to eight weeks (Jewkes et al., 2008; Gibbs et al., 2017), 21 weeks (Mathews et al., 2016), or six to nine months (Pronyk et al., 2006; Kajula et al., 2016). Abramsky et al.

(2014) and Wagman et al. (2015) implemented community mobilization activities without pre-specified dosage over the course of roughly four years. The intervention settings varied between and within studies. When provided, intervention locations included schools (Mathews et al., 2016), HIV clinics (Wagman et al., 2015), local media channels (Abramsky et al., 2014), microfinance loan centers (Pronyk et al., 2006), and community settings (Abramsky et al. 2014; Kalichman et al., 2009; Wagman et al., 2015).

### **Intervention Approaches**

Five of the eight studies aimed to reduce perpetration and experience of IPV (Abramsky et al., 2014; Gibbs et al., 2017; Jewkes et al., 2008; Mathews et al., 2016; Wagman et al., 2015). Two of the studies exclusively targeted IPV perpetration (Kajula et al., 2016; Kalichman et al., 2009) and one study focused specifically on reducing experience of IPV (Pronyk et al., 2006). HIV risk was predominantly operationalized as decreased condom use and concurrent sexual partners (Abramsky et al., 2014; Gibbs et al., 2017; Jewkes et al., 2008; Kajula et al., 2016; Kalichman et al., Mathews et al., 2016; Pronyk et al., 2006; Wagman et al., 2015).

Four studies implemented structural interventions to target the social and economic environments influencing HIV and IPV risk. Intervention activities included microfinance programs and community mobilization events to address cultural norms towards violence (Abramsky et al. 2014; Kajula et al. 2016; Pronyk et al. 2006; Wagman et al. 2015). The other studies can be described as multi-component interventions in which group-based activities target modifiable individual behaviors, structural level causes of HIV and IPV risk, and attitudes towards gender equality. The multi-component

intervention activities focused on modification of individual risk behaviors, addressed beliefs relating to gender equality, and built sexual health skills (Gibbs et al. 2017; Jewkes et al. 2008; Kalichman et al. 2009; Mathews et al. 2016). The eight studies are grouped by intervention approach and described below:

**Structural interventions.** SASA! is a community-level mobilization intervention targeting intimate partner violence and sexual-risk behavior reduction among individuals 18-49 years of age living in Kampala, Uganda (Abramsky et al. 2014). Participants in communities receiving the intervention were exposed to various activities led by trained Community Activists (CAs), including group discussions, public events, trainings, and films. The intervention activities aimed to reduce social acceptability of IPV among community members to reduce perpetration and victimization, as well as sexual risk behavior reduction addressing the increased risk of HIV associated with concurrent sexual partners among male participants. The intervention did not have a prescribed dosage of intervention exposure, but supported the CAs progression through the program's phases and strategies. More than 11,000 activities were implemented during the duration of the study. The control group was wait-listed for the intervention. The average age of men and women in the intervention group and control groups fell within the range of 27-29 years. The study did not report the proportion of participants 18 years of age. Comparison of baseline and follow-up data demonstrated that the intervention was associated with reduced social acceptance of IPV among women (aRR 0.54, 95% CI 0.38-0.79), and increased acceptance among women that women can refuse sex (aRR 1.28, 95% CI 1.07-1.52). The intervention was also associated with decreased sexual risk

behaviors, measured by self-reports of concurrent sexual partners among non-polygamous men (aRR 0.57, 95% CI 0.36-0.91).

Vijana Vijiweni II is a combined microfinance and health leadership training on STI incidence and IPV perpetration among male participants ( $N = 1,258$ ) belonging to 60 “camps” or social networks in Dar es Salaam, Tanzania (Kajula et al., 2016). Participants are at least 15 years of age and have belonged to a camp for at least 3 months prior to the intervention launch. The study did not report the proportion of participants 15-18 years old or the overall average age of participants. Men in the intervention group participate in a two-year microfinance program which promoted business skill training through individual loan application, weekly loan group meetings, and ensuing applications for larger loans upon successful group repayment. The peer leadership component of the intervention involved training nominated camp leaders to lead five weekly discussions among camp members on the topics of STI risk reduction, condom use, multiple sexual partners, effective communication skills, and reducing perpetration of IPV. Men in the control group are wait-listed for the intervention. Results from Vijana Vijiweni II are not yet available. The study will measure biologically verified STI incidence, attitudes and gender norms, as well as self-reported IPV perpetration to assess the efficacy of the intervention. Follow-up assessments will measure behavioral outcomes at 12-months and behavioral and biological outcomes 30-months post-intervention.

IMAGE is a combined microfinance and gender training intervention targeting women in the Limpopo province of South Africa (Pronyk et al., 2006). The intervention and control villages each contained three cohorts to study the direct and indirect impact of the intervention: eligible female loan recipients (average age 41 years), 14-35 years-

old household members of the loan recipients, and randomly sampled community members. The total study population was 6,576. The study did not report the proportion of participants 14-18 years of age, but reported the youngest participants' age in cohort 2 (16.9 years) and cohort 3 (17.1 years). The women in cohort one directly received loans through a group lending model. Loan groups held a total of ten 1-hour meetings every other week for support, discussion of credit, business assessments, and repayment. Within the 1-hour loan meetings, the intervention delivered structured trainings to explore topics of gender, IPV, HIV, and relationship skill building. Participants in the control villages were wait-listed to receive the intervention. At follow up, the study assessed past-year experience of IPV in cohort one, unprotected sex with non-spousal partners among cohort two participants, and HIV incidence in cohort three using lab-based diagnoses. IMAGE was associated with decreased experience of IPV in cohort 1 (aRR 0.45, 95% CI 0.23-0.91). The intervention was not associated with increased protection during sex among cohort two participants or HIV incidence in cohort three.

SHARE addressed IPV and HIV incidence in Rakai, Uganda (Wagman et al., 2015) using community mobilization strategies and behavioral IPV risk reduction intervention among women seeking HIV services. Study participants were 15-49 year-old individuals ( $N = 11,448$ ) recruited from the existing Rakai Community Cohort Study. Among the study population, 10% ( $N=1,167$ ) of participants were 15-19 years of age. Individuals in the intervention group were exposed to a range of intervention activities, including marches, distribution of learning activities, posters, newsletters, and men's and boys' IPV and HIV risk prevention sessions over the course of the four-year study. The study did not provide information on the dosage or length of intervention activities. The

aim of the intervention activities was to change social attitudes regarding IPV and reduce perpetration and experience of IPV, while concurrently addressing various sexual risk behaviors related to multiple sexual partners, non-marital sexual partners, condom use, and alcohol use before sexual activity. Women in the intervention group seeking HIV services were also given a brief intervention to reduce the risk of IPV related to HIV disclosure. The control group received standard HIV services offered through the ongoing cohort study, which included HIV prevention and treatment, HIV testing, counseling, and care referral. Analysis of self-reported experience and perpetration of IPV found that the intervention was associated with decreased incidence of both physical IPV (adjusted prevalence risk ratio 0.79, 95% CI 0.67-0.92) and sexual IPV (aPRR 0.80, 95% CI 0.67-0.97) in the previous year. The intervention was neither significantly associated with decreased incidence of emotional IPV nor self-reported IPV perpetration among male participants. At the 35-month follow up, lab-based diagnoses demonstrated a negative association between exposure to SHARE and HIV incidence (adjusted incidence rate ratio 0.67, 95% CI 0.46-0.97).

**Multi-component interventions.** PREPARE is a school-based intervention designed to reduce experience and perpetration of IPV, increase condom use, and delay sexual debut among Grade 8 adolescents ( $N = 3,451$ ) in the Western Cape Province, South Africa (Mathews et al., 2016). Over the course of 21 weeks, participants (average age 13) in the intervention group attended weekly 1-1.5 hour educational sessions facilitated group discussion of IPV, relationships, sexual decision making, gender and power inequity, communication skills, and sustainable community change. The school health service included free weekly access to a PREPARE nurse for “health checks,”

screenings, and referrals related to participants' sexual health. The school safety program educated school community members about IPV prevalence, laws related to sexual violence, and school safety planning. Participants in the control group attended school and did not receive any additional programming. Results from the 12-month follow-up surveys found that PREPARE was not significantly associated with delayed sexual debut, condom use, or number of sexual partners. The intervention was associated with decreased report of experience of IPV (OR 0.77, 95% CI 0.61-0.99).

The field trial conducted by Kalichman et al. (2009) recruited male participants 18 years and older ( $N = 475$ ) from two townships in Cape Town, South Africa to compare the effects of a trial IPV/HIV intervention with an HIV/alcohol intervention on IPV perpetration and risk of STI. Over the course of one week, men in the intervention group (average age 30.2 years, standard deviation 9.5 years) participated in five 3-hour integrated GBV and HIV risk-reduction sessions. The study did not provide details on the proportion of participants 18 years of age. The intervention activities included exploration of GBV/ HIV risk- identification and reduction through condom use skill building, behavioral role play with group feedback and discussion with South Africa media clips for context, and advocacy skill building. The control group received one three-hour session on HIV/alcohol risk reduction that did not include GBV or IPV intervention material. The study found that the field trial was not significantly associated with increased condom use, decreased number of sexual partners, or decreased occurrence of unprotected sex. At the six-month follow-up, the field trial was associated with decreased perpetration of past-month physical IPV (OR 0.3, 95% CI 0.2-0.4). Participants who at baseline reported they had lost their temper with a woman, men in the

intervention group were less likely to report losing their temper compared to men in the control group at six-month follow-up (OR 0.5, 95% CI 0.3-0.8).

Stepping Stones is a participatory intervention designed to reduce HIV, herpes simplex type 2 (HSV-2) among young men and women 15-26 years old ( $N = 2,776$ ) living in the Eastern Cape province of South Africa (Jewkes et al., 2008). Over the course of six to eight weeks, participants in the intervention group attended 13 three-hour long single-sex group meetings, three mixed-sex peer meetings, and one community meeting. Intervention activities were both group and individual based, including a variety of participatory role play, drama, and critical reflection exercises to facilitate exploration of gender equity and healthy relationships. The study designed the activities to reduce experience and perpetration of IPV, as well as sexual behaviors that increase risk of STI. The study delivered a three-hour session on safe sex, condoms, and HIV to the control group. Stepping Stones, while not associated with reduced HIV incidence, was able to demonstrate 33% reduction in Type 2 herpes simplex virus (aIRR 0.67, 95% CI 0.46-0.97). The study was also associated with a lower proportion of male participants reporting IPV perpetration at two-year follow-up in the intervention group compared to the control (aOR 0.62, 95% CI 0.38-1.01).

Stepping Stones and Creating Futures combines the gender transformative approach of Stepping Stones with an economic empowerment intervention, Creating Futures, to assess its efficacy in reducing HIV and IPV (Gibbs et al., 2017). The study population was comprised of 18-30 year-old men and women living in informal settlements in the eThekweni Municipality, South Africa ( $N = 1,357$ ). The average age of participants was 23 years; the study did not include the proportion of participants 18

years of age. The intervention's adapted version of Stepping Stones included ten three-hour single-sex group sessions over the course of 6-8 weeks. Drama, role play, and critical reflection exercises were used to facilitate discussion of behavioral influences, relationships, safe sex practices, HIV, GBV, and communication skills. Activities aimed to reduce experience and perpetration of IPV, as well as HIV risk behaviors including concurrent sexual partners and transactional sex. The study notes an important departure from previous editions of Stepping Stones, including the decision to emphasize sexual health and GBV factors specific to a younger study population. Following each Stepping Stones session was a 3-hour Creating Futures session, which aimed to help participants evaluate economic strategies that utilized human, financial, natural, physical, and forms of capital that may be available to them. The control group is wait-listed for the intervention. Study results are pending 24-month follow-up data collection of self-reported experience of physical IPV, sexual IPV, severe IPV, controlling behavior, and past-month earnings.

## **Discussion**

For this systematic review, we examined the geographic distribution, study design, and target population of eight interventions designed to reduce IPV and HIV risk in Sub-Saharan African settings. Even though the field of integrated IPV/HIV prevention in Sub-Saharan Africa is in its nascent stages, it is encouraging that eight interventions have been conducted with rigorous study designs. Overall, the results of this review are encouraging with respect to the efficacy of interventions to concomitantly prevent IPV and HIV. For public health practitioners in the field of adolescent IPV and HIV prevention, our findings suggest that integrated IPV/HIV interventions may be an

effective sexual risk and violence prevention strategy among adolescents in Sub-Saharan Africa. However, the low number of interventions specifically targeting adolescents highlights a significant opportunity for future research to develop age-tailored interventions for young people facing the dual risk of IPV and HIV in Sub-Saharan Africa. We have identified some of key strengths and gaps in the literature below. A summary of core implications of the current review for practice, policy, and research is provided in Table 2.

### **Geographic distribution of the studies**

Findings indicate that integrated IPV/HIV interventions in Sub-Saharan Africa have been rigorously evaluated in regions of Sub-Saharan Africa with the greatest burden of IPV and HIV. The eight studies were conducted in eastern and southern African countries, in which 19.4 million adults and children are living with HIV, as compared to 6.1 million in western and central African countries (UNAIDS, 2017). Southern and eastern Sub-Saharan Africa also report high IPV prevalence, with lifetime prevalence of physical or sexual abuse as high as 90% in this region (UN, 2012). In South Africa, where five of the eight interventions took place, the lifetime prevalence of physical and sexual abuse is 49% (UN, 2012).

Our findings also point to a regional gap in the literature, as no integrated IPV/HIV trials emerged from western or central African countries. This finding supports the need for increased HIV/AIDS prevention and intervention efforts in western and central African countries, where HIV prevalence rates, although lower than central and southern African countries, are not met with adequate treatment provision and transmission prevention (Djomand et al., 2014; Médecins Sans Frontières, 2016).

Previous studies in West Africa have found high prevalence rates and social acceptance of IPV, including experience of dating violence among university aged women and IPV among women living with HIV/AIDS (Olorunsaiye et al., 2017; Olowookere et al., 2015; Umana, Fawole, & Adeoye, 2014; Diallo & Voia, 2016). Considering the high IPV and HIV prevalence in Sub-Saharan Africa, it is surprising that not more than eight studies fulfilling inclusion criteria emerged in our search. We recommend that future research assess the efficacy of integrated IPV/HIV interventions in all regions of Sub-Saharan Africa, as the documented burden of both IPV and HIV demonstrate the pressing need for evidence based interventions.

### **Study Design Elements**

The results of our review demonstrate that integrated IPV/HIV interventions in Sub-Saharan Africa have been implemented with rigorous research methods. The RCTs large sample sizes are a key strength among the studies, indicating that the majority of current research is producing meaningful results through fully powered trials. The researchers reported unbiased allocation of clusters of participants to receive the intervention or comparative treatment, which can help minimize the potential for contamination between the two groups (Torgerson, 2001). The included studies' control groups represented a range of comparison conditions, which lent varying strength to the studies' results. Importantly, three studies compared integrated IPV/HIV interventions with HIV-focused services or risk reduction trainings, which demonstrates growing interest in the potential for combined IPV/HIV prevention to reduce a number of related sexual and interpersonal risk behaviors.

## **Target Population**

Our results are encouraging with respect to the number of studies that included, albeit did not always specifically target adolescents. For example, although SHARE and Vijana Vijiweni II included participants as young as 15 years old, the analytic samples of these studies included older adult participants. Stepping Stones and PREPARE targeted early and late adolescence, respectively (Jewkes et al., 2008; Kajula et al., 2016; Mathews et al., 2016; Wagman et al., 2008); only PREPARE's study sample was entirely within 13-18 years old. The studies' inclusion criteria for participant ages varied considerably, making it difficult to compare the effect of the interventions across same age adolescents.

Our finding that participants in IPV/HIV interventions are generally older coincides with study populations in which there is evidence of current romantic relationships, cohabitation, IPV experience, IPV perpetration, concurrent sexual partners, and inconsistent condom use at baseline. Even among the youngest participants included in PREPARE's study, at baseline 22% of the Grade 8 participants reported sexual debut, 45% had experienced IPV, and more than a quarter had perpetrated IPV (Mathews et al., 2016). The baseline findings of the eight studies indicate the majority of current research on integrated IPV/HIV examines secondary prevention intervention strategies among populations with pre-existing risk or incidence of IPV and HIV.

Addressing gender norms and identifying sexual risk behaviors during adolescence is crucial for primary prevention of both IPV and HIV (McCloskey et al., 2016; Mwale & Muula, 2017). The wide range of included ages among many of the studies limits the ability of intervention activities to include appropriate developmental

tailoring, particularly among adolescent participants who may not have relationship or sexual experience. This indicates an important gap in the current research. We recommend developmentally appropriate interventions that tailor all aspects of content and activities to the target population based on specific factors, including risk behavior, gender, and, importantly, age (Pedlow & Carey, 2004). Adolescence is marked by cognitive maturation, increased risk-taking, and development of decision making skills, all of which may benefit from extended training with age-specific skill building opportunities to increase the impact of interventions (Pedlow & Carey, 2004). Additionally, within the period of adolescence remain distinct phases of sexual development which require age-tailored interventions (Pedlow & Carey, 2004). Sexual risk interventions targeting youths in pre- or early adolescence may focus on primary prevention and establish safe behaviors to promote safe relationships and delay sexual debut, as seen in *PREPARE* (Mathews et al., 2016). Alternatively, interventions targeting older adolescents who may already be sexually active need to focus on secondary prevention through skill building and reducing sexual risk behaviors, including inconsistent condom use and multiple sex partners (Mwale & Muula, 2017). Given the current body of literature on developmental tailoring, we had anticipated more studies targeting early adolescence in our results. The present review indicates that further research needs to examine the age-specific effects of IPV/HIV interventions to determine the most effective prevention strategies for primary prevention during early adolescence and secondary prevention among older adolescents.

Another significant finding of our review is the active engagement of male participants in seven of the eight studies. Seven of the eight interventions aimed to reduce

IPV perpetration among the study population. This is highly promising and demonstrates that the current research on IPV/HIV is addressing the important role men must play in IPV prevention (Carlson et al., 2014). Two interventions were delivered exclusively to male participants (Kajula et al., 2016; Kalichman et al., 2009), while three other studies divided participants into single-sex groups to receive the intervention (Gibbs et al., 2017; Jewkes et al., 2008; Pronyk et al., 2006). We are encouraged by the specific focus on young men that has emerged in the field of integrated HIV and IPV prevention since gender targeting may be an effective means of promoting community-wide gender equality and normalizing safe sexual behaviors (Peacock & Levack, 2004). Our review found that the interventions targeting HIV and IPV risk among male participants implemented skill building activities to promote sexual communication and condom use, as well as group discussions and role play to explore the topics of HIV and IPV risk, attitudes towards women, and healthy relationships (Gibbs et al., 2017; Jewkes et al., 2008; Kajula et al., 2016; Kalichman et al., 2009). These strategies are aligned with previous literature calling for HIV and gender-targeted interventions to increase “space for boy’s voices” to direct the discourse on masculinity, identity, and renegotiation of power within relationships (Thorpe, 2002).

### **Intervention Strategies**

Our review found that both structural and behavioral approaches have been assessed for efficacy in concomitantly reducing IPV and HIV risk in Sub-Saharan Africa. The structural interventions primarily addressed the economic and social environments that contribute to gender inequity and increased risk of HIV. The multi-component interventions employed various skill building- activities to enhance sexual

communication, condom use, and personal beliefs and gender equality. Each of the eight interventions underscored gender inequity as a social factor that contributes to IPV and HIV risk. These are important strategies to address the distinct gender disparities in HIV risk; the average odds of a Sub-Saharan African woman being infected with HIV is 60% higher than her male counterpart (Magadi, 2011).

Due to the significant variety of intervention activities, dosages, and outcome measures, it is difficult to assess whether structural or behavioral approaches were more effective in reducing IPV/HIV risk. Furthermore, because of the wide age ranges in the study samples, it is also difficult to know with certainty which interventions were most effective among adolescents, and why. However, research has found that adolescent sexual and reproductive health is influenced by a combination of social and structural factors, including safe homes, parental communication, sustained livelihoods, and poverty (Bastien, Kajula, & Mahwezi, 2011; Madise, Zulu, & Ciera, 2007; Mosavel, Ahmed, & Simon, 2011). Addressing structural and ecological influences of adolescent sexual health may lead to more enduring risk reduction than behavioral interventions (DiClemente et al., 2007). While the structural interventions in this review did not specifically target adolescents, previous research shows evidence of the positive impact of structural interventions that address the economic, political, and social environments of both IPV and HIV risk (Berkman et al., 2005; Bourey et al., 2015; Handa et al., 2014; Harrison et al., 2010). The limited number of school-based integrated IPV/HIV interventions in our review highlights another priority area for future research. Schools offer the opportunity to reach large numbers of young people, increase intervention exposure by building program elements into the existing curriculum, and address social

norms related to gender equity and sexual risk behaviors in the school community (Harrison et al., 2010; Mathews et al., 2016; WHO, 2010).

### **Efficacy**

Our results show the potential for integrated IPV/HIV prevention to reduce sexual risk behavior and improve gender equality at the individual and community level. Of the six studies with available results, two interventions were associated with decreased IPV, as indicated by reduced self-reports of experience of IPV (Mathews et al., 2016; Pronyk et al., 2006). One intervention demonstrated reductions in IPV perpetration and STI incidence, but not HIV (Jewkes et al., 2008). Three interventions were associated with both statistically significant reductions in IPV and HIV risk (Abramsky et al., 2014; Kalichman et al., 2009; Wagman et al., 2015). However, the outcomes used to measure IPV and HIV reductions among these three interventions varied significantly, from social attitudes towards IPV (Abramsky et al., 2014) to self-reported incidence (Kalichman et al., 2009; Wagman et al., 2015). Similarly, the findings of Abramsky et al. (2014), Kalichman et al. (2009), and Wagman et al. (2015) represent intervention impacts on varied HIV outcomes, including both biological outcomes (Wagman et al. 2015) and self-reported sexual risk behavior reduction (Abramsky et al., 2014; Kalichman et al., 2009).

The differences in IPV and HIV effect measurement across the eight studies highlight the various ways research conceptualizes IPV and HIV, including both structural-level risks and reported incidence. All included studies relied on self-reports of IPV experience, perpetration, or measures of gender equitable attitudes which may introduce biases depending on the characteristics of the participant and the study's definition of IPV (Schroder et al., 2003; Waltermaurer, 2005). Furthermore, studies

which measure experience or perpetration of IPV exclusively cannot report reductions of all IPV incidence. In regards to HIV, half of the studies use biological outcomes to measure the interventions' effect on HIV risk reduction, while four studies used self-reported sexual risk behaviors, which is subject to reporting bias. Increasing use of biological outcomes in HIV prevention is challenging, but our results indicate that we need more studies that include rigorous, comparable measurement. The field of integrated IPV/HIV prevention will benefit from consistent definitions and conceptualizations of IPV and HIV risk.

It is encouraging that three studies resulted in statistically significant reductions in both IPV and HIV risk. However, the mixed efficacy are surprising results and suggests that more work in intervention development and refinement is warranted. One area for increased attention is the dose of intervention and follow-up times. The included studies implemented the intervention over a significant range of time, from five consecutive days of 3-hour sessions (Kalichman et al., 2009), to more than 11,000 community mobilization activities over the course of four years (Abramsky et al., 2014). The majority of the interventions implemented weekly or bi-weekly sessions. Importantly, the three interventions with demonstrated reductions in both HIV and IPV implemented intervention activities in either concentrated doses; Kalichman et al. (2009) exposed participants to 15 hours of intervention material in five days, while the two community mobilization interventions delivered continuous activities over the course of roughly four years (Abramsky et al., 2014; Wagman et al., 2015). Further research is needed to examine the impact of different intervention dosages. The follow-up period also varied considerably, with assessments ranging from 1-month to 4-years post-intervention

launch. Only one intervention (Pronyk et al., 2006) reported short duration of follow-up as a limitation to the study's findings. Although longer durations of study and extended follow-up assessments may increase the risk of follow-up attrition or contamination between study sites, we recommend that future research employ space follow-up assessments so as to measure the long-term impact of IPV/HIV interventions.

Overall, the findings are highly encouraging for integrated IPV/HIV interventions and have important implications for public health practice as well as public health policy. The demonstrated reductions in both IPV and HIV suggest that public health policy makers should be aware of the dual risk pathways that exist between both public health problems. Policies aiming to reduce IPV may also benefit HIV reduction efforts. Further research is needed to examine the existence and effect of current policies that address both risks concurrently. However, the interventions' strategies and promising results demonstrate that policies promoting gender and economic equity may help reduce risk factors that influence sexual risk taking and violence against women.

### **Limitations**

The present findings should be interpreted in light of several limitations. The selected electronic databases and chosen search terms may not have provided access to all relevant studies. Due to the wide range of intervention designs, delivery methods, and outcome measurements, and limited number of existing interventions, it is difficult to compare efficacy across interventions using a meta-analytical approach. Half of the studies used self-reported sexual risk behaviors to measure HIV outcomes and all eight studies used self-reported measures of experience of IPV, which allows for social

desirability and recall bias to affect study results (Schroder et al. 2003). More rigorous biological measurement of HIV and IPV is needed.

### **Conclusion**

Based on the findings of this review, interventions that integrate HIV and IPV prevention among adolescents are limited in number and are found in eastern and south African countries. Our analysis demonstrates that the majority of IPV and HIV interventions include both adult and older adolescent study populations and measure various IPV and HIV related outcomes. All included studies used group-based activities to promote gender equality and safer sexual norms. Prevention research should target specific adolescent sexual risk behaviors in a wider variety of settings throughout Sub-Saharan Africa to demonstrate which approaches are effective in reducing IPV and HIV incidence among vulnerable adolescent populations.

## References

- Abramsky, T., Devries, K., Kiss, L., Nakuti, J., Kyegombe, N., Starmann, E., ... Watts, C. (2014). Findings from the SASA! Study: a cluster randomized controlled trial to assess the impact of a community mobilization intervention to prevent violence against women and reduce HIV risk in Kampala, Uganda. *BMC Medicine*, 12. doi:10.1186/s12916-014-0122-5
- Anderson, J. C., Campbell, J. C., & Farley, J. E. (2013). Interventions to address HIV and intimate partner violence in Sub-Saharan Africa: a review of the literature. *The Journal of the Association of Nurses in AIDS Care: JANAC*, 24, 383–90. doi: 10.1016/j.jana.2013.03.003
- Bastien, S., Kajula, L. J., & Muhwezi, W. W. (2011). A review of studies of parent-child communication about sexuality and HIV/AIDS in sub-Saharan Africa. *Reproductive Health*, 8. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=edswsc&AN=000208608000025&site=eds-live&scope=site>
- Berkman, A., Garcia, J., Muñoz-Laboy, M., Paiva, V., & Parker, R. (2005). A Critical Analysis of the Brazilian Response to HIV/AIDS: Lessons Learned for Controlling and Mitigating the Epidemic in Developing Countries. *American Journal of Public Health*, 95, 1162–1172. doi:2105/AJPH.2004.054593
- Bourey, C., Williams, W., Bernstein, E. E., & Stephenson, R. (2015). Systematic review of structural interventions for intimate partner violence in low- and middle-income countries: organizing evidence for prevention. *BMC Public Health*, 15, 1165. doi:10.1186/s12889-015-2460-4

- Carlson, J., Casey, E., Edleson, J. L., Tolman, R. M., Neugut, T. B., & Kimball, E. (2015). Strategies to Engage Men and Boys in Violence Prevention: A Global Organizational Perspective. *Violence Against Women*, 21, 1406–1425. doi.org/10.1177/1077801215594888.
- De Koker, P., Mathews, C., Zuch, M., Bastien, S., & Mason-Jones, A. J. (2014). A Systematic Review of Interventions for Preventing Adolescent Intimate Partner Violence. *Journal of Adolescent Health*, 54, 3–13. doi:doi.org/10.1016/j.jadohealth.2013.08.008
- DiClemente, R. J., Salazar, L. F., & Crosby, R. A. (2007). A review of STD/HIV preventive interventions for adolescents: sustaining effects using an ecological approach. *Journal of Pediatric Psychology*, 32, 888–906. https://doi.org/10.1093/jpepsy/jsm056
- Djomand, G., Quaye, S., & Sullivan, P. S. (2014). HIV epidemic among key populations in west Africa. *Current Opinion in HIV and AIDS*, 9, 506–513. doi:10.1097/COH.0000000000000090
- Dunkle, K., & Decker, M. (2013). Gender-based violence and HIV: reviewing the evidence for links and causal pathways in the general population and high-risk groups. *American Journal of Reproductive Immunology*, 69, 20–26. doi:10.1111/aji.12039
- Dunkle, K., Jewkes, R., Brown, H., Gray, G. E., McIntyre, J. A., & Harlow, S. D. (2004a). Transactional sex among women in Soweto, South Africa: Prevalence, risk factors and association with HIV infection. *Social Science and Medicine*, 59, 1581–1592. doi:10.1016/j.socscimed.2004.02.003

- Dunkle, K., Jewkes, R., Brown, H., Gray, G., McIntyre, J., & Harlow, S. (2004b). Gender-based violence, relationship power, and risk of HIV infection in women attending antenatal clinics in South Africa. *Lancet*, 363, 1415–1421. doi:10.1016/S0140-6736(04)16098-4
- Eaton, L., Flisher, A., & Aarø, L. (2003). Unsafe sexual behavior in South African youth. *Social Science & Medicine*, 56, 149–165. doi:10.1016/S0277-9536(02)00017-5
- Evan, M., Risher, K., Zungu, N., Shisana, O., Moyo, S., Celentano, D. D., ... Rehle, T. M. (2016). Age-disparate sex and HIV risk for young women from 2002 to 2012 in South Africa. *Journal of the International AIDS Society*, 19, 21310. doi:10.7448/IAS.19.1.21310
- Flisher, A., Myer, L., Mèrais, A., Lombard, C., & Reddy, P. (2007). Prevalence and correlates of partner violence among South African adolescents. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 48, 619–627. doi.org/10.1111/j.1469-7610.2007.01711.x
- García-Moreno, C., & Watts, C. (2000). Violence against women: Its importance for HIV/AIDS. *AIDS*, 14, S253–S265. <http://doi.org/10.1097/00002030-200005050-00024>
- Gibbs, A., Washington, L., Willan, S., Ntini, N., Khumalo, T., Mbatha, N., ... Jewkes, R. (2017). The Stepping Stones and Creating Futures intervention to prevent intimate partner violence and HIV-risk behaviours in Durban, South Africa: study protocol for a cluster randomized control trial, and baseline characteristics. *BMC Public Health*, 17, 336. doi:10.1186/s12889-017-4223-x

- Handa, S., Halpern, C. T., Pettifor, A., & Thirumurthy, H. (2014). The Government of Kenya's Cash Transfer Program Reduces the Risk of Sexual Debut among Young People Age 15-25. *PLOS ONE*, 9. doi:10.1371/journal.pone.0085473
- Harrison, A., Newell, M.-L., Imrie, J., & Hoddinott, G. (2010). HIV prevention for South African youth: which interventions work? A systematic review of current evidence. *BMC Public Health*, 10. doi:10.1186/1471-2458-10-102
- Jewkes, R., Dunkle, K., Nduna, M., & Shai, N. (2010). Intimate partner violence, relationship power inequity, and incidence of HIV infection in young women in South Africa: a cohort study. *Lancet*, 376, 41–48. doi:10.1016/S0140-6736(10)60548-X
- Jewkes, R., Nduna, M., Levin, J., Jama, N., Dunkle, K., Puren, A., ... Duvvury, N. (2008). Impact of Stepping Stones on Incidence of HIV and HSV-2 and Sexual Behaviour in Rural South Africa : Cluster Randomised Controlled Trial. *BMJ: British Medical Journal*, 337, 391–395. doi:10.1136/bmj.a506
- Joint United Nations Programme on HIV/AIDS (UNAIDS). (2017). *UNAIDS Data 2017*. Retrieved from [http://www.unaids.org/sites/default/files/media\\_asset/20170720\\_Data\\_book\\_2017\\_en.pdf](http://www.unaids.org/sites/default/files/media_asset/20170720_Data_book_2017_en.pdf)
- Joint United Nations Programme on HIV/AIDS (UNAIDS). (2014). *The Gap Report*. Retrieved from [http://www.unaids.org/sites/default/files/media\\_asset/UNAIDS\\_Gap\\_report\\_en.pdf](http://www.unaids.org/sites/default/files/media_asset/UNAIDS_Gap_report_en.pdf)

- Kajula, L., Balvanz, P., Kilonzo, M. N., Mwikoko, G., Yamanis, T., Mulawa, M., ...  
Maman, S. (2016). Vijana Vijiweni II: a cluster-randomized trial to evaluate the efficacy of a microfinance and peer health leadership intervention for HIV and intimate partner violence prevention among social networks of young men in Dar es Salaam. *BMC Public Health*, 16. doi:10.1186/s12889-016-2774-x
- Kalichman, S. C., Simbayi, L. C., Cloete, A., Clayford, M., Arnolds, W., Mxoli, M., ...  
Kalichman, M. O. (2009). Integrated gender-based violence and HIV risk reduction intervention for South African men: Results of a quasi-experimental field trial. *Prevention Science*, 10, 260–269. doi:10.1007/s11121-009-0129-x
- Kim, J., Martin, L., & Denny, L. (2003). Rape and HIV: post-exposure prophylaxis: addressing the dual epidemics in South Africa. *Reproductive Health Matters*, 11, 101–112. doi:10.1016/S0968-8080(03)00285-7
- Kotchick, B., Shaffer, A., Forehand, R., & Miller, K. (2001). Adolescent sexual risk behavior: a multi-system perspective. *Clinical Psychology Review*, 21, 493–519. doi:10.1016/S0272-7358(99)00070-7
- Li, Y., Marshall, C., Rees, H., Nunez, A., Ezeanolue, E., & Ehiri, J. (2014). Intimate partner violence and HIV infection among women: a systematic review and meta-analysis. *Journal of the International AIDS Society*, 17, 18845. doi:10.7448/IAS.17.1.18845
- Madise, N., Zulu, E., & Ciera, J. (2007). Is poverty a driver for risky sexual behaviour? Evidence from national surveys of adolescents in four African countries. *African Journal of Reproductive Health / La Revue Africaine de La Santé Reproductive*, 11, 83–98. doi:10.2307/25549733

- Magadi, M. A. (2011). Understanding the gender disparity in HIV infection across countries in sub-Saharan Africa: Evidence from the Demographic and Health Surveys. *Sociology of Health and Illness*, 33, 522–539. doi:10.1111/j.1467-9566.2010.01304.x
- Maman, S., Mbwapbo, J., Hogan, N., Kilonzo, G., & Sweat, M. (2001). Women's barriers to HIV-1 testing and disclosure: challenges for HIV-1 voluntary counselling and testing. *AIDS Care*, 13, 595–603. doi:10.1080/09540120120063223
- Maman, S., Mbwapbo, J., Hogan, N., Kilonzo, G., Campbell, J., Weiss, E., & Sweat, M. (2002). HIV-positive women report more lifetime partner violence: findings from a voluntary counselling and testing clinic in Dar es Salaam, Tanzania. *American Journal of Public Health*, 92, 1331–7.
- Mathews, C., Eggers, S. M., Townsend, L., Aarø, L. E., de Vries, P. J., Mason-Jones, A. J., ... De Vries, H. (2016). Effects of PREPARE, a multi-component, school-based HIV and intimate partner violence (IPV) prevention programme on adolescent sexual risk behaviour and IPV: Cluster randomised controlled trial. *AIDS and Behavior*, 20, 1821–1840. doi:10.1007/s10461-016-1410-1
- McCloskey, L. A., Boonzaier, F., Steinbrenner, S. Y., & Hunter, T. (2016). Determinants of intimate partner violence in sub-Saharan Africa: A review of prevention and intervention programs. *Partner Abuse*, 7, 277–315. doi:10.1891/1946-6560.7.3.277
- Médecins Sans Frontières. (2016). *Out of Focus: How millions of people in West and Central Africa are being left out of the global HIV Response*. Retrieved from

[https://www.msfastaccess.org/sites/default/files/MSF\\_assets/HIV\\_AIDS/Docs/HIV\\_report\\_WCA\\_ENG\\_2016.pdf](https://www.msfastaccess.org/sites/default/files/MSF_assets/HIV_AIDS/Docs/HIV_report_WCA_ENG_2016.pdf)

Michielsens, K., Temmerman, M., & Van Rossem, R. (2013). Limited effectiveness of HIV prevention for young people in sub-Saharan Africa: studying the role of intervention and evaluation. *Facts, Views & Vision in ObGyn*, 5, 196–208.

Kaufman, C. E., & Stavrou, S. E. (2002). “Bus fare, please”: the economics of sex and gifts among adolescents in urban South Africa. *Population Council Policy Research Division Working Papers*. Retrieved from [http://pdf.usaid.gov/pdf\\_docs/Pnada195.pdf](http://pdf.usaid.gov/pdf_docs/Pnada195.pdf)

Mosavel, M., Ahmed, R., & Simon, C. (2012). Perceptions of gender-based violence among South African youth: Implications for health promotion interventions. *Health Promotion International*, 27, 323–330. doi.org/10.1093/heapro/dar04

Munguti, K., Grosskurth, H., Newell, J., Senkoro, K., Mosha, F., Todd, J., ... Hayes, R. (1997). Patterns of sexual behavior in a rural population in north-western Tanzania. *Social Science & Medicine*, 44, 1553–61. doi:10.1016/S0277-9536(97)00014-2

Mwale, M., & Muula, A. S. (2017). Systematic review: A review of adolescent behavior change interventions [BCI] and their effectiveness in HIV and AIDS prevention in sub-Saharan Africa. *BMC Public Health*, 17, 1–10. doi:10.1186/s12889-017-4729-2

Olorunsaiye, C. Z., Brunner, L., Laditka, S. B., Kulkarni, S., & Boyd, A. S. (2017). Associations between women’s perceptions of domestic violence and

- contraceptive use in seven countries in West and Central Africa. *Sexual & Reproductive Healthcare*, 13, 1–8. doi:10.1016/j.srhc.2017.01.003
- Olowookere, S. A., Fawole, O. I., Adekanle, D. A., Adeleke, N. A., & Abioye-Kuteyi, E. A. (2015). Patterns and Correlates of Intimate Partner Violence to Women Living With HIV/AIDS in Osogbo, Southwest Nigeria. *Violence against Women*, 21, 1330–1340. doi:10.1177/1077801215594889
- Paul-Ebhohimhen, V. A., Poobalan, A., & van Teijlingen, E. R. (2008). A systematic review of school-based sexual health interventions to prevent STI/HIV in sub-Saharan Africa. *BMC Public Health*, 8, 4. doi:10.1186/1471-2458-8-4
- Peacock, D., & Levack, A. (2004). The men as partners program in South Africa: Reaching men to end gender-based violence and promote sexual and reproductive health. *International Journal of Men's Health*, 3, 173–188. doi:10.3149/jmh.0303.173
- Pedlow, C. T., & Carey, M. P. (2004). Developmentally-appropriate sexual risk reduction interventions for adolescents: Rationale, review of interventions, and recommendations for research and practice. *Annals of Behavioral Medicine: A Publication of the Society of Behavioral Medicine*, 27, 172–184. doi:10.1207/s15324796abm2703\_5
- Pettifor, A., Measham, D., Rees, H., & Padian, N. (2004). Sexual power and HIV risk, South Africa. *Emerging Infectious Diseases*, 11, 1996–2004. <http://doi.org/10.3201/eid1011.040252>
- Pronyk, P. M., Hargreaves, J. R., Kim, J. C., Morison, L. A., Phetla, G., Watts, C., ... Porter, J. D. H. (2006). Effect of a structural intervention for the prevention of

- intimate-partner violence and HIV in rural South Africa: a cluster randomised trial. *The Lancet*, 368, 1973–1983. doi:10.1016/S0140-6736(06)69744-4
- Schroder, K. E. E., Carey, M. P., & Venable, P. A. (2003). Methodological challenges in research on sexual risk behavior: II. Accuracy of self-reports. *Annals of Behavioral Medicine*, 26, 104–123. doi:10.1207/S15324796ABM2602\_03
- Swart, L. A., Stevens, M. S. G., & Ricardo, I. (2002). Violence in adolescents' romantic relationships: Findings from a survey amongst school-going youth in a South African community. *Journal of Adolescence*, 25, 385–395. doi:10.1006/jado.2002.0483
- Teitelman, A. M., Jemmott, J. B., Bellamy, S. L., Icard, L. D., O'Leary, A., Heeren, G. A., ... Ratcliffe, S. J. (2016). Partner violence, power and gender differences in South African adolescents' HIV/STI behaviors. *Health Psychology: Official Journal of the Division of Health Psychology, American Psychological Association*, 35, 751–760. doi:10.1037/hea0000351
- Thorpe, M. (2012). Masculinity in an HIV Intervention. *Agenda: Empowering Women for Gender Equity*, 53, 61–68. doi:10.2307/4548057
- Torgerson, D. J. (2001). Contamination in trials: is cluster randomisation the answer? *BMJ: British Medical Journal*, 322, 355–357.
- Umana, J. E., Fawole, O. I., Adeoye, I. A., Koenig, M., Stephenson, R., Ahmed, S., ... Lalonde, C. (2014). Prevalence and correlates of intimate partner violence towards female students of the University of Ibadan, Nigeria. *BMC Women's Health*, 14. doi:10.1186/1472-6874-14-131

United Nations. (2012). *Violence against women prevalence data: surveys by country*.

Retrieved from

[https://www.endvawnow.org/uploads/browser/files/vawprevalence\\_%0Amatrix\\_june2013.pdf%0A](https://www.endvawnow.org/uploads/browser/files/vawprevalence_%0Amatrix_june2013.pdf%0A)

United Nations Children's Fund (UNICEF). (2017). *Turning the tide against AIDS will*

*require more concentrated focus on adolescents and young people*. Retrieved

from <https://data.unicef.org/topic/hivaids/adolescents-young-people/#>

van der Straten, A., King, R., Grinstead, O., Vittinghoff, E., Serufilira, A., & Allen, S.

(1998). Sexual Coercion, Physical Violence, and HIV Infection Among Women in Steady Relationships in Kigali, Rwanda. *AIDS and Behavior*, 2, 61–73.

doi:10.1023/A:1022311424652

Diallo, S. A., Voia, M. (2016). The Threat of Domestic Violence and Women

Empowerment: The Case of West Africa. *African Development Review*, 28, 92–

103. doi:10.1111/1467-8268.12169

Wagman, J. A., Gray, R. H., Campbell, J. C., Thoma, M., Ndyababo, A., Ssekasanvu, J.,

... Kagaayi, J. (2015). Effectiveness of an integrated intimate partner violence and

HIV prevention intervention in Rakai, Uganda : analysis of an intervention in an existing cluster randomised cohort. *The Lancet Global Health*, 3, e23–e33.

doi:10.1016/S2214-109X(14)70344-4

Waltermauer, E. (2005). Measuring Intimate Partner Violence (IPV) you may only get

what you ask for. *Journal of Interpersonal Violence*, 20, 501–506.

doi:10.1177/0886260504267760

World Health Organization (2013). *Global and regional estimates of violence against women: prevalence and health effects of intimate partner violence and non-partner sexual violence*. Retrieved from [http://apps.who.int/iris/bitstream/10665/85239/1/9789241564625\\_eng.pdf? ua=1](http://apps.who.int/iris/bitstream/10665/85239/1/9789241564625_eng.pdf?ua=1)

World Health Organization. (2010). *Sexual Determinants of sexual and reproductive health: informing future research and programme implementation*. Retrieved from [http://apps.who.int/iris/bitstream/10665/44344/1/9789241599528\\_eng.pdf](http://apps.who.int/iris/bitstream/10665/44344/1/9789241599528_eng.pdf)

## Appendix

### Search Strategies

#### PubMed Search

Search ((HIV Infections[MeSH] OR HIV[MeSH] OR hiv OR hiv-1\* OR hiv-2\* OR hiv1 OR hiv2 OR hiv infect\* OR human immunodeficiency virus OR human immunodeficiency virus OR human immuno-deficiency virus OR human immune-deficiency virus OR ((human immun\*) AND (deficiency virus)) OR acquired immunodeficiency syndrome OR acquired immunodeficiency syndrome OR acquired immuno-deficiency syndrome OR acquired immune-deficiency syndrome OR ((acquired immun\*) AND (deficiency syndrome)) OR "sexually transmitted diseases, Viral"[MeSH:NoExp])) AND (“Adolescent”[MeSH] OR youth OR youths OR youngster OR teenager OR teenagers OR teen OR teens OR adolescent[mh] OR adolescent OR adolescents OR adolescence OR child[mh] OR child OR children OR young person\* OR young people OR student OR students) AND (“Domestic Violence”[MeSH] OR intimate partner violence OR intimate partner abuse OR dating violence OR dating abuse OR relationship violence OR relationship abuse OR physical abuse[mh] OR adolescent relationship abuse OR adolescent dating abuse OR adolescent dating violence OR violence against women OR sexual assault OR sexual violence OR sexual abuse OR young people "Intimate Partner Violence"[Mesh]) AND (Africa OR Sub-Saharan OR Angola OR Benin OR Botswana OR Burkina Faso OR Burundi OR Cameroon OR “Cape Verde” OR “Central African Republic” OR Chad OR Comoros OR Congo OR Cote d’Ivoire OR Djibouti OR “Equatorial Guinea” OR Eritrea OR Ethiopia OR Gabon OR Gambia OR Ghana OR Guinea OR Guinea-Bissau OR Kenya OR Lesotho OR Liberia

OR Madagascar OR Malawi OR Mali OR Mauritania OR Mauritius OR Mozambique  
OR Namibia OR Niger OR Nigeria OR Rwanda OR “Sao Tome and Principe” OR  
Senegal OR Seychelles OR Sierra Leone OR Somalia OR “South Africa” OR Sudan OR  
Swaziland OR Tanzania OR Togo OR Uganda OR “Western Sahara” OR Zambia OR  
Zimbabwe)

Embase search string:

((('human immunodeficiency virus infection'/exp OR 'human immunodeficiency virus  
infection') AND ([embase]/lim OR [medline]/lim)) OR ('human immunodeficiency  
virus'/exp OR 'human immunodeficiency virus') OR ('human immunodeficiency virus  
1'/exp OR 'human immunodeficiency virus 1') OR ('acquired immune deficiency  
syndrome'/exp OR 'acquired immune deficiency syndrome') OR ('serodiagnosis')) AND  
(('partner violence') OR ('domestic violence') OR ('dating violence') OR ('sexual  
assault') OR ('sexual violence') OR ('rape') OR ('sexual abuse')) AND (('juvenile') OR  
('adolescent') OR ('child') OR ('adolescence') OR ('student') OR ('school age') OR  
('young adult')) AND (('africa') OR ('africa south of the sahara') OR ('angola') OR  
('angolan') OR ('benin') OR ('beninese') OR ('botswana') OR ('burkina faso') OR  
('burkinabe') OR ('burundi') OR ('cameroon') OR ('cameroonian') OR ('cape verde') OR  
('central africa') OR ('central african republic') OR ('central african') OR ('chad') OR  
('comoros') OR ('congo') OR ('cote d'ivoire') OR ('djibouti') OR ('equatorial guinea') OR  
('eritrea') OR ('eritrean') OR ('ethiopia') OR ('ethiopian') OR ('gabon') OR ('gabonese')  
OR ('ghana') OR ('ghanaian') OR ('guinea') OR ('guinea-bissau') OR ('kenya') OR  
('kenyan') OR ('lesotho') OR ('liberia') OR ('liberian') OR ('madagascar') OR ('malawi')  
OR ('malawian') OR (mali) OR ('mauritania') OR ('mauritius') OR ('mozambique') OR

('mozambican') OR ('namibia') OR ('namibian') OR ('niger') OR ('nigeria') OR ('nigerian') OR ('rwanda') OR ('rwandan') OR ('sao tome and principe') OR ('senegal') OR ('senegalese') OR ('seychelles') OR ('seychellene') OR ('sierra leone') OR ('sierra leonean') OR ('somalia') OR ('somali (citizen)') OR ('south africa') OR ('south african') OR ('sudan') OR ('sudanese') OR ('swaziland') OR ('swazi (people)') OR ('tanzania') OR ('tanzanian') OR ('togo') OR ('togolese') OR ('uganda') OR ('ugandan') OR ('western sahara') OR ('zambia') OR ('zambian') OR ('zimbabwe') OR ('zimbabwean'))

PsychInfo Search:

Search Alert: "( (HIV Infections OR HIV OR hiv OR hiv-1\* OR hiv-2\* OR hiv1 OR hiv2 OR hiv infect\* OR human immunodeficiency virus OR human immunodeficiency virus OR human immuno-deficiency virus OR human immune-deficiency virus OR ((human immun\*) AND (deficiency virus)) OR acquired immunodeficiency syndrome OR acquired immunodeficiency syndrome OR acquired immuno-deficiency syndrome OR acquired immune-deficiency syndrome OR ((acquired immun\*) AND (deficiency syndrome)) OR "sexually transmitted diseases, Viral") ) AND ( ("Adolescent" OR youth OR youths OR youngster OR teenager OR teenagers OR teen OR teens OR adolescent[mh] OR adolescent OR adolescents OR adolescence OR child[mh] OR child OR children OR young adult OR young person\* OR young people OR student OR students) ) AND ( "Domestic Violence" OR intimate partner violence OR intimate partner abuse OR dating violence OR dating abuse OR relationship violence OR relationship abuse OR physical abuse OR adolescent relationship abuse OR adolescent dating abuse OR adolescent dating violence OR violence against women OR sexual assault OR sexual violence OR sexual abuse OR young people "Intimate Partner

Violence") ) AND ( (Africa OR Sub-Saharan OR Angola OR Benin OR Botswana OR Burkina Faso OR Burundi OR Cameroon OR "Cape Verde" OR "Central African Republic" OR Chad OR Comoros OR Congo OR Cote d'Ivoire OR Djibouti OR "Equatorial Guinea" OR Eritrea OR Ethiopia OR Gabon OR Gambia OR Ghana OR Guinea OR Guinea-Bissau OR Kenya OR Lesotho OR Liberia OR Madagascar OR Malawi OR Mali OR Mauritania OR Mauritius OR Mozambique OR Namibia OR Niger OR Nigeria OR Rwanda OR "Sao Tome and Principe" OR Senegal OR Seychelles OR Sierra Leone OR Somalia OR "South Africa" OR Sudan OR Swaziland OR Tanzania OR Togo OR Uganda OR "Western Sahara" OR Zambia OR Zimbabwe) )

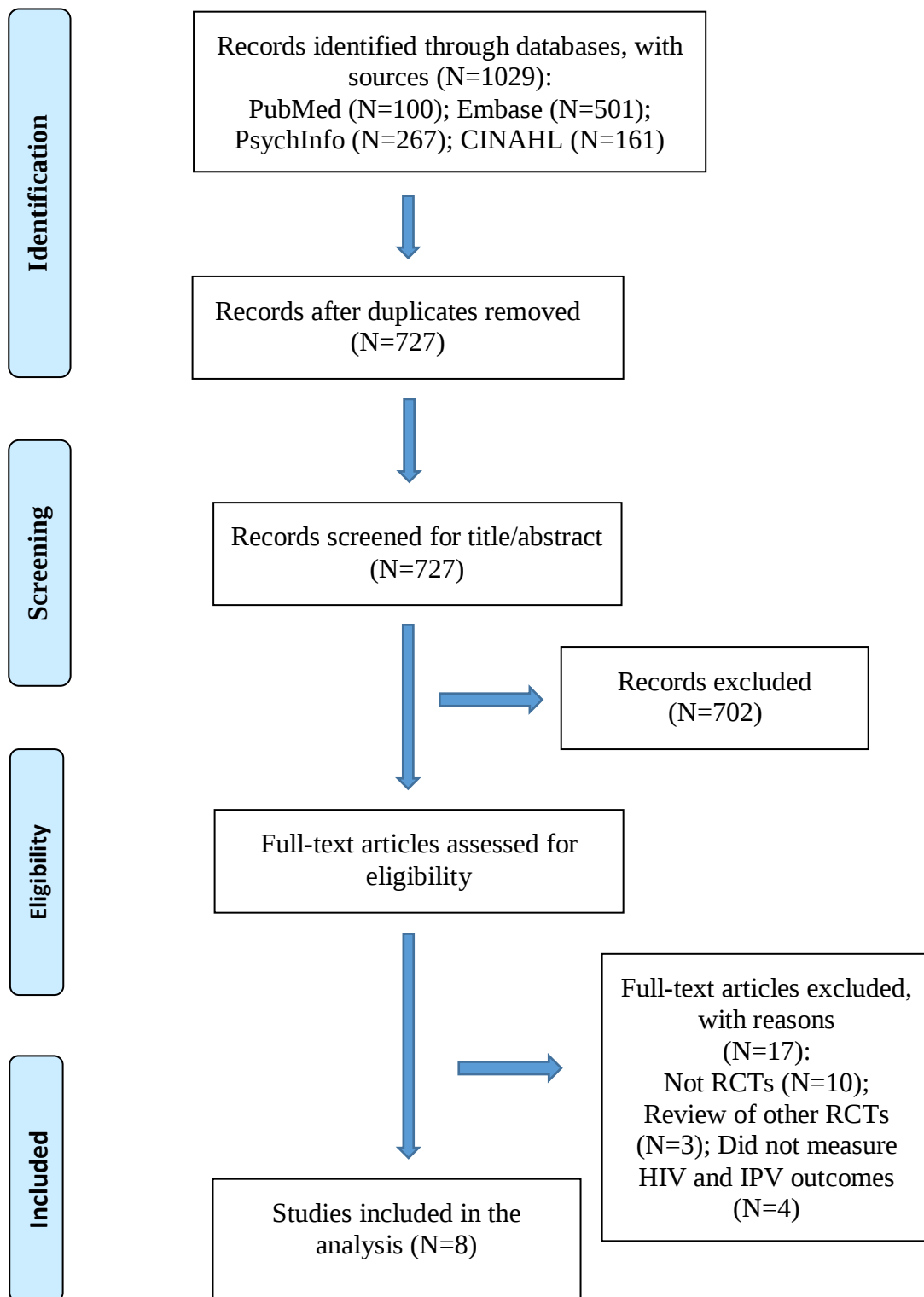
CINAHL search:

Search Alert: "( (HIV Infections OR HIV OR hiv OR hiv-1\* OR hiv-2\* OR hiv1 OR hiv2 OR hiv infect\* OR human immunodeficiency virus OR human immunodeficiency virus OR human immuno-deficiency virus OR human immune-deficiency virus OR ((human immun\*) AND (deficiency virus)) OR acquired immunodeficiency syndrome OR acquired immunodeficiency syndrome OR acquired immuno-deficiency syndrome OR acquired immune-deficiency syndrome OR ((acquired immun\*) AND (deficiency syndrome)) OR "sexually transmitted diseases, Viral") ) AND ( ("Adolescent" OR youth OR youths OR youngster OR teenager OR teenagers OR teen OR teens OR adolescent[mh] OR adolescent OR adolescents OR adolescence OR child[mh] OR child OR children OR young adult OR young person\* OR young people OR student OR students) ) AND ( ("Domestic Violence" OR intimate partner violence OR intimate partner abuse OR dating violence OR dating abuse OR relationship violence OR relationship abuse OR physical abuse OR adolescent relationship abuse OR adolescent

dating abuse OR adolescent dating violence OR violence against women OR sexual assault OR sexual violence OR sexual abuse OR young people "Intimate Partner Violence") ) AND ( (Africa OR Sub-Saharan OR Angola OR Benin OR Botswana OR Burkina Faso OR Burundi OR Cameroon OR "Cape Verde" OR "Central African Republic" OR Chad OR Comoros OR Congo OR Cote d'Ivoire OR Djibouti OR "Equatorial Guinea" OR Eritrea OR Ethiopia OR Gabon OR Gambia OR Ghana OR Guinea OR Guinea-Bissau OR Kenya OR Lesotho OR Liberia OR Madagascar OR Malawi OR Mali OR Mauritania OR Mauritius OR Mozambique OR Namibia OR Niger OR Nigeria OR Rwanda OR "Sao Tome and Principe" OR Senegal OR Seychelles OR Sierra Leone OR Somalia OR "South Africa" OR Sudan OR Swaziland OR Tanzania OR Togo OR Uganda OR "Western Sahara" OR Zambia OR Zimbabwe)

**Figure 1.**

**Flowchart for Study Selection**



**Table 1.**

**Integrated IPV/HIV interventions among adolescents in Sub-Saharan Africa**

| Study                       | Location                                                                    | Participant Characteristics                                                | Intervention Description                                                                                                                                                                                               | Study Characteristics                                                                                                                   | Results                                                                                                              |
|-----------------------------|-----------------------------------------------------------------------------|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Abramsky <i>et al.</i> 2014 | Rubaga and Makindye Divisions, Kampala, Uganda.                             | 2,532 men and women at F/U<br>Avg age men: 27 years; avg age women: 28 yrs | 4 yrs, 5 mo.<br>1. No specific dosage of community mobilization activities: advocacy and media on local media channels, communication materials, training.<br>2. CG wait-listed                                        | Pair-matched CRCT; 4-year F/U survey. IPV outcomes: <i>a priori</i> ; social acceptability IPV; women's PYr exp. IPV. HIV outcome: SRBs | At 4-yr F/U, lower acceptance of IPV among women; higher acceptance of women refusing sex. Decreased SRBs among men. |
| Gibbs <i>et al.</i> 2017    | Informal settlements in eThekweni municipality, KwaZulu-Natal, South Africa | 1,357 men and women. Avg age 23 yrs.                                       | 6-8 wks,<br>1. 10 3-hr sessions of <i>Stepping Stones</i> (participatory gender transformative activities) and 11 3-hr sessions of <i>Creating Futures</i> (livelihoods strengthening activities)<br>2. CG wait-listed | CRCT; F/U at 12-mo. and 24-mo. IPV outcome: modified WHO VAW scale; 8-item sexual relationship power scale. HIV outcome: SRBs           | Results pending                                                                                                      |

|                              |                                       |                                                       |                                                                                                                                                                                                              |                                                                                                                                                                                                                                              |                                                                                                                                                                                                                 |
|------------------------------|---------------------------------------|-------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Jewkes <i>et al.</i> 2008    | Eastern Cape province of South Africa | 2,776 men and women 16-23 years old.                  | 6-8 wks,<br>1. Thirteen 1-hr sessions in single-sex groups (role play, drama, critical reflection); 3 meetings; one community meeting;<br>2. CG 3-hr session on HIV risk                                     | CRCT; F/U at 12-mo. and 24-mo. F/U rate 75% for men and women at 12 mo., 73% of women and 69% of men at 24 mo. IPV outcome: IPV incidence questionnaire. HIV: biological outcomes; SRBs                                                      | Intervention was not associated with lower HIV incidence; associated with lower HIV-2. No significant effect on reported IPV perp among men.                                                                    |
| Kalichman <i>et al.</i> 2009 | Cape Town, South Africa               | 475 men. Avg age 30.2 years (standard deviation 9.5). | 1 wk<br>1. 5 small group sessions (skill building, goal setting, risk identification, condom use skill building, sexual communication training)<br>2. CG: 3-hour HIV/alcohol risk session; no IPV component. | Quasi-experimental intervention trial; F/U at 1-mo, 3-mo, and 6-mo. Participant retention greater than 90%. IPV outcome: 7-item domestic violence scale; past mo. IPV perp. HIV: 11-item HIV knowledge test; 4-item stigma scale; SRB intent | Increased discussion of condoms with partner at 1-month F/U; increased reporting of HIV testing at 3-mo F/U; increased intention to reduce SRBs, decreased reporting of past-mo. physical IPV perp at 6-mo F/U. |

|                            |                                               |                                                                           |                                                                                                                                                                                                                                                     |                                                                                                                                                                                                       |                                                                                                                                             |
|----------------------------|-----------------------------------------------|---------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Kajula <i>et al.</i> 2016  | Kinondoni District of Dar es Salaam, Tanzania | 1,258 men; all participants at least 15 yrs of age (no avg age provided). | 6 and 9 mo cycles.<br>1. 5 Camp Health Leader conversations/wk (HIV risk, condoms, violence, concurrent sexual partners). Microfinance groups meet weekly (includes business skill training, access to credit, loan repayment)<br>2. CG wait-listed | CRCT; behavioral assessment at 12-mo F/U. and behavioral and biological assessment 30-mo. post intervention launch. IPV outcome: WHO VAW scale; gender equitable men's scale. HIV: biological outcome | Results pending.                                                                                                                            |
| Mathews <i>et al.</i> 2016 | Western Cape, South Africa                    | 3,451 Grade 8 participants. Avg age 13 years.                             | 21 wks<br>1. Weekly 1-1.5 hr after-school sessions (interactive and skill based group sessions); weekly access to PREPARE school nurse; two-day training for school safety teams.<br>2. CG: attended school as usual                                | CRCT; F/U at 6-mo. and 12-months. 94% retention at 6 mo. and 88% retention at 12 mo. IPV outcome: IPV exp and perp past 6 months. HIV: SRBs                                                           | No significant association between intervention and SRBs at 6-mo. or 12 mo. F/U. At 12 mo. F/U, participants less likely to report IPV exp. |

|                           |                                        |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                          |                                                                                                                                                                                                             |                                                                                                                                                     |
|---------------------------|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Pronyk <i>et al.</i> 2006 | Rural Limpopo province of South Africa | 6,576 men and women. 860 women in Cohort 1 exposed to intervention. Avg age Cohort 1: 41 years. Cohort 2: persons 14-35 yrs old sleeping in Cohort 1 household; Cohort 3: 14-35 <i>de jure</i> residents of Cohort 1 households. | 12-15 mo.<br>1. Cohort 1: Microfinance group meetings every 2 wks over 10 or 20 wk cycles; 1-hr gender and HIV training session every 2 wks; Community mobilization for 6-9 mo. following training.<br>2. CG wait-listed | CRCT; F/U at 2 yrs (Cohort 1 and Cohort 2) and 3 years (Cohort 3). At 2 yr F/U, study retained 90% of intervention cohort 1 and 84% of CG cohort 1. IPV outcome: PYr IPV exp. HIV: biological outcome; SRBs | 2-yr F/U Cohort 1 less likely to report PYr IPV exp. Intervention not associated with decreased SRBs or decreased HIV incidence in Cohorts 2 and 3. |
| Wagman <i>et al.</i> 2015 | Rakai, Uganda                          | 11,448 individuals 15-49 yrs (no avg age provided)                                                                                                                                                                               | 4 years<br>No specific dosage<br>1. Community mobilization activities (activism, campaigns, newsletters, peer groups, support counseling).<br>2. CG: routine HIV prevention and treatment services.                      | CRCT; F/U at 16 mo. and 35 mo. after baseline. Retention 57% at 35-month F/U. IPV outcome: Conflict Tactic Scales PYr exp and perp. HIV: biological outcome; SRBs                                           | Intervention associated with decreased exp of physical and sexual IPV at 35-mo. follow up. <i>SHARE</i> associated with decreased HIV incidence.    |

Average = avg; Cluster randomized control trial = CRCT; Comparison Group = CG; Experience = exp; Follow up = F/U; Hour = hr; Month = mo.; Past year = PYr; Perpetration = perp; Sexual risk behaviors = SRBs; Weeks = Wk; Year(s) = Yr(s); World Health Organization Violence Against Women = WHO VAW.

**Table 2**

**Implications of the Review for Practice, Policy, and Research**

| <b>Area of Impact</b> | <b>Implications of the Review</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Practice              | <ul style="list-style-type: none"><li>• The findings of this review suggest that integrated IPV/HIV interventions show promise as a sexual risk and violence prevention strategy among adolescents in Sub-Saharan Africa.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Policy                | <ul style="list-style-type: none"><li>• Policy makers interested in preventing HIV and IPV should be aware of the dual risk pathways, and that policies in support of risk reduction in one may affect rates of the other (and vice versa).</li><li>• HIV and IPV risk reduction policy should address the mechanisms by which gender and economic inequities affect rates of sexual risk behaviors and violence against women.</li></ul>                                                                                                                                                                                                               |
| Research              | <ul style="list-style-type: none"><li>• Targeting adolescents in integrated IPV/HIV interventions would provide further evidence regarding effective age-specific strategies for sexual risk behavior reduction and violence prevention.</li><li>• Research on integrated IPV/HIV interventions would benefit from consistent biological outcomes and standardized IPV outcomes to improve rigorous, comparable measurement across studies.</li><li>• Research examining concurrent IPV/HIV prevention should examine specific gender-targeted approaches to increase men and boys' involvement in promoting and normalizing gender equality.</li></ul> |

## **A Qualitative Analysis of Sexual Consent among High School Students**

### **Abstract**

Sexual violence is common in adolescence. Education on sexual consent is considered to be a critical component of many sexual assault prevention programs, and it is possible that an understanding of sexual consent assists adolescents in developing healthy dating and sexual relationships. Accordingly, the current study conducted a series of semi-structured interviews ( $N = 29$ ) to explore perceptions of sexual consent among high school students (ages 14 – 18). Thematic analysis identified three salient themes pertaining to: 1) the definition of consent; 2) verbal and non-verbal strategies for conveying consent; and 3) expectations of how consent would be communication following an initial sexual encounter. In the present sample, adolescents defined consent as saying “yes” sexual activity. Whereas consent was *defined* as a verbal provision of affirmative consent, both male and female adolescents believed that girls typically conveyed consent non-verbally. Girls indicated that they typically conveyed sexual refusal through non-verbal cues, whereas adolescent males reported proceeding with sexual activity until they heard the verbal expression of “no.” Adolescents shared the perception that adolescents who previously engaged in sexual activity can expect that sexual activity will happen again without the need for verbal consent, particularly within an established relationship. These findings highlight important discrepancies in adolescents’ definition of sexual consent, and how they communicate sexual consent and sexual refusal. Variation in how girls describe communicating sexual refusal, and the signals boys describe as indicating refusal for sex may contribute to unwanted sexual experiences among adolescents.

## **Background**

High school years (ages 14 to 18) represent a crucial period of development for adolescents. During this developmental period, many adolescents indicate increasing awareness and exploration of sexual identity, and commence romantic and sexual relationships (Miller, 2017). The onset of sexual activity during adolescence is associated with increased risk of sexual violence (Eaton et al., 2010; Williams et al., 2014), defined by the Centers for Disease Control (2014) as any “sexual act that is committed or attempted by another person without freely given consent of the victim or against someone who is unable to consent or refuse.” Adolescence is a period of particularly high risk for sexual violence compared to other age groups (Planty, Langton, Krebs, Berzofsky, & Smiley-McDonald, 2013; Rennison, 2000). In fact, over forty percent of female victims of rape were under 18 years old when the assault occurred (Black et al., 2011). In the United States, an estimated 26% of 17 years old females and 5% of 17 year old boys report some form of sexual victimization in their lifetime (Finkelhor, Shattuck, Turner, & Hamby, 2014), and 10% percent of adolescents 14-21 years of age report lifetime sexual violence perpetration (Ybarra & Mitchell, 2013). Sexual victimization is associated with numerous psychological and health consequences, including posttraumatic stress disorder (PTSD) (McLaughlin et al., 2013) and increased risk for re-victimization (Gidycz, Coble, Latham, & Layman, 1993; Humphrey & White, 2000; Risser, Hetzel-Riggin, Thomsen, & McCanne, 2006). Furthermore, forced or coerced sexual activity is commonly unprotected, which leads to increased risk of unintended pregnancy and sexually transmitted infections (Decker, Silverman, & Raj, 2005; McFarlane et al., 2005).

The prevalence of sexual violence, and negative health outcomes associated with experiences of violence underscore the importance of primary prevention of sexual violence among adolescents. A critical component of sexual assault prevention programs for adolescents is fostering an awareness of what constitutes sexual consent (Centers for Disease Control and Prevention, 2017). Sexual consent is often defined as "freely given verbal or non-verbal communication of a feeling of willingness to engage in sexual activity" (p. 259, Hickman & Muehlenhard, 1999). Other definitions of sexual consent suggest that consent can only be present through a verbal indication of willingness to engage in sexual activity. For example, Section 67386(a)(1) of California's Education Code (2014) recognizes affirmative, verbal consent as the only legal signal of consent in response to the high prevalence of rape on college campuses (Jozkowski, 2015). Muehlenhard, Humphreys, Jozkowski, & Peterson (2016) explain that part of the controversy surrounding what constitutes consent stems from the varying definitions of consent in different legal, social, and research contexts. Three main conceptualizations of consent emerge in the literature: consent as internal "willingness;" consent as explicit agreement; and consent as "inferred" willingness (Muehlenhard et al., 2016). In the absence of a universal definition of consent, research examining sexual behavior often explores the ways individuals understand, signal, and interpret consent in their own lived experiences.

The vast majority of research examining sexual consent focuses on undergraduate college students (e.g., Jozkowski, 2015; Lindgren, Schacht, Pantalone, Blayney, & George, 2009). Research on the topic demonstrates gender differences in conveyance and interpretation of consent are of particular importance in regards to consent norms among

heterosexual couples. The theory of sexual scripts, first proposed by Gagnon & Simon (1973), offers a framework for understanding socialized gender roles in sexual consent. Early research on sexual scripts focused on sexual initiation and posited men act as “initiators” and pursue sexual activity while women control the extent of the sexual acts in their role as “gatekeepers” (Gagnon & Simon, 1973; Metts & Spitzberg, 1996). The current evidence of sexual consent among college students provides further insight into the influence of sexual “scripts” on consent communication. Specifically, college aged men may be more likely to interpret non-verbal cues as signals of consent than their female peers (Farris, Treat, Viken, & McFall, 2008; Jacques-Tiura, Abbey, Parkhill, & Zawacki, 2007; Lofgreen, Mattson, Wagner, Ortiz, & Johnson, 2017). In regard to sexual refusal, men are also more likely to rely on their partners’ nonverbal indicators to detect non-consent whereas women report looking for their partners’ verbal and nonverbal indicators (Jozkowski, Peterson, Sanders, Dennis, & Reece, 2014). Relationship factors also play a role in sexual consent. Specifically, longer relationship history may be negatively associated with undergraduates’ perceived need of verbal consent, such that students describe long-term relationships as having less of a need for explicit consent before sexual encounters (Humphreys, 2007). Further, women may also acquiesce to sexual activity with their partners in established relationships in order to avoid conflict (Conroy, Krishnakumar, & Leone, 2015). Internalized stereotypes normalizing female subservience and passivity in sexual activity may be associated with decreased refusal of unwanted sexual activity among female college students (Hust, Rodgers, & Bayly, 2017).

Much work needs to be done to understand sexual consent behaviors during early to mid-adolescence, which corresponds to the initiation of sexual activity. The dearth of

research on sexual communication among adolescents presents a gap in primary prevention research for sexual violence, and specifically in the understanding of how sexual scripts impact adolescent sexual development, consent, and negotiation of sexual activity. Further, the gap in the research indicates limited understanding of how high school adolescent consent norms compare to the evidence of consent norms among undergraduate students. Such insight would benefit sexual violence prevention by providing a clearer understanding of how sexual consent behaviors emerge during sexual development in high school.

While adolescent sexual activity is often associated with risk-taking (Kotchick, Shaffer, Miller, & Forehand, 2001; Weinstock, Berman, & Cates, 2004), it is important to understand adolescent sexuality as a period of experimentation and formation of sexual identity (Horne & Zimmer-Gembeck, 2005; Miller, 2017). Adolescents will use coital and non-coital sexual activities to discover hitherto unknown sexual preferences. Increased sexual experience among adolescents is associated with higher sexual subjectivity and sexual agency, illustrating positive impacts of initial sexual exploration (Horne & Zimmer-Gembeck, 2005). Nonetheless, sexual consent is an important component of establishing that the exploration of sexual activity between adolescents is willingly engaged in, free from coercion or force, and freely chosen. Whether adolescents are discussing exploring new sexual activities or continuing a sexual relationship, sexual communication and establishment of non-coercive consent is tantamount to ensuring comfortable, desired sexual encounters during which consent remains an ongoing process. Behaviors developed and habituated around consent during adolescence may have a long-term impact on sexual safety over the lifecourse. As such, an understanding

of adolescent perceptions of consent can help identify ideal opportunities for primary prevention.

### **The Present Study**

This current study extends previous research aimed at sexual communication and consent by examining perceptions of sexual communication and consent among adolescents between the ages of 14 and 18 currently enrolled in high school. Given the paucity of previous research on sexual consent among adolescents, exploratory research using qualitative methods offered an ideal approach to understand perceptions of sexual consent among adolescents through thematic analysis. The current study explored how adolescents' understanding of consent compares to consent behaviors with sexual partners, and how these perceptions impact expectations for sexual activity after an initial sexual encounter. The interview was designed to encourage open-ended responses that reflect the adolescents' lived experience. Towards the goal of understanding consent, the interview guide asked the following questions: 1) How do adolescents define consent?; 2) How do adolescents convey consent to a partner?; and 3) If two adolescents have engaged in sexual activity once before, what are the expectations for future sexual encounters? The interview also used follow-up questions to understand how consent behaviors may vary by gender.

## **Methods**

### **Participants**

Thirty-three adolescents provided parental consent and adolescent assent to participate in the study. Two audio files were of poor quality, precluding transcription. Two additional audio-files were deemed to stray from the interview protocol, and were

excluded from the study. The final data set consisted of 29 interview transcripts. Because the interviews, audio files, and transcripts were anonymous, it was not possible to identify the demographic characteristics of the 4 adolescents who were removed from the dataset. Thus, demographic data is presented for the full sample of 33 participants who enrolled in the study and completed an interview (see Table 1). On average, participants were 17 years (range 14-19 years of age). The study sample consisted of freshmen in high school ( $N = 3$ ), sophomores ( $N = 12$ ), juniors ( $N = 13$ ), and seniors ( $N = 5$ ). Students self-identified as female ( $N = 20$ ), male ( $N = 11$ ), and transgender ( $N = 2$ ). Sixty percent of the participants ( $N = 20$ ) identified as Hispanic. It is important to note that participants were not queried as to whether they had engaged in any form of sexual activity. Thus, it is possible that the study sample included adolescents with a range of sexual experiences, as well as adolescents who had yet to engage in sexual activity.

## **Procedure**

Data were collected in the context of a larger study of sexual assault prevention programming for high school adolescents (Orchowski et al., 2016). Prior to the onset of the prevention curriculum, a convenience sampling technique was utilized to recruit 33 students enrolled Rhode Island High Schools for individual interviews. The interviews were advertised as an opportunity for students to provide input on factors associated with healthy relationships among youth. A flier was distributed to all students within the school with information about the research study. The flier included a parental consent-to-contact form. Students who returned a signed parental consent form received \$5 gift card to a local merchant, regardless of the parent's decision to allow the student to participate. Students with parental approval were contacted and provided with further

details on the study and interview process. A research assistant met with a parent or legal guardian in a private location to explain the study and garner informed parental consent for study participation. Students were eligible for participation if they provided written parental and adolescent assent. Students were excluded from the study if they had previously attended the sexual assault prevention program.

The study was approved by the hospital Institutional Review Board. All interviews were conducted by a trained research assistant or study staff member of the same gender as the participant. All interviewers received training on semi-structured interview methods. Participants engaged in a one-on-one structured semi-structured interview that explored teenagers' perceptions of dating and sexual behavior in their high school. The interviews were conducted after-school on the school premise in a private room. Before commencing the interview, the researcher reminded the participant to (a) speak about general experiences as opposed to personal experience; and (b) never to use any names or details that could identify another school community member. Interviewers asked participants to elaborate on, or clarify their responses as needed. Participants were allowed to pass on any topic they did not feel comfortable discussing and to ask the interviewer to clarify the intent of their question. The interviews lasted approximately 90 minutes and students who participated in the interview received \$30 upon completion. The interviews were digitally recorded and transcribed verbatim. All identifying information was removed from the transcript.

### **Qualitative Coding Procedures**

Iterative qualitative coding of the interviews using NVivo (QSR International, 2017) was used to create a preliminary codebook for organizing the data. The resulting

codebook was reviewed by three members of the research team and finalized. The coding team, consisting of two coders, met regularly to discuss coding findings and address discrepancies. The appended Table 2 displays the averaged kappa score across of all sources. Themes emerged upon review of all transcript data coded as “definition of consent,” “conveyance of consent,” or “continuous consent”. The three codes were reviewed and summarized with respect to commonly described attitudes and shared experiences among the participants. Thematic analysis methods (Braun & Clarke, 2006) were applied to the coded data provided the reportable results of main and sub themes. Thematic analysis is an adaptable method of qualitative data analysis used to identify, organize, describe, and report themes based on summarized findings (Braun & Clarke, 2006). As opposed to ascribing to theoretical frameworks, thematic analysis allows main findings, or themes, to emerge directly from trends in the data (Braun & Clarke, 2006).

## **Results**

Most participants shared perspectives which they believed reflected norms regarding sexual consent in their school community, as indicated by responding to interview questions through the use of phrases such as: “students in this school,” “most of the kids at my school,” and “most of the time”. The analysis revealed three primary themes related to perceptions of sexual consent: 1) “Saying Yes”: adolescents define sexual consent as saying “yes” to sexual activity; 2) “If She Doesn’t Say No”: discrepancies in the conveyance of consent and sexual refusal among boys and girls; and 3) “Once Yes, Always Yes”: if adolescents have previously engaged in sexual activity, it can be expected that sexual activity will happen again without the need for verbal consent.

## **Theme #1 – “Saying Yes”: Adolescents Define Sexual Consent as Saying “Yes” to Sexual Activity**

When participants were asked to provide a definition of “consent,” the majority of responses described consent as a verbal agreement, or permission, to engage in sexual activity. Two participants were not familiar with “consent” and asked for clarification. The majority of male and female participants defined consent as the result of a spoken conversation, with most responses including “yes,” “no,” “okay,” or “permission” in the definition. For example, when asked to define consent for sexual activity, one female participant indicated:

*Both of the partners are like, ‘Yes I want to have sex.’ And they’re like confident about it.*

As seen in the example above, some participants defined consent as both partners talking about sex and agreeing to sexual activity. Participants shared the perspective that consent was defined as given freely and with confidence. Among three of the study participants, the view was also shared that consent was defined as agreeing to sexual activity knowing there was also the opportunity to say “no.”

Consistent with an affirmative consent standard, participants also defined consent as a verbal affirmation of agreement for sexual activity. For example, when asked to define consent, one male participant indicated:

*Interviewer (I): How do you think most teens define consent?*

*Participant (P): They’ll say ‘yes’.*

*I: So someone saying ‘yes’*

*P: Exactly.*

*I: That seems pretty simple*

*P: I think that’s the only way...The only way I think that’s legit is for verbal agreement, that’s it, cause how hard is it to say ‘yes’ or ‘no.’*

As highlighted here, most participants define consent as a straightforward discussion between two adolescents in which verbal agreement or disagreement clearly delineated whether sexual activity would occur. Verbal affirmation of consent was perceived to reduce any confusion surrounding either partner's preferences for engaging in sexual activity. In the participants' definition of consent, responsibility is placed on both partners to verbally express consent and respect the partner's explicit decisions regarding consent in return. It is important to note that while participants' definition of consent clearly followed a verbal standard of affirmative consent, participants did not describe what types of activities partners in a sexual encounter were consenting to, or whether the partners needed to consent to the same activities. Participants also did not define consent as an ongoing process during a sexual encounter.

## **Theme #2 – “If She Doesn’t Say No”: Discrepancies in the Conveyance of Consent and Sexual Refusal among Boys and Girls**

Whereas participants' *definition* of sexual consent suggested that consent required a clear verbal communication of “yes”, adolescents' descriptions of how consent was actually conveyed among teens reflected a reliance on non-verbal indications of sexual interest, as well as both non-verbal and verbal indications of sexual refusal. Specifically, the majority of male and female participants suggested that – in practice – adolescents used non-verbal gestures and actions to communicate sexual consent and negotiate through a sexual encounter. Boys in the sample described several non-verbal indicators that they believed girls would use to indicate their agreement to sexual activity. These non-verbal indicators of consent included subtle cues of sexual interest, like light touching or a look, to more overt indicators of sexual interest, such as heavy touching,

kissing, moving the partner's head or hands down towards sexual body parts, or removing clothing.

Further, both male and female adolescents described girls are being responsible for communicating consent to sexual activity, such that the absence of sexual refusal was considered a sign of sexual consent. Consistent with traditional heterosexual sexual scripts, it was assumed that boys would initiate a sexual encounter that they were consenting to, and that girls would either respond to the encounter by non-verbally allowing it to proceed, or by issuing a verbal "no" to stop the encounter. For example, when asked how one would know that someone was comfortable with sexual activity, one male participant noted:

*I: How do you know that other person is comfortable if you haven't even had that conversation with them yet?*

*P: It's just a hunch, you should already know. You obviously know if you're ready, the other person may or may not be ready, it's a 50/50 chance that they're going to be ready. And if you sit down and they sit next to you and you start making out well there you go now you know that you both are ready. But that's just the way it is.*

The above example also indicates the willingness among adolescent boys to "make the first move" in a sexual encounter, with the "chance" that the participant will object; illustrating boundary testing is utilized to infer sexual consent. As highlighted in this example, adolescent boys in the sample described that sexual activity often occurred in practice without a verbal agreement prior to initiating the sexual encounter. Instead, it was assumed that if a female partner allowed sexual activity to occur, that sexual consent was present.

In fact, the most prominent example of non-verbal indicators of sexual consent was silence. Male and female participants shared the perspective that the female partner's

silence can be interpreted as an indication of both consent and enjoyment of the current sexual activities. For example, when asked to describe how consent is communicated, one female adolescent noted:

*So consent in this school is definitely the whole 'if she doesn't say no then she says yes' thing, I wanna say. So like I said previously, you know how sex would go so you and someone are kissing, maybe on somebody's bed and then they'll probably put their hand in your pants and you're not saying anything, also that probably means you like it. So if you're not saying anything and you keep going then they're going to keep going then they're gonna take your pants off, and then they're gonna take their pants off and then that's as far as consent goes.*

As highlighted in the aforementioned quote, participants indicated that silence held the same legitimacy among male and female adolescents as explicit verbal confirmation of consent. The scenario describes sexual activity building to more intimate levels; the female partner's silence signals her permission, and presumably, enjoyment because silence "probably means you like it." Male participants shared similar perspectives about the interpretation of silence as consent to sexual activity. As one male participant notes when queried as to how adolescents convey consent:

*If you guys are kissing and stuff and you start touching and what not, and if she's comfortable with it, she'll let you do it or if she says no then clearly no, you gotta retract from doing whatever you was doing and do whatever you was doing before, so kissing or touching or whatever, if you're not having sex.*

As described earlier, the quote above highlights how, when asked to describe the conveyance of consent, adolescent boys defaulted to describing how adolescent girls reacted to the initiation of sexual activity. The phrase "she'll let you do it" highlights how the absence of sexual refusal – as indicated by the word "no" – was perceived as agreement to sexual activity. In sum, rather than garnering a verbal affirmation of consent prior to sexual activity, boys tended to initiate sexual activity, and wait until they heard the word "no" to stop the sexual encounter. In these moments, sexual refusal with

the word “no” was often communicated in response to the escalation of sexual activity, at which point boys described going back to the sexual activity that they had previously been engaging in with a partner.

There was some variability, however, in how boys and girls described signals of sexual refusal. Participants were asked to describe how adolescents respond if they do not want to engage in sexual activity, or proceed beyond previously consented sexual acts. Male participants predominantly described hearing the word “no” as a sign to stop sexual activity. For example, one male participant noted:

*If you want to do more, just make sure you're in the right position. If she says no you gotta respect it, that's when rape comes up.*

Overall, male participants generally described the seriousness of verbal sexual refusal. The inclusion of rape in the description of sexual refusal was found in one other response. Female participants, however, were more likely to describe non-verbal indications of sexual refusal behaviors among their peers. For example, when asked how girls convey they did not want to engage in sexual contact, one female participant provided the following response:

*Um, I'm guessing that they would like, if they didn't want something they would like try to move like they would move away from that person or they would like, if they were being touched or something they would like, again take away, remove the hands where they are. Or like push the person away a little.*

The example above illustrates the physical cues female adolescents may use to refuse sexual activity. Other participants shared the perspective that in addition to physically pushing a partner away, some female adolescents will make a face of discomfort. Female participants generally believed that male sexual partners would recognize physical signs of sexual refusal and cease sexual activity, similar to hearing “no.”

### **Theme #3 – “Once Yes, Always Yes”: Re-establishing Consent After a First Sexual Encounter is Unnecessary**

The majority of participants shared the view that establishing consent was unnecessary if two adolescents had already engaged in sexual activity. First, both male and female participants indicated that an adolescent can expect to have a second sexual encounter with the same partner because they assumed consent was carried over to future sexual activity. In other words, unless either partner objected to a second sexual encounter, it was a possibility. This perspective applied to both long-term relationships and casual-sex or “hook-up” relationships. For example, when queried about how sexual consent was established among partners who had shared in sexual activity before, one adolescent male suggested:

*Like they'll expect it and they'll think that it's okay to do it the next time because you already gave them your consent the first time... they think it's okay because it happened the first time. So they'll be like “What's the problem? Why can't it happen a second time?”*

Other participants shared that re-establishing consent was not necessary in long-term relationships. When describing how sexual consent might be established in long-term relationships, many participants discussed long-term partners “knowing” each other well enough that body language and non-verbal signals indicated sexual interest without the need for verbal confirmation of consent. Furthermore, many female participants shared that once sexual activity was initiated within established couples it becomes an expected component of the relationship. For example, one adolescent girl commented:

*Some of them they feel like if their partner really enjoys it and they don't want to sadden them or anger them then they might stay quiet. So it's like ‘okay I like this but I don't like this, but I don't wanna make you mad.*

The example illustrates that in addition to expecting sexual activity within established relationships, adolescents might not verbally refuse sexual activity out of fear they will upset their partner. Foregoing discussion of consent for the purpose of avoiding conflict was more commonly mentioned among female participants than male participants.

## **Discussion**

The present study explored perceptions of consent among high school participants. Adolescence is a time in development where many youth are exploring their sexual identity, and initiating romantic and sexual relationships. For these reasons, it is important to understand how adolescents understand sexual consent, so that this information can be taken into account when constructing educational curricula and sexual assault prevention programs. The present study, to our knowledge, represents the first qualitative analysis of how adolescent high school students conceptualize consent for sexual activity. Three themes were revealed in coding of the semi-structured interviews.

First, adolescents predominantly defined consent using a verbal standard of affirmative consent. Specifically, participants in the current study demonstrated a confident grasp on the definition of consent as verbalized permission to proceed with sexual activity, with the vast majority of responses in agreement that consent involves unambiguous, non-coercive, and non-forced agreement to sexual activity by both partners. Second, whereas adolescents defined sexual consent through a verbal standard of affirmative consent, they suggested that – in practice – sexual consent was more likely to be conveyed through non-verbal cues, especially through silence or the absence of a verbal refusal of sexual activity (i.e., saying “no”). These findings are notable, suggesting that while adolescents can provide a standard definition of consent, their understanding of how consent

translated into real life experiences varied – and rarely included experiences that could be defined as affirmative verbal consent.

Instead, adolescents described that consent was predominantly communicated by adolescent females' silence in response to the initiation of sexual activity (i.e., the absence of sexual refusal), or via subtle (i.e., a look) or overt (i.e., removing clothing) physical behaviors. The common experience of non-verbal signals among the high school participants are consistent with previous literature reporting high frequency of non-verbal sexual consent behaviors among college students (Beres, 2010; Hickman & Muehlenhard, 1999; Humphreys, 2007), suggesting that perceptions of what constitutes sexual consent may be established long before students arrive at college. In this study, both boys and girls reported using non-verbal cues to convey consent. Given that research among college students suggests that college men are more likely to use non-verbal cues than their female peers (Beres, 2010; Hickman & Muehlenhard, 1999; Jozkowski, Peterson, Sanders, Dennis, & Reece, 2014), future research using quantitative measures is needed to examine whether this trend holds true for younger adolescents. Although speculative, there may be changes in how youth communicate sexual consent in high school, compared to college.

It was notable that adolescents in the present sample did not describe using direct verbal communication as a method of conveying consent. Results of a previous qualitative study of adolescent sexual initiation experiences describe adolescent sexual decision making as a multi-step dynamic process, in which adolescents (average age 14.1 years) determine personal sexual boundaries, verbally communicate boundaries to their partner, and verbally negotiate boundaries in the moment (Michels et al, 2005). In

contrast to Michels's et al. (2005) findings, verbal communication of boundaries was accomplished primarily when refusing sexual activity, rather than when agreeing to sexual activity. The average participant age in the current study was three years older than the average participant in Michels et al., (2005), and it may be that non-verbal conveyance of consent is more common among older adolescents. It is reasonable to hypothesize that youth commonly trying out different communication patterns as they seek to negotiate sexual experiences, and learn what they like and don't like in the context of a sexual partnership.

Notably, without prompting, both male and female adolescents positioned the female in a sexual interaction as being responsible for conveying agreement to sexual activity. The reliance on female adolescents to determine the course of sexual activity through their consent or refusal is consistent with previous literature on traditional heterosexual scripts, which suggests that the gendered roles of consent may be driven by internalized expectations of sexual behavior, particularly among women (Bay-Cheng & Eliseo-Arras, 2008; Conroy et al., 2015; Ryan, 2011). Gagnon & Simon (1973) first proposed that sexual behavior is influenced by individuals' understanding of their role in sexual encounters, interpersonal sexual negotiation between partners, and broader cultural frameworks that promote gendered sexual roles. Jozkowski et al. (2014) explain that adolescent females experience sexual development within the prescribed script of sexual coyness and gradual acquiescence to persistent, and often aggressive, male sexual advances. The findings of the current study provide further evidence of varied understandings of consent by gender, which may reflect the power dynamics within sexual negotiation of consent (Hust et al., 2017).

Specifically, whereas the participants' descriptions aligned with previous studies' depictions of sexually assertive young males who test boundaries (Jozkowski et al., 2014), the male participants' staunch recognition of verbal refusal suggests keen awareness of sexual violence perpetration. Adolescent males' reliance of their female partners to verbally signal non-consent suggests that the version of "gatekeeping" described in the current study has less to do with relationship maintenance (Jozkowski, Marcantonio, & Hunt, 2017), and more to do with placing the responsibility of sexual violence prevention among female partners (Burkett & Hamilton, 2012). These results draw into question the potential harm posed by teaching adolescents legitimate consent behaviors are limited to verbal affirmation or refusal (Jozkowski, 2015). Specifically, if boys and men learn that sexual refusal is only communicated via the word "no", they may overlook many of the non-verbal indicators that girls and women report using to convey sexual refusal. Indeed, in the present sample, girls most often described using an array of non-verbal or physical indicators of sexual refusal.

Third, adolescents also perceived that once sexual activity had occurred between partners, consent for subsequent sexual activity was to be assumed. The majority of participants shared the perspective that if two people have already had a sexual encounter, sexual consent would not be required for future sexual activity. The discussion of long-term partners recognizing sexual interest without consent or discussion echoes previous findings of "tacit knowing" described by Beres (2010). These findings suggest that adolescents may not perceive continuous consent as a typical feature of their peers' long-term relationships. These results are consistent with previous research of negotiation of consent within college relationships (Burkett & Hamilton, 2012; Conroy et

al., 2015; Humphreys, 2007). For example, Conroy et al. (2015) report that young undergraduate women may acquiesce to sexual activity within relationships in order to satisfy their partners, maintain sexual scripts, and avoid negative consequences in their relationships. Jozkowski, Marcantonio, & Hunt (2017) describe similar complex understandings of consent among female undergraduate students who act as “sexual gatekeepers” in face of their partners’ sexual activity initiation, with careful consideration of how consent or refusal will affect the partner’s ego or the young women’s own reputation (p. 243).

### **Implications for Sexual Assault Prevention**

Mixed perceptions of what constitutes sexual consent among high school students highlight a critical area for attention in sexual violence prevention, as the results indicate that both primary and secondary sexual violence prevention strategies are needed to address unsafe consent norms among high school students. With regard to primary sexual violence prevention among high school students, the current findings support previous research highlighting the importance of establishing healthy and gender-equitable behaviors in early adolescent relationships, as ninth grade participants in the study perceived risky sexual activity as the norm (Lundgren & Amin, 2015). The results of the current study also suggest that sexual violence prevention in high schools must include secondary prevention for adolescents who already engage in risky sexual behaviors. From the findings emerge two key recommendations for sexual violence prevention among high school students.

Although the participants of the present study did not explicitly name gender norms in their description of sexual consent behavior, important gender differences

emerged in the data related to the perceived norms of sexual consent within heterosexual couples. The consent norms described by participants place a significant amount of responsibility on young women to make sexual decisions for the couple. Understanding consent strictly as “yes means yes” or the absence of a verbal no burdens young women with the task of “sexual gatekeeping” as a means of preventing assault (Burkett & Hamilton, 2012; Jozkowski, 2015). Furthermore, defining consent as females’ verbal “yes” or “no” leaves little room for non-verbal cues, including silence or signs of discomfort, to convey refusal. We interpret the current study’s findings as a challenge to the Miscommunication Hypothesis, which assumes acquaintance rape and sexual coercion are the result of miscommunication (McCaw & Senn, 1998). If male and female adolescents have the ability interpret subtle non-verbal cues as sexual consent, they can also recognize non-verbal cues of refusal (Beres, 2010; O’Byrne, Rapley, & Hansen, 2006). The present study’s findings suggest that adolescents may be at high risk of sexual violence not because of misinterpretation, but because their non-verbal signs of refusal are ignored or considered invalid. Sexual communication promotion must address the fundamental role that gender inequity plays in sexual violence in order to shift social norms toward respecting signs of sexual refusal (Jozkowski, 2015).

Activities that highlight sexual communication skill building may also be particularly useful in sexual violence prevention programs for high school students. The aims of these activities are two-fold: 1) normalize discussion of sexual consent; and 2) provide students the opportunity to practice verbal and non-verbal sexual consent communication and recognition skills with the knowledge that their partners are literate in sexual communication (Beres, 2010). Sexual violence prevention should aim to

promote discussion of sexual consent in any type of sexual relationship, at all grade levels, as a normal and comfortable component of relationships. Intervention strategies should address the misperception that a verbal “no” is the only indication of non-consent, or that their female peers are responsible for deciding how far the sexual activity goes. Structured role play activities can provide adolescents with the opportunity to practice discussing sexual consent in order to reduce the perceived awkwardness of the conversation; all activities and should normalize adolescents’ expectation that sexual partners will listen and respond to their sexual decision making with respect (Beres, 2010).

### **Limitations**

The findings of this study should be considered in light of several limitations. Varying degrees of sexual experience among the interview participants may affect their perspectives on typical sexual consent behaviors. The study included participants across four high school grades, therefore the typical norms participants described could refer to their own age-mates’ experiences as opposed to school-wide trends. The study’s sample size was derived from public and private high schools across the state of Rhode Island, therefore the present study’s findings cannot be generalized to other U.S. settings. The sensitive nature of the study topic and required parental consent may have prevented some adolescents from participating in the interviews. Further, the small sample size and the study’s commitment to confidentiality limits the capabilities of this analysis to examine demographic differences in the data beyond gender. The results cannot be generalized by race, ethnicity, or socio-economic status. Further, while the interview script did not limit the discussion to heteronormative consent behaviors, all participants

discussed the role of consent in heterosexual couples. As such, the current study cannot be generalized to all adolescent relationships. Consent norms among different types of adolescent sexual relationships present an important direction for future study. It should also be noted that the present study did not ask students to identify whether or not they were sexually active. Thus, it is unclear the extent to which the present findings represent the opinions and perspectives of sexually experienced versus sexually inexperienced youth. An understanding of sexual communication likely develops in part through adolescents' own experiences with sexual activities, as youth try out and experiment with different communication patterns. Future research would benefit from directly comparing the perspectives of adolescents who have previously engaged in sexual activity, to the experiences of youth who are not sexually active.

### **Conclusion**

High school students' sexual consent norms have received less attention in sexual violence research than those of college-aged students, however the results indicate that adolescents may face similar risks of sexual violence within their relationships. The current study is an important first step towards understanding how adolescents define and perceive sexual consent. Whereas definitions of sexual consent may be clear to adolescents as including a clear affirmative verbal affirmation of sexual activity, it is clear that in practice, adolescents convey consent through a much greater array of non-verbal strategies. As violence prevention efforts are necessary early in the life course, it is essential that researchers and practitioners not only engage youth in discussions of the definition of consent, but also ensure that conversations include discussion of how consent is actually conveyed in the context of a sexual partnership.

## References

- Bay-Cheng, L. Y., & Eliseo-Arras, R. K. (2008). The making of unwanted sex: Gendered and neoliberal norms in college women's unwanted sexual experiences. *The Journal of Sex Research*, 45, 386–397. Retrieved from [www.jstor.org/stable/20620386](http://www.jstor.org/stable/20620386)
- Beres, M. (2010). Sexual miscommunication? Untangling assumptions about sexual communication between casual sex partners. *Culture, Health and Sexuality*, 12, 1–14. doi.org/10.1080/13691050903075226
- Black, M. C., Basile, K. C., Breidling, M. J., Smith, S. G., Walters, M. L., Merrick, M. T., ... Stevens, M. R. (2011). The National Intimate Partner and Sexual Violence Surveys (NISVS): 2010 Summary Report. *National Center for Injury Prevention and Control, Centers for Disease Control and Prevention*.
- Braun, V., & Clarke, V. (2006). Full-Text. *Qualitative Research in Psychology*, 3, 77–101. doi.org/10.1191/1478088706qp063oa
- Burkett, M., & Hamilton, K. (2012). Postfeminist sexual agency: Young women's negotiations of sexual consent. *Sexualities*, 15, 815–833. doi.org/10.1177/1363460712454076
- Centers for Disease Control and Prevention. (2014). Sexual violence surveillance: Uniform definitions and recommended data elements. Retrieved from [www.cdc.gov/violenceprevention/pdf/sv\\_surveillance\\_definitions1-2009-a.pdf](http://www.cdc.gov/violenceprevention/pdf/sv_surveillance_definitions1-2009-a.pdf)
- Centers for Disease Control and Prevention. (2017). Teen dating violence. Retrieved from [www.cdc.gov/violenceprevention/intimatepartnerviolence/teen\\_dating\\_violence.htm](http://www.cdc.gov/violenceprevention/intimatepartnerviolence/teen_dating_violence.htm)

- Conroy, N. E., Krishnakumar, A., & Leone, J. M. (2015). Reexamining issues of conceptualization and willing consent: The hidden role of coercion in experiences of sexual acquiescence. *Journal of Interpersonal Violence*, 30, 1828–1846.
- Decker, M. R., Silverman, J. G., & Raj, A. (2005). Dating violence and sexually transmitted disease/HIV testing and diagnosis among adolescent females. *Pediatrics*, 116, e272 LP-e276. Retrieved from [www.pediatrics.aappublications.org/content/116/2/e272.abstract](http://www.pediatrics.aappublications.org/content/116/2/e272.abstract)
- Eaton, D. K., Kann, L., Kinchen, S., Shanklin, S., Ross, J., Hawkins, J., ... Wechsler, H. (2010). Youth risk behavior surveillance - United States, 2009. *Morbidity and Mortality Weekly Report. Surveillance Summaries (Washington, D.C.: 2002)*, 59, 1–142.
- Farris, C., Viken, R. J., Treat, T. A., & McFall, R. M. (2006). Heterosocial perceptual organization: Application of the choice model to sexual coercion. *Psychological Science*, 17, 869–875. doi.org/10.1111/j.1467-9280.2006.01796.x
- Finkelhor, D., Shattuck, A., Turner, H. A., & Hamby, S. L. (2014). The lifetime prevalence of child sexual abuse and sexual assault assessed in late adolescence. *Journal of Adolescent Health*, 55, 329–333. doi.org/10.1016/j.jadohealth.2013.12.026
- Gagnon, J. H., & Simon, W. (1973). *Sexual conduct: the social sources of human sexuality*. Chicago: Aldine Pub.Co.
- Gidycz, C. A., Coble, C. N., Latham, L., & Layman, M. J. (1993). Sexual assault experiences in adulthood and prior victimization experiences. *Psychology of Women Quarterly*, 17, 151–168. doi.org/10.1111/j.1471-6402.1993.tb00441.x

- Hickman, S. E., & Muehlenhard, C. L. (1999). "By the semi-mystical appearance of a condom": How young women and men communicate sexual consent in heterosexual situations. *The Journal of Sex Research*, 36, 258–272.  
doi.org/10.1080/00224499909551996
- Horne, S., & Zimmer-Gembeck, M. J. (2005). Female sexual subjectivity and well-being: Comparing late adolescents with different sexual experiences. *Sexuality Research and Social Policy*, 2, 25–40. doi.org/10.1525/srsp.2005.2.3.25
- Humphrey, J. A., & White, J. W. (2000). Women's vulnerability to sexual assault from adolescence to young adulthood. *Journal of Adolescent Health*, 27, 419–424.  
doi.org/10.1016/S1054-139X(00)00168-3
- Humphreys, T. (2007). Perceptions of sexual consent: The impact of relationship history and gender. *The Journal of Sex Research*, 44, 307–315. Retrieved from  
www.jstor.org/stable/pdf/20620316.pdf?refreqid=excelsior%3A80cbe3f190cd2a40bd9791a772baf85a
- Hust, S. T., Rodgers, K. B., & Bayly, B. (2017). Scripting sexual consent: Internalized traditional sexual scripts and sexual consent expectancies among college students. *Family Relations*, 66, 197-210. doi:10.1111/fare.12230
- Jacques-Tiura, A. J., Abbey, A., Parkhill, M. R., & Zawacki, T. (2007). Why do some men misperceive women's sexual intentions more frequently than others do? An application of the Confluence Model. *Personality & Social Psychology Bulletin*, 33, 1467–1480. doi.org/10.1177/0146167207306281
- Jozkowski, K. N. (2015). "Yes means yes"? Sexual consent policy and college students. *Change: The Magazine of Higher Learning*, 47, 16–23. doi.org/10.1363/psrh.12041

- Jozkowski, K. N., Marcantonio, T. L., & Hunt, M. E. (2017). College students' sexual consent communication and perceptions of sexual double standards: A qualitative investigation. *Perspectives on Sexual and Reproductive Health*, 49, 237–244. doi.org/10.1363/psrh.12041
- Jozkowski, K. N., Peterson, Z. D., Sanders, S. A., Dennis, B., & Reece, M. (2014). Gender differences in heterosexual college students' conceptualizations and indicators of sexual consent: Implications for contemporary sexual assault prevention education. *Journal of Sex Research*, 51, 904–916. doi.org/10.1080/00224499.2013.792326
- Kotchick, B. A., Shaffer, A., Miller, K. S., & Forehand, R. (2001). Adolescent sexual risk behavior: A multi-system perspective. *Clinical Psychology Review*, 21, 493–519. doi.org/10.1016/S0272-7358(99)00070-7
- Lofgreen, A. M., Mattson, R. E., Wagner, S. A., Ortiz, E. G., & Johnson, M. D. (2017). Situational and dispositional determinants of college men's perception of women's sexual desire and consent to sex: A factorial vignette analysis. *Journal of Interpersonal Violence*, 1, 886260517738777. doi.org/10.1177/0886260517738777
- Lindgren, K. P., Schacht, R. L., Pantalone, D. W., Blayney, J. A., & George, W. H. (2009). Sexual communication, sexual goals, and students' transition to college: Implications for sexual assault, decision-making, and risky behaviors. *Journal of College Student Development*, 50, 491–503. Retrieved from www.muse.jhu.edu.revproxy.brown.edu/article/317035

- Lundgren, R., & Amin, A. (2015). Addressing intimate partner violence and sexual violence among adolescents: Emerging evidence of effectiveness. *Journal of Adolescent Health*, 56, S42–S50. doi.org/10.1016/j.jadohealth.2014.08.012
- McCaw, J. M., & Senn, C. Y. (1998). Perception of cues in conflictual dating situations: A test of the miscommunication hypothesis. *Violence Against Women*, 4, 609–624. doi.org/10.1177/1077801298004005006
- McFarlane, J., Malecha, A., Watson, K., Gist, J., Batten, E., Hall, I., & Smith, S. (2005). Intimate partner sexual assault against women: frequency, health consequences, and treatment outcomes. *Obstetrics and Gynaecology Forum*, 105, 99–108. doi.org/10.1097/01.AOG.0000146641.98665.b6
- McLaughlin, K. A., Koenen, K. C., Hill, E. D., Petukhova, M., Sampson, N. A., Zaslavsky, A. M., & Kessler, R. C. (2013). Trauma Exposure and Posttraumatic Stress Disorder in a National Sample of Adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 52, 815–830.e14. doi.org/10.1016/j.jaac.2013.05.011
- Metts, S., & Spitzberg, B. H. (1996). Sexual communication in interpersonal contexts: A script-based approach. In *Communication yearbook 19*. (pp. 49–91). Thousand Oaks, CA, US: Sage Publications, Inc.
- Michels, T. M., Kropp, R. Y., Eyre, S. L., & Halpern-Felsher, B. L. (2005). Initiating sexual experiences: How do young adolescents make decisions regarding early sexual activity? *Adolescence*, 15, 583–607. doi.org/10.1111/j.1532-7795.2005.00112.x

- Miller, E. (2017). Prevention of and interventions for dating and sexual violence in adolescence. *Pediatric Clinics of North America*, 64, 423–434.  
doi.org/10.1016/j.pcl.2016.11.010
- Muehlenhard, C. L., Humphreys, T. P., Jozkowski, K. N., & Peterson, Z. D. (2016). The complexities of sexual consent among college students: A conceptual and empirical review. *Journal of Sex Research*, 53, 457–487.  
doi.org/10.1080/00224499.2016.1146651
- O’Byrne, R., Rapley, M., & Hansen, S. (2006). “You couldn’t say “no”, could you?": Young men’s understandings of sexual refusal. *Feminism and Psychology*, 16, 133–154. doi.org/10.1177/0959-353506062970
- Orchowski, L.M., Malone, S., Pearlman, D., Rizzo, C., Zlotnick, C., Oesterle, D., Andoscia, G., Lokey, C., Latzman, N., & Spies, E. (2016, August). *Preventing sexual assault among high school teens: A pilot evaluation of Your Voice Your View*. Paper presented at the Annual Conference of the American Psychological Association, Denver, CO.
- Planty, M., Langton, L., Krebs, C., Berzofsky, M., & Smiley-McDonald, H. (2013). Female victims of sexual violence, 1994-2010. *U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics*. Retrieved from [www.bjs.gov/content/pub/pdf/fvsv9410.pdf](http://www.bjs.gov/content/pub/pdf/fvsv9410.pdf)
- QSR International Pty Ltd. NVivo qualitative data analysis Software. Version 11, 2017.
- Rennison, C. M. (2000). Criminal Victimization 2000: Changes 1999-2000 with Trends 1993-2000. *U.S. Department of Justice, Office of Justice Programs, Justice of Bureau Statistics*. Retrieved from [www.bjs.gov/content/pub/pdf/cv00.pdf](http://www.bjs.gov/content/pub/pdf/cv00.pdf)

- Risser, H. J., Hetzel-Riggin, M. D., Thomsen, C. J., & McCanne, T. R. (2006). PTSD as a mediator of sexual revictimization: The role of reexperiencing, avoidance, and arousal symptoms. *Journal of Traumatic Stress, 19*, 687–698. doi.org/doi-org.revproxy.brown.edu/10/1002/jts.20156
- Ryan, K. M. (2011). The Relationship between Rape Myths and Sexual Scripts: The Social Construction of Rape. *Sex Roles, 65*, 774–782. doi.org/10.1007/s11199-011-0033-2
- Student Safety: Sexual Assault Act, Cal. EDC. §15.5-67380 - 67386 (2014). Retrieved from  
leginfo.legislature.ca.gov/faces/codes\_displaySection.xhtml?lawCode=EDC&sectionNum=67386.
- Weinstock, H., Berman, S., & Cates, W. (2004). Sexually transmitted diseases among American youth: Incidence and prevalence estimates, 2000. *Perspectives on Sexual and Reproductive Health, 36*, 6–10. Retrieved from www.jstor.org/stable/3181210
- Williams, C. M., Cook-Craig, P. G., Bush, H. M., Clear, E. R., Lewis, A. M., Garcia, L. S., ... Fisher, B. S. (2014). Victimization and Perpetration of Unwanted Sexual Activities Among High School Students: Frequency and Correlates. *Violence Against Women, 20*, 1239–1257. doi.org/10.1177/1077801214551575
- 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. Retrieved from dx.doi.org/10.1001/jamapediatrics.2013.262

**Table 1.****Demographic Characteristics of Enrolled Participants (N = 33)**

| <i>Characteristic</i>                          | <i>N, %</i>      |
|------------------------------------------------|------------------|
| <b>Mean age (years)</b>                        | 17 (range 14-19) |
| <b>Grade</b>                                   |                  |
| Freshman                                       | 3 (9.1%)         |
| Sophomore                                      | 12 (36.4%)       |
| Junior                                         | 13 (39.4%)       |
| Senior                                         | 5 (15.1%)        |
| <b>Gender</b>                                  |                  |
| Female                                         | 20 (60.6%)       |
| Male                                           | 11 (33.3%)       |
| Transgender                                    | 2 (6.1%)         |
| <b>Ethnicity</b>                               |                  |
| Hispanic/Latino                                | 20 (60.6%)       |
| Non-Hispanic/Latino                            | 8 (24.3%)        |
| Unknown                                        | 5 (15.1%)        |
| <b>Race</b>                                    |                  |
| Black/African American                         | 6 (18.2%)        |
| White                                          | 3 (9.1%)         |
| Native Hawaiian or Pacific Islander            | 1 (3%)           |
| More than one race                             | 3 (9.1%)         |
| Unknown                                        | 20 (60.6%)       |
| <b>Sexual Orientation</b>                      |                  |
| Heterosexual                                   | 23 (69.6%)       |
| Bisexual                                       | 4 (12.2%)        |
| Prefer not to answer                           | 6 (18.2%)        |
| <b>Dating Status</b>                           |                  |
| Dates casually                                 | 9 (27.3%)        |
| Involved in committed relationship (>6 months) | 7 (21.2%)        |
| Does not date                                  | 11 (33.3%)       |
| Prefers not to answer                          | 6 (18.2%)        |
| <b>Free/Reduced Lunch</b>                      |                  |
| Yes                                            | 26 (78.8%)       |
| No                                             | 2 (6.1%)         |
| Unknown                                        | 5 (15.1%)        |

**Table 2.**

**Kappa Statistics for Study Themes**

|                             | Hierarchical<br>Consent Code | Definition of<br>Consent | Conveyance of<br>Consent | Continuous<br>Consent | Total |
|-----------------------------|------------------------------|--------------------------|--------------------------|-----------------------|-------|
| Kappa                       | 0.946                        | 0.899                    | 0.946                    | 0.898                 | 0.922 |
| Percent<br>Agreement<br>(%) | 98.95                        | 99.8                     | 99.35                    | 99.69                 | 99.4  |