## Western Michigan University ScholarWorks at WMU

Dissertations

Graduate College

12-2018

# Preventing Sexual Victimization: An Assertiveness Training Program for Female Adolescents

Emily Morgan Western Michigan University, ecfmorgan@gmail.com

Follow this and additional works at: https://scholarworks.wmich.edu/dissertations

Part of the Clinical Psychology Commons

#### **Recommended Citation**

Morgan, Emily, "Preventing Sexual Victimization: An Assertiveness Training Program for Female Adolescents" (2018). *Dissertations*. 3361. https://scholarworks.wmich.edu/dissertations/3361

This Dissertation-Open Access is brought to you for free and open access by the Graduate College at ScholarWorks at WMU. It has been accepted for inclusion in Dissertations by an authorized administrator of ScholarWorks at WMU. For more information, please contact wmu-scholarworks@wmich.edu.





### PREVENTING SEXUAL VICTIMIZATION: AN ASSERTIVENESS TRAINING PROGRAM FOR FEMALE ADOLESCENTS

by

Emily Morgan

A dissertation is submitted to the Graduate College in partial fulfillment of the requirements for the degree of Doctorate of Philosophy Clinical Psychology Western Michigan University December 2018

Dissertation Committee:

Amy Damashek, Ph.D., Chair Amy Naugle, Ph.D. Scott Gaynor, Ph.D. Tara Sjuts Ph.D. Copyright by Emily Morgan 2018

### PREVENTING SEXUAL VICTIMIZATION: AN ASSERTIVENESS TRAINING PROGRAM FOR FEMALE ADOLESCENTS

Emily Morgan M.A.

Western Michigan University, 2018

Unwanted sexual experiences occur too frequently in the United States and result in myriad deleterious consequences. The first instances of unwanted sexual experiences for females most frequently occur during adolescence (ages 12 to 17). Despite this, the majority of literature on sexual victimization and victimization prevention programs focus on college-aged females, thus leaving a need for research on prevention programs for adolescent females. The present study examined the effects of an assertiveness training program on the risk for sexual coercion among adolescent females. A behavioral skills training model (i.e. instruction, model, rehearsal, and feedback) was used to teach seven adolescent females assertiveness skills over the course of six group-based sessions. Participants engaged in rehearsals of assertiveness skills with group members, as well as with a male research assistant. Self-report data was gathered to assess for changes in self-reported sexual experiences, general assertiveness skills, and risk for sexual coercion. Observational data were collected during one-on-one role plays and were coded to measure changes in assertive behaviors throughout the study. We found no significant changes in risk in group level analyses; however slight mean changes in the expected direction were made on the majority of the scales. Individually, one participant met criteria for change using the Reliable Change Index (RCI) for improvement in signaling sexual boundaries. Slight increases were noted in observed eye contact, assertive volume and tone, and assertive nonverbals. Nonoverlap of All Pairs (NAPs) supports these findings. Self-reported increased of assertive volumes and tone of voice were found.

### TABLE OF CONTENTS

LIST OF TABLES	iv
LIST OF FIGURES	v
INTRODUCTION	1
Consequences of Sexual Victimization	1
Risk and Protective Factors for Sexual Victimization	
Research on Skills Training as a Means for Sexual Victimization Prevention	6
Summary	8
Present Study Goals	9
METHODS	
Procedures	10
Participants	
Measures	11
Demographics.	11
Assertiveness	
Sexual Victimization	16
Satisfaction	17
Intervention & Assessment	
Data Analysis	
RESULTS	
Self-Report Measures of Assertiveness and Risk for Sexual Coercion	
Assertiveness Vignettes	
Assertiveness Vignettes for Participant 100	
Assertiveness Vignettes Participant 200	
Assertiveness Vignettes Participant 300	
Assertiveness Vignettes Participant 400	
Assertiveness Vignettes Participant 500	30
Assertiveness Vignettes Participant 600	

Assertiveness Vignettes Participant 700	31
Applied Assertiveness Skills Questionnaire	32
AASQ Participant 200	33
AASQ Participant 300	34
AASQ Participant 400	35
AASQ Participant 500	36
AASQ Participant 700	36
Observational Data	38
Observational Data for Participant 100	38
Observational Data for Participant 200	38
Observational Data for Participant 300	39
Observational Data for Participant 400	40
Observational Data for Participant 500	41
Observational Data for Participant 600	42
Observational Data for Participant 700	42
Summary of Participant Data	43
DISCUSSION	44
Limitations and Implications	49
REFERENCES	53
APPENDICES	59
A. Participant Data	59
B. Session Outline	76
C. Sessions Flow Chart	93
D. Measures	100
E. Individual Role-Play Scripts	116
F. Coding Sheets	118
G. Recruitment Script	125
H. HSIRB Letter of Approval	130

### LIST OF TABLES

1 Participant Demographics	59
2 ANOVA Means and Standard Deviations	60
3.1 RCI ASCRS- Signaling Sexual Boundaries Subscale	61
3.2 RCI ASCRS- Risky Sexual Behavior Subscale	61
3.3 RCI SAS- Refusal Subscale	61
3.4 RCI SAS- Pregnancy and STD Prevention Subscale	61
3.5 RCI CADRI	62
3.6 RCI SRAS	62
4 Observational Data Statistics by Participant	68

### LIST OF FIGURES

1.1 Participant 200 Assertiveness Vignettes	63
1.2 Participant 300 Assertiveness Vignettes	64
1.3 Participant 400 Assertiveness Vignettes	65
1.4 Participant 500 Assertiveness Vignettes	66
1.5 Participant 700 Assertiveness Vignettes	67
2.1 Participant 200 Observational Data	71
2.2 Participant 300 Observational Data	72
2.3 Participant 400 Observational Data	73
2.4 Participant 500 Observational Data	74
2.5 Participant 700 Observational Data	75

#### INTRODUCTION

Sexual victimization is a serious problem in the United States. According to the National Violence Against Women Survey (conducted by the U.S. Department of Justice), it is estimated that 17.6% of the women in the United States report being raped at some time in their life (from childhood to adulthood; Tjaden & Theonnes, 2006). The report indicates that 32.4% of female rape victims experienced their first assault between the ages of 12 and 17 (Tjaden & Theonnes, 2006). Additionally, between the years 1994 and 2010 females ages 12 to 17 have consistently reported higher rates of sexual victimization than any other age group (Planty, Langton, Krebs, Berzofsky, & Smiley-McDonald, 2013). Specifically, between the years 2005 and 2010 incidence rates of sexual victimization per 1,000 females were 4.1 among 12-17 year olds, 3.7 among 18-34 year olds, and 1.5 among 35-64 year olds. Perpetrators of sexual assault against adolescent (ages 12 to 17) females are most likely to be current or former intimate partners (35.9%) or acquaintances (33.3%; Tjaden & Theonnes, 2006).

Psychological researchers commonly define sexual victimization as the occurrence of any unwanted touching, fondling, kissing, intercourse, or penetration by use of physical force, threats, (Testa, VanZile-Tamsen, Livingston & Koss, 2004) or coercion (Lacasse & Mendelson, 2007). Sexual victimization may also involve psychological pressure or may occur when an individual is unable to give consent (Tjaden & Theonnes, 2006).

#### Consequences of Sexual Victimization

Several studies have reported negative psychological consequences associated with sexual victimization. A meta-analysis conducted by Chen et al. (2010) reviewed 37 longitudinal studies with control groups that focused on child and adult victimization for males and females

Victimization was organized into two groups; rape (e.g. oral, anal, or vaginal penetration) and all other forms of sexual abuse (e.g. threat of sexual violence, and genital contact). The authors found an association between a history of sexual victimization and lifetime prevalence of anxiety, depression, Post-Traumatic Stress Disorder (PTSD), eating disorders, suicide attempts, and sleep disorders. These results were observed across individuals, regardless of their age at victimization. When comparing the two groups of victimization type, a history of rape was found to have a stronger relationship to a diagnosis of depression, PTSD, and eating disorders than other forms of sexual abuse (e.g., threat of sexual violence).

Mason and Lodrick (2013) more recently reviewed studies that examined the psychological consequences of sexual assault post-victimization. They also found that victims of sexual assault may suffer from depression and posttraumatic stress symptoms, as well as impairments in sexual functioning, difficulties with social adjustment and re-establishing intimate relationships, and engagement in self-harming behaviors. In addition, they reported that victims who suffer from posttraumatic symptoms may attempt to "self-medicate" by abusing alcohol or drugs.

Brown, Testa and Messman-Moore (2009) compared consequences for three types of sexual victimization (i.e., physically forced, incapacitated by drugs or alcohol, and verbal coercion) among female college students and from a community sample and found that women who experienced forced sexual victimization reported higher levels of posttraumatic stress symptoms and overall distress, followed by those reporting incapacitated victimization. Those who reported sexual coercion endorsed the lowest levels of posttraumatic stress symptomology and overall distress.

Increased risk for sexual *revictimization* is another deleterious consequence of sexual victimization. Classen, Palesh, & Aggarwal (2005) conducted a literature review regarding the phenomena of sexual revictimization for adults, adolescents, and children. The authors found that those women who had a history of both childhood sexual abuse and adolescent sexual assault were at the highest risk for re-victimization in college, followed by females who were only victimized during adolescence. However, the relationship between childhood sexual abuse and revictimization in college became non-significant when sexual assault in adolescence was controlled. Thus, victimization during adolescence puts a female at significant risk for sexual revictimization later in life.

#### Risk and Protective Factors for Sexual Victimization

Research suggests that there are many risk factors for adolescents and young adults to experience sexual victimization. Previous sexual victimization has been shown to predict later unwanted sexual encounters (Greene & Navarro, 1998; Humphrey & White, 2000; Small & Kerns, 1993; Testa & Dermen, 1999 and Vogel & Himelein, 1995). Several studies, both prospective (Greene & Navarro, 1998) and retrospective (Testa & Dermen, 1999; Vogel & Himelen, 1995), have found that females victimized during adolescence and women reporting a history of sexual abuse during childhood had increased chances of later sexual victimization. A prospective study by Humphery and White (2000) assessed sexual victimization among women in college. The authors found that women victimized during childhood had twice the likelihood of being victimized in adolescence. In addition, rates of sexual victimization among college aged women were highest for those who endorsed their first sexual victimization during adolescence.

Alcohol consumption and the use of other substances have also been found to increase women's risk for sexual victimization. Several researchers have reported that adult females (18 years and older) who consume greater quantities of alcohol, or drink more frequently are at a higher risk for sexual victimization than peers who do not drink as often or in as great of quantities (Greene & Navarro, 1998; Livingston et al, 2007; Testa & Dermen, 1995 and Yeater et al., 2008). Adolescent and pre-college females who consume alcohol are also at higher risk for unwanted sexual experiences than adolescents who refrain from drinking (Lacasse & Mendelson, 2007; Small & Kerns, 1993 and Vogel & Himelein, 1995).

Lack of supervision by parents or caregivers is another identified risk factor for unwanted sexual experiences among adolescent females (Livingston, Hequembourg, Testa, & Vanzile-Tamsen, 2007; Small & Kerns, 1993). Small and Kerns (1993) administered self-report measures to 7<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade females that asked questions about unwanted sexual activity, risk factors for unwanted sexual experiences and perpetrators of the unwanted sexual act. The authors found that lack of parental monitoring was the strongest predictor of sexual victimization in comparison to other risk factors including sexual abuse history, excessive alcohol use, and peer conformity. Similar results were found by Livingston, Hequembourg, Testa and Vanzile-Tamsen (2007). Risk factors for adolescent sexual victimization were assessed using a sample of 18- to 30- year old women who had a history of adolescent sexual victimization. Participants reported on information that was unique to their sexual victimization during adolescence. It was found that lack of guardianship (i.e., any situation in which parent or guardian supervision or protection are not available) was a strong risk factor for sexual victimization during adolescence (Livingston, Hequembourg, Testa, & Vanzile-

Additional studies have found a variety of other factors that were related to risk for sexual victimization, including adversarial sexual beliefs (e.g. beliefs that sexual relationships are exploitative; Vogel & Himelein, 1995), higher levels of conformity to peers (Small and

Kerns, 1993), concern about social and relationship repercussions of declining sexual advances (Livingston, Hequembourg, Testa, & Vanzile- Tamsen, 2007), greater amounts of sexual activity, higher number of sexual partners, greater levels of sexual risk taking behaviors (Bramsen, Lasgaard, Koss, Elklit, & Banner; 2011), and higher levels of anxiety and depression (Greene & Navarro, 1998). In a study that examined specific dating situations in which sexual victimization occurred it was found that victimized women were less likely to have engaged in planning the date, engaged in sexual activity during the date, and endorsed that the man they were with made them feel uncomfortable, and made hostile comments (Yeater, Lenberg, Avina, Rinchart & O'Donohue, 2008).

Finally, lack of assertiveness has been found to be a risk factor for sexual victimization. Several studies have indicated that that low levels of assertiveness predicted sexual victimization among college-aged females, while high levels of assertiveness were found to be protective against sexual victimization (Greene and Navarro, 1998; Vogel & Himelein, 1995; and Yeater, et al., 2008). Difficulties with assertive behaviors (e.g. setting sexual limits and not knowing how to respond when sexual encounters became uncomfortable) have also been found to be vulnerability factors for sexual victimization among adolescent females (Livingston, Hequembourg, Testa, and Vanzile-Tamsen, 2007). Similarly, individuals who engage in selfprotective strategies during unwanted sexual encounters have been shown to have more positive outcomes. Greenfeld (1997) reported on data compiled from over two dozen datasets held by the Bureau of Justice Statistics and the Unified Crime Reporting program of the FBI and found that seven out of ten victims of sexual victimization reported using self-protective strategies (e.g. scared or warned perpetrator, or resisted). Over half of those who engaged in self-protective strategies felt as though it somehow helped their situation. These findings suggest that it may be beneficial for prevention programs to focus on training women in assertive behaviors to reduce their risk of victimization. Indeed, several studies have examined the relation between assertiveness training and risk for sexual victimization.

#### Research on Skills Training as a Means for Sexual Victimization Prevention

The majority of research regarding training assertive behaviors to prevent victimization has focused on college-aged females, (e.g. Brecklin, 2004; Brecklin & Ullman, 2005; Simpson Rowe, Jouriles, McDonald, Platt, & Gomez, 2012; Weitlauf, Smith, & Cervone, 2000) despite the fact that adolescents are at high risk for peer-perpetrated sexual victimization. Brecklin and Ullman (2005) used a dataset obtained through the National Survey of Intergender Relationships completed by 3,187 female college students to assess the relationship between self-defense or assertiveness training and sexual victimization. Those with self-defense or assertiveness training prior to their unwanted sexual experiences reported that their resistance to the offender made the offender less aggressive or stopped the offender. Researchers have also examined the impact of skills training programs directed at children to prevent childhood sexual abuse. Such programs teach children behaviors that can be considered assertive (e.g. saying "No" or "Stop"), often using a behavior skills training model to effectively teach said behaviors (Wurtele, 2008). Though these programs tend to result in increases in preventative behaviors, they target preventative behaviors to be used by children against adult perpetrators.

Weitlauf, Smith, & Cervone, (2000) recruited eighty female undergraduates from an urban university to participate in a study to examine the effects of self-defense training. Participants were randomly assigned to the control wait-list group or the experimental group. Females' assertiveness, aggression, perceived vulnerability, locus of control, self-esteem and self-efficacy were measured at three points throughout the study. There were significant increases in assertiveness among women in the self-defense training program in comparison to those in the control group at the conclusion of the study. However, despite the initial increase in assertiveness these behaviors did not maintain at the six-month follow-up. The authors did not specifically examine risk for sexual victimization.

Simpson Rowe, Jouriles, McDonald, Platt, and Gomez (2012) conducted a pilot study of the Dating Assertiveness Training Experience (DATE) using 102 undergraduate females. This training program used role play scenarios with members of the opposite sex to train assertive behaviors in order to decrease the chance of sexual victimization. They compared this treatment group to a control group who did not receive any intervention. The authors measured sexual victimization using items drawn from two self-report questionnaires. Assertive responses to victimization were measured using a questionnaire regarding unwanted sexual experiences and the individual's responses to these experiences (e.g. I said "No" or "Stop", or "I went along with it"). Women in the DATE group were less likely than the control group to be sexually victimized after the 16-week study. Among those who were sexually victimized, females in the DATE condition were more likely to report responding assertively to their offender when compared to the control condition.

In 2014 Simpson Rowe and colleagues conducted a pilot trial of a program called My Voice My Choice (MVMC), a 90 minute assertive resistance training program. This program was facilitated through an immersive virtual environment (IVE) during which participants practiced using assertiveness skills in sexually coercive virtual role plays. After role plays were conducted participants received feedback on their skill use. Forty seven adolescent females were randomized to receive this program while 36 adolescent females were randomized into a wait-list control group. Results indicate that participants who received the MVMC program were less

likely to victims of unwanted sexual experiences at the three-month follow-up compared to those in the wait-list control group. These results indicate the use of an assertiveness training program that utilizes realistic role plays and provides participants with feedback on their skill use reduces the risk for unwanted sexual experiences.

#### Summary

Research indicates that about a third of sexual victimization occurs between the ages of 12 and 17 (Tjaden & Theonnes, 2006) and that assertiveness skills may reduce the likelihood of victimization (Greene & Navarro, 1998). It has also been reported that those at greater risk for revictimization are individuals who had their first instance of sexual victimization in adolescence versus those who experienced sexual victimization in childhood or adulthood (Classen, Palesh, & Aggarwal, 2005). Despite these findings, most research on programs training assertiveness skills include college aged or adult females as participants (e.g. Greene & Navarro, 1997; Livingston, Hequembourg, Testa, & Vanzile-Tamsen, 2007; Simpson Rowe, Jouriles, McDonald, Platt, & Gomez, 2012). Given the fact that adolescents are at a high risk for sexual victimization and that the most common perpetrators are peers, it is necessary to develop sexual assault prevention programs for this age group. Such programs should be aimed at improving protective factors while minimizing risk factors for sexual victimization. Assertive behaviors have been established as a protective factor for sexual victimization, and that training adolescents in assertiveness skills may help to lower their risk for sexual victimization (Simpson Rowe, Jouriles, & McDonald, 2014).

Present Study Goals

The goals of the present study were to teach adolescent females assertiveness skills using a behavioral skills training model to increase assertive behaviors and decrease the risk for sexual coercion. It was hypothesized that participants' skill level in individual assertive behaviors (i.e. eye contact, making a request, denying a request, and nonverbal behavior) would increase as each of these skills was introduced over the course of the study, and their risk for sexual victimization would decrease. It was hypothesized that:

- There would be an increase in each assertiveness skill measured via observation from baseline to after the introduction of the respective assertiveness skill, and these skills would maintain when measured in the four-week follow-up.
- 2) There would be an increase in the number of assertiveness skills used in hypothetical scenarios reported on the Assertiveness Vignettes, and these increases would occur systematically after the introduction of each respective skill.
- 3) There would be an increase in the number of assertiveness skills participants used between sessions as reported in the Applied Assertiveness Skills Questionnaire; and these skills would increase systematically as each respective skill was introduced.
- There would be an increase in assertiveness as measured by the SAS and the S-RAS from baseline to post-intervention and to the follow-up session
- 5) There would be a decrease in the number of unwanted sexual experiences from baseline to post-intervention and to the follow-up as assessed by the CADRI
- 6) There would be a decrease in sexual risk coercion measured by the ASCRS from baseline to post-intervention, and to the follow-up session.

#### METHODS

The present study used a single-subject multiple baseline design to examine if assertiveness skills are associated with changes in observed and self-reported assertive behaviors. Changes in pre-post self-reported assertiveness and risk for sexual coercion were examined at a group level. Participants were 7 female adolescents (ages 12-17) recruited from the community around Kalamazoo, Michigan. Sessions took place in two rooms at the Unified Clinics in Kalamazoo.

#### Procedures

A behavior skills training model (BST; i.e. instruction, modeling, rehearsal, and feedback) was used to teach participant assertiveness skills as a means to reduce the risk for sexual coercion by a peer. The program was delivered in six weekly group sessions that lasted an hour and a half to two hours each. A total of three groups were held. Groups one and two included two participants each, and group three included three participants. Target assertiveness skills were introduced systematically throughout the six-week intervention, and changes in assertive behavior were expected to occur after the respective skills were introduced in session. Baseline data for self-report measures and overt skills were collected during the consent session and prior to content delivery during session one. Follow-up data were collected at four weeks post-intervention. A battery of self-report assessments was administered during the consent, first, sixth, and follow-up sessions. The assessments were used to examine past sexual experiences, risk for sexual coercion, and assertiveness skills (see the session flow-chart for a breakdown of the session progression including the introduction of interventions and the process of data collection). Moreover, participants completed vignettes and participated in videotaped role-plays in each of the sessions.

Participants

Participants were seven adolescent females who were recruited from the community in and around Kalamazoo Michigan. See Table 1 for details regarding participant group membership, the sessions each participant completed, and demographic variables. Participants' guardians completed the demographics questionnaire. The mean age of participants was 14.4 years. Three participants were in eighth grade, one was in seventh, one was in ninth, one was in tenth, and one was in eleventh. Five participants reported their ethnicity as White, one as African American, and one as multi-racial. Three participant's annual family income ranged from \$75,000-99,999, two ranged from \$35,000-49,999, one ranged from \$12,000-49,999, and one indicated an annual family income of  $\geq$  \$100,000. One participant had a history of sexual assault which she disclosed to the graduate researchers. These researchers spent time during the sessions to check in with the participant and time after the sessions to debrief about any of her discomfort. They reminded her before one-on-one role plays that they were pretend and she could stop at any time. They offered her referrals for mental health services. The graduate researchers discussed this client's experiences during weekly research supervision and noted she reported appreciating the group and the opportunity to learn the skills. Any signs of distress this participant exhibited were managed during session and she reportedly did not feel the need to stop any role plays or discontinue the group.

#### Measures

Demographics. Participants' parents completed a demographic questionnaire during the consent session, after consent was been obtained. Information about parent and participant ages, highest level of education, ethnicity, and family characteristics was collected.

Assertiveness. Skill level in assertiveness was assessed using four self-report questionnaires and five observations of participant behavior.

The Simple Rathus Assertiveness Schedule (SRAS) (McCormick, Hahn, and Walkey, 1984) is a revised version of the Rathus Assertiveness Schedule (RAS) (Rathus, 1973), created to be more readable by test takers. Validity for the original RAS was obtained by comparing the measure to that of a criterion measure (subscales of the California Psychological Inventory) of assertive and outgoing behaviors. The correlation between the two measures was .70, p < .01(Harris and Brown, 1979). The SRAS is highly correlated (r = .94) with the original items on the Rathus Assertiveness Schedule (McCormick, 1985). The measure consists of 30 items and is completed by participants using a six-point Likert scale ("1 = very unlike me" to "6: = very much like me"). The measure has high split-half reliability (.92,) and high internal consistency (.87). The revised measure has higher reliability and is more homogenous than the original Rathus Assertiveness Schedule (McCormick, Hahn, and Walkey, 1984). Preliminary norms for the measure were obtained by administering the assessment to undergraduate males and females as well as imprisoned offenders (both males and females). Vaal and McCullagh (1977) administered a slightly modified version of the original RAS to adolescents between the ages of 11 and 14 and it was found that test-retest reliability was stable over a two-month period (r = .83; p < 1. This measure was administered in the consent session, session one, session six, and the follow-up session.

The *Sexual Assertiveness Scale for Women* (Morokoff, Quina, Harlow, Whitmire, Grimley, Gibson, and Burkholder; 1997) is an eighteen-item measure used to assess assertiveness skills of women with regard to sex, and is broken down into three sections (initiation, refusal, and pregnancy-STD prevention). The items in the measure are written in a

statement form (e.g. "I refuse to have sex if I don't want to, even if my partner insists") and respondents indicate the degree to which these statements reflect their behaviors using a fivepoint scale (a-disagree strongly, c-mixed, and e-agree strongly). For the present study only the Refusal and Pregnancy-STD Prevention subscales were administered. Internal consistency for the Refusal and Pregnancy-STD Prevention subscales are good (standardized coefficient alphas of.71 and .83 respectively). Increased scores on the Refusal and Pregnancy-STD Prevention subscales have been found to be related to fewer experiences of sexual coercion ( $\beta$ = -.22, *p*,.01;

 $\beta$ = -.14, *p*< .05). Test-retest is moderate for both subscales from time one to six-months (Refusal = .60; Pregnancy-STD Prevention= .66), from six months to one year (Refusal= .65; Pregnancy-STD Prevention= .70), and from time one to one year (Refusal = .59; Pregnancy-STD Prevention= .59). This measure was administered in the consent session, session one, session six, and the follow-up session.

Participants completed the *Applied Assertiveness Skills Questionnaire* (AASQ; developed by the author) as homework between sessions to assess if and when the participants used any assertiveness skills during the past week. The measure asked if the participant used any skills they learned during the program (e.g. eye contact, volume of voice) during the past week. Participants responded using a "yes/no" format. If participants endorsed "yes" they indicated how many times they used that particular skill and answered short follow-up questions regarding the context in which the skill was used. Participants answered if there were times when they *could have* used assertive skills. Further, they explained the situation and indicated what made it difficult to use the skills. This questionnaire was to be completed between each session; however, if participants did not complete this form outside of session they did so at the beginning of session before the next skill was introduced.

Participants completed the *Assertiveness Vignettes Worksheet* (developed by the author) to assess for their knowledge of specific assertiveness skills. These worksheets contained vignettes for which assertiveness skills are appropriate. Participants were asked to explain how they would behave in these scenes to effectively communicate their opinions and needs to both female and male peers as well as with their parents. The use of assertiveness skills in these hypothetical scenarios were measured by assessing the occurrence of key words to reflect the assertive skills taught in the group (e.g. "I would make eye contact, speak clearly, and ask my friend to take me home"). Research assistants were trained to code these vignettes, and an interrater reliability above .85 was established prior to coding. These vignettes were completed at each session.

Finally, assertive behaviors was assessed through coded video recordings of participants' one-on-one interactions with male research assistants. Behaviors that were assessed were based on those used in an assertive skills training program by Bornstein, Bellack, and Hersen (1977) and include: maintenance of eye contact, speech duration, request making (e.g. requesting that a peer step to the back of the line instead of standing in front of them), and volume of voice. Participants will also be trained to deny requests (e.g. saying "no" to the request made by a significant other to engage in sexual activity) and to maintain congruency between their verbal message and facial expression (e.g., not smilling when they're trying to assert themselves). These observations were obtained when participants engaged in video recorded role plays with a research assistant in sessions one through six and the follow-up session. Role plays were standardized so each participant engaged in the same role at each session. Further, each role play

was constructed to allow for the participant to engage in each of the assertiveness skills (e.g. refuse a request).

Participants were removed from the group in an order that reflected the location of the first letter of their last name in the alphabet. We rotated the start-point one letter in each successive role-play session (i.e. last names that start with "A" will be recorded first for the first role-play session, "B" last names will be recorded first in the second role-play session, "C" in the third, and so on). This systematic rotation of participant recording helped to equally distribute any potential effects of learning from watching other group participants' role plays. Graduate and undergraduate research assistants were trained to observe and code participants' assertive behaviors using videos of interpersonal interactions created by the lead researcher and a research assistant. These videos were based on the same scenarios the participants engaged in during sessions. The author trained the research assistants to code for assertiveness by watching these training video together and identifying when the subject is engaging in an assertive way. Researcher assistants coded each video for five skills; eye contact, volume/ tone of voice, assertive nonverbal behaviors, requests made, and requests denied. Researchers were trained to an agreement of at least .90 for all five assertiveness skills.

Eye contact was measured as the percent of the role play the participant maintained eye contact. Volume/tone of voice was measured using a five-point Likert scale (1- could not hear or shouting; 2- could hear a little or very loud; 3- could hear part of the time or yelled/aggressively loud part of the time; 4- could hear most of the time or loud at times; and 5- could hear the whole time and not aggressively loud). Assertive nonverbal behavior was coded using a five-point Likert scale (1- not assertive at all; 2- somewhat assertive; 3- assertive about half of the time; 4- mostly assertive; and 5- very assertive or assertive the whole time). Requests made were

measured as the total number of requests the participant made during that interaction. Requests were operationalized as any verbalization that suggests, commands, or directs someone else to change their behavior. Request denying was measured by the percent of requests the participant denied over the duration of the role play. Research assistants recorded the number of requests the research assistant made during the interaction and (e.g. said "no" to). The research assistant divided the number of requests made by the number that were denied to receive the percent of requests denied for that role play. Each role play included at least one request in order to ensure participants had the opportunity to use this skill.

To keep coders blind to which session they were coding, all data coding began after the follow-up session took place after the first two groups, and after the sixth session for the third group.

Sexual Victimization. Experiences of sexual victimization and risk for sexual victimization were assessed with two measures.

The *Conflicts in Adolescent Dating Relationships Inventory (CADRI)* (Wolfe, Scott, Reitzel- Jaffe, Wekerle, Grasley, & Straatman, 2001) is a 35-item measure developed to assess for perpetration and victimization of abuse and coercion in adolescent dating relationships. Each question assesses whether the examinee has been the perpetrator or victim of the specific act (e.g. "I touched him sexually when he didn't want me to"/ "He touched me sexually when I didn't want him to"). Questions are answered on a 4-point Likert type scale ("Never: this has never happened in your relationship" to "Often: this has happened 6 times or more in your relationship"). Chronbach's alpha for total abuse was .83, the physical abuse subscale alpha was .76, and the alpha for the verbal and emotional abuse subscale was .81. The measure contains questions about current dating partners, but for the purpose of the study this will be modified to assess for these interactions with any male peer. Further, on the initial assessment during the consent session, the measure asked about the occurrence of these behaviors in the past year while subsequent assessments (sessions one and six, and the follow-up session) asked "in the past month." This measure was administered in the consent session one, session six, and the followup session.

The Adolescent Sexual Coercion Risk Scale (Bramsen, Lasgaard, Elklit, & Koss, 2010) is a 17- item measure designed to assess risk for sexual coercion based on participants' reports of social behavior. The measure consists of two subscales: The Risk Behavior subscale (7 items; e.g. "When I go out, I might leave a drink unattended and then return to it later"), and the Signaling Sexual Boundaries subscale (10 items; e.g. "If I think a guy has crossed the line, I will tell him"). Items are scored on a 6 point Likert scale (1-*disagree strongly* to 6-*agree strongly*). The measure was developed using a sample of 327 females in the ninth grade. Internal consistency for the Signaling Sexual Boundaries subscale is .86, and is .74 for the Risk Behavior subscale. Lower scores on the Signaling Sexual Boundaries subscale were found to be significantly correlated with reports of severe victimization. In addition, higher scores on the Risk Behavior subscale were found to be significantly associated with severe and moderate experiences of victimization. Finally, individuals who reported severe victimization had higher levels of risk behaviors than those with moderate victimization (Bramsen, Lasgaard, Elklit, & Koss, 2010). This measure was administered in the consent session one, session six, and the follow-up session.

Satisfaction. Participants completed a 7-item satisfaction survey using a 5-point Likert scale (1-not at all/no, 2-a little bit, 3- somewhat/maybe, 4-quite a bit/probably, and 5-a

lot/definitely). Questions asked about the participant's experience with the group and likelihood of using the skills outside of the group setting. A space was provided at the end of the survey for participants to write additional comments or suggestions.

#### Intervention & Assessment

The assertiveness skills building program was titled the "Teen Assertiveness Group" (TAG), and was delivered in six weekly sessions. Sessions lasted between one to two hours. Assertiveness skills were assessed each session using the Assertiveness Vignettes and the Applied Assertiveness Skills Questionnaire (AASQ) homework sheet (see Appendix A for a detailed outline of the sessions, a flowchart of the session content, a copy of the AASQ and a copy of the Assertiveness Vignettes). In the consent, first, sixth, and follow-up session the, CADRI, ASCRS, SRAS, and SAS were also administered.

During the consent session the participants and their parents were informed about the process and the purpose of the study. After assent and consent were obtained from participant and their parents, participants completed the battery of assessments (CADRI, SRAS, SAS, ASCRS, and the Assertiveness Vignettes) while their parents completed the demographics survey. The measures completed by the participants were used to obtain the first self-report baseline data point. The participants were taken from the group individually to participate in a one-on-one role-play with a research assistant. This role-play provided the first observational baseline data point.

In the first session the researchers and participants introduced themselves to the group, explained the rules of the program, and the researchers led a discussion about assertiveness with the participants. Participants then completed the battery of assessments to obtain the second selfreport baseline data points before any didactic material was covered. The second set of observational baseline data was collected using the one-on-one role plays and occurred before any didactic material was covered. After the assessments and role-plays were completed, the group discussed the general risks in their environment (e.g. social media posts and sexting), the differences between passive, aggressive, and assertive communication, and when being assertive is difficult. The first set of assertiveness skills were introduced and practiced (i.e. eye contact, volume of voice, and facial/speech congruency. The participants were given the AASQ for homework.

Session two began with a review of communication styles (passive, aggressive, and assertive). The participants then engaged in one-on-one role-plays with other group members and role-plays in front of the whole group. Researchers provided feedback on the first set of assertiveness skills, and encouraged participants to give constructive feedback to their peers. Participants were removed individually during the group role-plays to engage in a one-on-one role-play with a research assistant. These role-plays provided the first observational data point for eye contact, volume, and congruency (introduced in session one), and the third baseline data points for making and denying requests. At the end of the group the participants completed the Assertiveness Vignettes and were given the AASQ for homework.

The third session began with a review of the previously learned skills (eye contact, volume, and congruency). Researchers introduced the next skill; request making. The participants engaged in role-plays with peers to practice making requests. During this time, participants were taken from the group individually and recorded in role-plays with male research assistants. This role play data provided the second observational data point for eye contact, volume and congruency, and the first data point for request making. Also, this role play

data provided the third baseline data point for request denying. At the end of the group the participants completed the Assertiveness Vignettes and be given the AASQ for homework.

During the fourth session the last assertiveness skill was introduced (request denying). The participants engaged in one-on-one practice of these skills followed with other group members. During the group role-plays participants were taken from the group and recorded engaging in role-plays with a male research assistant. These recordings provided the first data point for request denying, the second data point for request making, and the third data point for eye contact, volume, and congruency. At the end of the group the participants completed the Assertiveness Vignettes and were given the AASQ for homework.

In the fifth session the group consisted of a review of all the assertiveness skills taught in the previous session. Participants engaged in role-plays with other group member to practice these skills. Participants were taken from the group individually to have role-plays with male research assistants video recorded. These recordings provided the second observational data point for request denying, the third data point for request making, and the fourth set of observational data points for eye contact, volume, and congruency. At the end of the group the participants completed the Assertiveness Vignettes and were given the AASQ for homework.

In the sixth session the participants engaged in a review of all of the assertiveness skills taught in the previous sessions. The participants engaged in role-plays with other group members. During this time, participants were taken individually from the group to have role-plays recorded with a male research assistant. This recorded role-play provided the third observational data point for request denying, the fourth data point observational data point for request making, and the fifth data point for eye contact, volume, and congruency. The

participants completed the battery of assessments (CADRI, SRAS SAS, ASCRS, and Assertiveness Vignettes). The data gathered with the battery of assessments provided the third data points for self-reported experiences of sexual activity, sexual coercion risk, and assertiveness skills.

One follow-up session was conducted four weeks post-intervention. During the follow-up session the battery of assessments (i.e. CADRI, SAS, SRAS, and ASCRS) was re-administered. While the participants completed their assessments they were called from the group individually and completed the recorded follow-up role-play with a male research assistant. The battery of assessments provided follow-up data for the self-reported sexual experiences, assertiveness skills, and risk for sexual coercion while the videos will provide observational follow-up data on the overt assertiveness skills with males taught in the group (e.g. making request, eye contact, and volume of voice). At the end of this session the participants had a celebration to thank them for their time and reward them for their hard work.

A total of three consecutive groups were held over the course of a year. The aforementioned session progression was standard for all three groups; however, the group leaders and role-play research assistants varied across group. The first group was led by the author, another female graduate student, and a transgender male graduate student. The participant engaged in role plays with either an African American or Caucasian male graduate student. On one occasion the participant 200 conducted the role-play with the transgender male graduates student. No differences were noted for this session regarding observational data. For groups two and three, a multiracial male graduate student participated in the role-plays with participants. Groups two and three were led by the same Caucasian female and a transgender

male graduate students from the first group. An African-American female graduate student also helped lead group three.

#### Data Analysis

The observational data and vignette data were gathered and analyzed using a singlesubject multiple-baseline design. Graphs were constructed for each participant to reflect the changes in assertive behaviors (as measured by the vignettes and observations) as they were systematically introduced throughout the study. Visual inspection of graphs was used to examine changes in the percent of time eye contact was made for the duration of the role play, volume of voice (using a five point Likert scale), congruence of nonverbal behavior with assertive behavior (using a five point Likert scale), the total number of requests made, and the percentage of requests denied for each role play. Self-reported use of the skills between sessions was collected using the Applied Assertiveness Skills Questionnaire. One-way repeated measures ANOVA were conducted to examine the changes on the self-report measures (CADRI, SRAS, SAS, and ASCRS) from baseline, pre-intervention, post-intervention and follow-up session.

#### RESULTS

#### Self-Report Measures of Assertiveness and Risk for Sexual Coercion

One-way repeated measures ANOVA were conducted to examine changes in general assertiveness (i.e. SRAS), sexual assertiveness (i.e. SAS), conflict styles in relationships (i.e. CADRI), and risk for sexual coercion (i.e. ASCRS). Sample sized varied across time due to participants being absent or attrition. In total, six participants completed the SRAS, CADRI, and ASCRS at the initial assessment period. Four participants completed these measures at the

second assessment period, five completed them at the third assessment period, and five completed them at the four week follow-up. Limited data were gathered for the SAS as many participants marked the items as not being applicable to them. Four participants completed the Refusal subscale of the SAS at the initial assessment period, three completed it at the second assessment, two at the third, and two at the four week follow-up. Three participants completed the STD and Pregnancy Prevention subscale at the initial assessment period, three at the second period, two at the third, and two participants completed it at the four week follow-up. See Table 2 for the means and standard deviations for all assessments across time.

Compared to previous research, participants in the present study scores relatively similar to those on some measures of sexual assertiveness regarding pregnancy and STD prevention on the SAS (Morokoff et al., 1997), but scored lower on refusal behaviors on this measure. Participant scored slightly lower on the general assertiveness skills on the SRAS (Radin, 2000). Finally participant generally scored lower on risky sexual behaviors on the ASCRS (Bramsen, Lasgaard, Koss, Elklit, & Banner, 2012) and higher on scores for signaling sexual boundaries. Scores on conflicts styles from the CADRI could not be compared for comparisons.

Participants 200, 300, 400 500, and 700 completed the SRAS at pre-, post-, and followup sessions and were included in the analysis. Results indicate no significant changes in general assertiveness skills (F(3, 16) = 0.43, p = 0.73) on the SRAS. Though no statistically significant changes were found, mean changes indicate slight increases in general assertiveness.

Only participants 500 and 700 completed measures at the pre- post-, and follow-up time points, and were included in the analysis. The SAS did not indicate any increases in sexual assertiveness on the refusal subscale (F(3, 4) = 0.34, p = 0.80) or the pregnancy and STD prevention subscale (F(3, 6) = 0.34, p = 0.79). The means for the refusal subscale indicate slight

increases over the course of the study which indicates slight increases in assertive refusal skills. However, slight decreases occurred on the pregnancy and STD subscale indicating lower assertiveness for preventing pregnancy and STDS.

Participants 200, 300, 400 500, and 700 completed the CADRI at pre-, post-, and followup sessions, and were included in the analysis. No significant changes were noted in conflict styles (F(3, 16) = 0.01, p = 0.99) as measured by the CADRI. The means show no change during the intervention.

Participants 200, 300, 400, 500, and 700 completed both subscales of the ASCRS at prepost- and follow-up sessions, and were included in the analysis. No significant changes in sexual coercion occurred in either of the subscales on the ASCRS; signaling sexual boundaries: F(3, 16) = 0.25, p = 0.86 and risky sexual behavior: F(3, 16) = 0.10, p = 0.96. The means for the signaling sexual boundaries subscale increased slightly over the course of the study indicating better assertiveness use for signaling boundaries. The means for the risky sexual behavior subscale however, decreased slightly indicating higher rates of sexually risky behavior.

Reliable Change Indices (RCIs; Jacobson & Truax, 1991) were calculated to assess for significant pre-post change for each participant on each measure. Pre-intervention data were gathered during the consent and assent session and again at the beginning of the first session. RCIs were calculated using each participant's first pre-intervention data and their postintervention data. Specifically, participant 200 only completed pre-intervention assessments at the first session, thus data from this session was used to calculate her RCI. Participants 300 and 400 only completed pre-intervention assessments at the consent session thus data from this session was used to calculate their RCIs. Participants 500 and 700 completed pre-intervention

data at both the consent session and session one, thus their data gathered in the consent session were used as their pre-intervention data.

RCIs indicate reliable change for participant 400 on the ASCRS Signaling Sexual Boundaries subscale, indicating an increase in ability to signal boundaries. Reliable change for participant 700 on this subscale was noted, however it was in the unexpected direction (i.e. reduced ability to signal sexual boundaries). Reliable change was also noted on the ASCRS Risky Sexual Behavior subscale for participants 300 and 700. However, these changes were in the unexpected direction indicating an increase in risky sexual behavior. See Tables 3.1 through 3.6 for calculated RCs for each participant by assessment.

#### Assertiveness Vignettes

The Assertiveness Vignettes worksheets have six hypothetical scenarios to which participants responded. They endorsed what skills they would hypothetically use in each scenario, thus allowing the participant to report using each of the five individual skills at least six times on each worksheet (i.e. one for each scenario). In total, participants had the opportunity to report a total of 30 skills (i.e. five skills across six scenarios). Figures 1.1 through 1.5 display data reflecting the total number of individual skills each respective participant reported across measurement repetitions. Attrition occurred with participants 100 and 600 leading to a lack of interpretable data. Thus graphs for these two participants have been omitted from this document. Details regarding how each participant responded are specified below.

#### Assertiveness Vignettes for Participant 100

Participant 100 only engaged in baseline sessions. Her baselines were consistent for each endorsed hypothetical skill. She did not endorse using eye contact, assertive volume or tone, or

assertive nonverbals at baseline. She endorsed hypothetically making a request four times at each baseline assessment, and denying a request three times at each baseline assessment.

#### Assertiveness Vignettes Participant 200

At baseline, participant 200 did not endorse that she would hypothetically maintain eye contact or use an assertive volume or tone of voice. She did indicate twice that she would use assertive nonverbal behaviors during baseline. No change occurred for her reported use of eye contact, which she did not endorse using at all across the intervention and at follow-up. Inconsistent endorsement of assertive volume and tone of voice is noted during the intervention. She indicated using this skill once in session three and again in session five. She did not indicate using this skill in the follow-up session. A clear trend is seen in the intervention in her endorsed use of assertive nonverbals. There was a slight decrease in endorsement of these skills at follow-up, yet her follow-up report is distinctly higher than baseline. However, only one baseline assessment was gathered on these three skills for this participant. Thus, it is difficult to draw conclusions about the effects of the treatment on the increases in any of these skills.

The second skill, making requests, was steady at baseline. She endorsed using this skill hypothetically three times in both baseline assessments. A clear level change occurred in the expected direction after the skill was introduced. However, midway through the intervention she returned to baseline, and continued to reduce the frequency of hypothetical use of request making. She dropped below baseline in the sixth session, endorsing hypothetical use of the skill only once, which she also endorsed at the follow-up.

The last skill to be introduced was denying requests. Baseline data were stable, as participant 200 endorsed hypothetically using these skills twice at each assessment. No change in

denying requests was noted after the skill was introduced. In session six she only endorsed hypothetical use of the skill once, which she again reported at the follow-up.

Overall, participant 200 endorsed an increase in hypothetical assertive nonverbal skill use after the skill was introduced. However, only one baseline data point was obtained for this skill, thus no conclusive statement can be made that the changes in this skill were due to the effects of the intervention. A level change in making requests was noted after the skill was introduced, however this did not maintain, and reporting dropped below baseline by the end of the program. The other skills did not show increases after skills were introduced.

#### Assertiveness Vignettes Participant 300

The Assertiveness Vignettes worksheet was only administered to participant 300 at the consent/assent session, and sessions three through the follow-up session. Thus, baseline data were only obtained once (i.e. the consent/assent session) for the first two sets of skills (i.e. eye contact, volume and tone of voice, assertive nonverbals, and making requests). Readministration of this measure began at the third session allowing for a second baseline data point to be obtained for request denying. Due to the lack of baseline data, interpretation of these results are limited.

The participant did not endorse hypothetically making eye contact during any of the phases of the study. She endorsed using an assertive volume and tone once during baseline; however she did not endorse the use of this skill again in the intervention or follow-up. She indicated hypothetical use of assertive nonverbal twice at baseline. A clear level change is noted in the unexpected direction, when she did not endorse using this skill in sessions three or four. Though a slight increase in this skill is noted in sessions five and six (i.e. once each), this was below baseline, and dropped back to zero at follow-up.

Participant 300 reported using the second skill (i.e. request making) hypothetically twice at baseline. An increase was noted in the intervention phase for request making. In sessions three and four she endorsed using this skill three times, and increased this to the ceiling in session five. She decreased her responding back to three time in session six, and returned to baseline rates at the follow-up.

The last skill to be introduced was denying requests. She consistently endorsed hypothetical use of this skill across baseline; indicating hypothetical skill use twice in both the consent/assent session and again in session three. She maintained this rate of responding throughout the intervention and at baseline with one exception. She did not endorse hypothetical use of this skill at session five.

Overall, participant 300 showed an increase in endorsed hypothetical use of making requests. This change was noted in the intervention after only one baseline data point was obtained thus no conclusive statement can be made that the changes in this skill were due to the effects of the intervention.

#### Assertiveness Vignettes Participant 400

The Assertiveness Vignettes worksheet was only administered to participant 400 at the consent/assent session, and sessions three through the follow-up session. Thus, baseline data were only obtained once (i.e. the consent/assent session) for the first two sets of skills (i.e. eye contact, volume and tone of voice, assertive nonverbals, and making requests). Readministration of this measure began at the third session allowing for a second baseline data point to be obtained for request denying. Due to the lack of baseline data, interpretation of these results are limited.

Participant 400 did not endorse hypothetically using an assertive volume or tone of voice during the baseline, intervention, or follow-up sessions. She did not endorse using eye contact at baseline. A small increase was noted in the intervention when she indicated using eye contact once in session three. However, she returned to baseline levels of responding in session four through follow-up. Her endorsed use of assertive nonverbals was consistent from baseline through follow-up, with the exception of session four. She endorsed using this skill once across the entirety of the group; however, she did not endorse using this skill at all in session four.

The participant endorsed she would use the second skill hypothetically (i.e. request making) once at baseline. A clear level change in the expected direction was noted in session three, after the skill was introduced which maintained at session four. A downward trend is noted through the intervention, which brings her back to baseline levels of endorsing in the sixth session. A slight increase in responding in the follow-up session was seen as she endorsed request making twice.

Participant 400's baseline data were not stable and collected two sessions apart (i.e. consent/assent and session three). She initially did not report hypothetically denying any requests, yet in her second baseline session she endorsed hypothetically denying requests twice. She continued to hypothetically endorse two denials after this skill was introduced, and increased reporting at session five. A decrease in responding occurred at session six, at which time she only endorsed this skill once; lower than her second baseline data. This maintained at follow-up.

In sum participant 400 did not exhibit any noticeable changes in her self-reported hypothetical use of assertive behaviors in scenarios.

Assertiveness Vignettes Participant 500

Participant 500 did not endorse hypothetically using eye contact in any of the sessions from baseline through follow-up. Her baseline for her volume and tone of voice was steady as she did not endorse this skill during baseline. After the skill was introduced a clear elevation in level is seen, as she endorsed this skill once in sessions two through four. However, she returned to her baseline rate of responding in session five which maintained through the follow-up session. She did not endorse any assertive nonverbal behavior during baseline, and a clear level change is noted after the skill was introduced. She endorsed this skill twice in session two and three. Though her reporting decreased to one instance in sessions four through six, her intervention data maintained above baseline. However, this skill did not maintain at the followup session, at which time she did not endorse use of this skill.

Her baseline for hypothetical request making was inconsistent, and began near the ceiling, but leveled out with her endorsing this skill once in her final two baseline sessions. This rate of responding was consistent throughout the intervention and to the follow-up with the exception of one session; she endorsed this skill twice during session five. This however, cannot be attributed to the intervention as her initial baseline data suggests a relatively high rate of initial responding.

She endorsed moderately high levels of using the final skill (i.e. denying requests) hypothetically during baseline. Baseline data varied as she endorsed using this skill between one and three times. Her intervention data were stable as she endorsed this skill twice in all intervention sessions. Her follow-up session increased slightly during which she endorsed this skill three times. It should be noted this is in alignment with baseline rate of responding and cannot be recognized as a maintenance of skills from the intervention.

In summary, participant 500 reported an increase in her endorsed hypothetical use of assertive nonverbal behaviors in the Assertiveness Vignette scenarios after this skill was introduced. This increase was observed after two baseline data points had been obtained. However, she reduced responding back to baseline levels at follow-up. She exhibited an increase in endorsing hypothetical use of assertive volume and tone of voice but reduced back to baseline rates of responding near the end of the intervention. These results potentially indicate these initial changes could be associated with the introduction of these skills. However, these effects only maintained throughout part of the intervention period.

## Assertiveness Vignettes Participant 600

Participant 600 only attended three sessions. Since two baseline and only one intervention data points were obtained, graphs are not provided for this participant. She did not endorse hypothetically using eye contact or an assertive volume or tone during baseline, which continued into the intervention phase. Her assertive nonverbal skill use was stable at baseline as she endorsed using this skill once at each assessment point. However, this decreased to zero in the intervention. A possible trend is noted in baseline for request making, and an inconsistent pattern of responding is noted for request denying. Generally, a trend is noted in her overall skills in baseline that continues into the first session of the general intervention.

## Assertiveness Vignettes Participant 700

Participant 700 did not endorse hypothetical use of eye contact at any phase of the study. Her highest rate of endorsing hypothetical use of volume and tone of voice occurred in the first baseline session at which time she reported using the skill once. She did not endorse using this skill again in baseline, intervention, or at the follow-up. Her baseline for assertive nonverbal

behavior was stable as she did not endorse using this skill, which was consistent across the intervention phase and at baseline, with the exception of session three when she reported using this skill once.

Her endorsed use of request making remained consistent across baseline and the intervention. She endorsed making requests twice at each point of data collections. However, at follow-up a slight drop in the endorsement of this skill was noted as she only endorsed this skill once.

Baseline data for hypothetical request denying was inconsistent. She ranged from not endorsing this skill to endorsing it three times. Her highest endorsement of this skill occurred during baseline which limits the interpretation of the results for treatment effects. A slight increase in endorsement is seen during the intervention from using the skill once to twice from session five to six. However, she did not endorse this skill at the follow-up session.

Overall, participant 700's data indicate a relatively consistent pattern of responding across the whole study. She did not exhibit any noticeable changes in her endorsement of assertive behaviors in hypothetical scenarios.

## Summary of participant data

All together only one participant (participant 500) exhibited an increase in their reported hypothetical use of assertive nonverbals and assertive tone and volume of voice from baseline to intervention.

## Applied Assertiveness Skills Questionnaire

The Applied Assertiveness Skills Questionnaire (AASQ) provides two spaces for participants to report on the situations they used their skills in the last week, thus only allowing

participants to report using each skill up to two times. The nature of this reporting method does not lend itself to graphing as the ceiling would be reached if the participant used the skill only twice. Though this measure does not assess for large changes in skill use, it can capture changes that occur after skills are introduced. These changes as well as qualitative information on generalization are reported below.

The AASQ was intended to be assigned as homework, but more frequently participants completed it at the beginning of each session. Due to the timing of administrations this measure marks changes in target behaviors at different time points than the Assertiveness Vignettes and the observational data from the role plays. Hypothetically, changes in eye contact, volume of voice, and assertive nonverbals would be noted in session two after these skills were introduced in session one. Changes in making requests would be noted in session four after the skill had been introduced in session three. Changes in request denying would be noted in session five after that skills was introduced in session four.

## AASQ Participant 200

Participant 200 completed the AASQ for sessions two through six. No changes in selfreported use of the skills outside of session was noted after the introduction of relevant skills. Changes in responding that cannot be attributed to the intervention were observed.

Specifically, she had slight increases in self-reported use of assertive tones and volume of voice, and denying requests over the course of the study. An increase in assertive nonverbals was seen after they had been introduced, but she did not report using this skill consistently. Though she reported she made requests twice outside of session, these occurred early in the intervention, and were not noted after the skill was taught in the group. She most frequently reported using these skills outside of session with her friends and her mother. She reported using these skills

once with a male. She reported that she could have used these skills with friends, her sister, and a male she was talking with through electronic messaging. She stated she most frequently not using these skills because she did not want to or did not care. She noted it would have been difficult to be assertive with her mother because "it was [her] mother".

## AASQ Participant 300

Participant 300 completed the AASQ for sessions one through the follow-up. No changes in self-reported use of the skills outside of session was indicated. Changes in responding that cannot be attributed to the intervention were observed.

Specifically, she most frequently used an assertive volume and tone, which she reported using ten times outside of session. Her use of these skills outside of session was consistent and no change was noted over time. Making requests was the next most frequent skill (i.e. nine times). She consistently reported using this skill more often earlier in the intervention, and decreases were observed later into the program. She reported denying requests eight times at a stable rate across the intervention. She reported making eye contact and using assertive nonverbals six times each outside of session. Both of these skills were occurring at a stable rate across time. Of note, in the follow-up session the only skill she reported using was making a request. In sum, no changes in eye contact, volume and tone of voice, assertive nonverbals and denying requests were noted throughout the course of the intervention. She reported making fewer requests across time. She most frequently used these skills with her friends, followed by peers, and she used these skills once with her brother and once with her mother.

She reported that she could have used these skills with her friends and once with a teacher but did not. She reported not using these skills with her friends because she did not want to be rude, she is normally compliant and did not want to "complain", and because she was

uncertain about her own opinion in a situation. She did not want to use these skills with her teacher because she did not want to get in trouble.

## AASQ Participant 400

Participant 400 completed the AASQ for sessions one through the follow-up. She showed an increase in request making after the skill was introduced after three baseline sessions, which was maintained at follow-up. Other changes in responding were exhibited but cannot be attributed to the intervention.

Specifically, she frequently used an assertive volume and tone of voice (i.e. 14 times), which she reported using twice each time the assessment was given. She reported using assertive nonverbals 13 times which she used consistently across the duration of the study. She reported using eye contact eight times after the skill had been introduced and maintained consistency in reporting through the intervention. She reported making requests seven times which increased slightly after the skill was introduced. Finally, she reported denying a request once which occurred after the skill was introduced. In sum, participant 400 consistently reported using eye contact, assertive volume and tone of voice, and assertive nonverbals over the course of the study. She increased slightly in making and denying requests toward the end of the study after these skills were introduced. She used these skills most frequently with friends, followed by her teacher and peers, and finally with her sister and mother.

She indicated having opportunities to use these skills but did not do so when interacting with her peers, friends, teacher, and principal. She stated that she did not use these skills with her friends because she did not want to hurt their feelings and because she did not have a good argument for denying a request. She did not use these skills with her peers because she did not

want to engage with them. She did not use these skills with her teacher or principal because she did not want to challenge authority.

## AASQ Participant 500

Participant 500 completed the AASQ for sessions one through five. She noted an increase in request making after it was introduced after three baseline sessions. However, this was the only assessment period the participant noted using any skills outside of session. She reported that eye contact and assertive volume and tone occurred at the session four assessment period. However, these increases were noted two sessions after the skills were introduced; thus, it is unclear if these changes are a function of the intervention

Specifically, she reported using eye contact, an assertive volume and tone of voice, and making a request one time each. She reported using these skills between sessions three and four; three sessions after they were introduced. She stated she used these with her brother. Data were not collected at the sixth or follow-up sessions. She indicated she could have used these skills twice with a male peer and twice with other peers. She stated she did not use these skills because she was nervous and she did not want to be rude.

#### AASQ Participant 700

Participant 700 completed the AASQ for sessions one, two, three, and five. She reported an increase in the requests she was denying outside of session when the skill was introduced after three baseline sessions. She reported an increase in the use of an assertive tone and volume, however only one baseline data point was obtained prior to the introduction of this skill which limits the conclusions that can be made about the treatment effects for this skill.

Specifically, she reported using an assertive volume and tone of voice most frequently across time (i.e. seven times). This skill slightly increased after being introduced and remained consistent across the intervention. She reported making eye contact five times. She reported using this skill slightly more immediately following its introduction, but returned to lower rates of use after that session. A similar pattern was noted with denying requests. She reported denying requests five times, with a slight increase after the skill was introduced. She reported making four requests, but no pattern is noted in her use. She did not report using assertive nonverbals during the course of the study.

She indicated she did not use these skills but could have used with her family, friends, and once while at court. She noted she did not want to express her emotions with her family because she was uncomfortable, and because she did not want to be rude. She stated she did not use the skills in court because she was too anxious.

## Summary of participant data

Taken together, the participants were most frequently using assertive volume and tones of voice outside of session, followed by making requests, eye contact and assertive nonverbals, and finally denying requests. They were using these skills significantly more with their friends than in any other interpersonal situations. They were using these skills moderately with peers, followed by their parents, siblings, male peers and teachers, and finally once with a stranger.

In total three participants showed increases in skills when those respective skills were introduced in session. Specifically, two participants showed an increase in their reported use of making requests outside of session. One participant reported an increase in the amount of requests she was denying outside of session.

## **Observational Data**

Table 4 details how each participant responded for each skill across sessions. Figures 2.1-2.5 display the graphs for each participant's assertiveness behaviors across session. Summaries for these graphs are detailed below by participant.

## Observational Data for Participant 100

Graphs for participant 100 were not included as she only participated in the first two baseline sessions. Participant 100 exhibited slight increases in percent of eye contact maintained through the role-play, assertive nonverbal behaviors, volume of voice and the number of requests made during baseline. The number of requests denied maintained stable during baseline.

## Observational Data for Participant 200

Participant 200 began the group after the first baseline session. Therefore only one baseline data point was obtained for the first skill set (i.e. eye contact, volume and tone of voice, and assertive nonverbals), which limits the conclusions that can be made from the data for these skills. Visual inspections of the graphs for participant 200 (Figure 2.1) indicate high rates of eye contact at baseline which maintained through the intervention. At the four week follow-up the percentage of eye contact dropped significantly; far below baseline. Participant 200's volume of voice was high during baseline and maintained through the intervention with drops in levels during session three and again in session six. The participant's volume of voice at the four week follow-up was consistent with that of her last intervention session. However, this volume was a level lower than her baseline volume and volume for sessions three through five. Her assertive nonverbals were high at baseline which maintained when the skills were introduced. In session five her nonverbals were less assertive but increased again for the last session of the group.

These skills did not maintain at follow-up and a clear level change can be observed. The participant did not make any requests at baseline, during the intervention or at the follow-up session. The participant's percent of requests denied was inconsistent during baseline. A clear level change occurred at the first data point when the skills were introduced, and a ceiling effect is seen for the remaining intervention sessions. The follow-up session indicates a drop in the percent of requests denied; however this behavior is still above her lowest percent during baseline.

In sum, Participant 200 exhibited a slight increase in request denying when this skill was introduced after three baseline sessions. It should be noted baseline data were unstable, yet the increases during intervention were elevated above all baseline data.

## Observational Data for Participant 300

As seen in Figure 2.2 participant 300 maintained a moderate amount of eye contact during her baseline sessions. A slight increase in eye contact was observed after this skill was introduced during the intervention. Intervention data indicates instability of percent of eye contact maintained; however all rates of eye contact were above her baseline rates. A clear level change is indicated at the follow-up during which the participant exhibited the highest percentage of time she maintained eye contact. Her assertive nonverbals increased across baseline and this trend continued into the intervention where they plateaued in intervention sessions three through five. At the last intervention session her assertive nonverbals returned to their initial level at sessions one and two, which maintained at follow-up. Her volume of voice was steady at baseline and a clear level change occurred after they were introduced in session two and maintained until the last session of the intervention when this skill returned to baseline. At the follow-up session however, her volume increased showing a clear level change. She did

not make any requests throughout baseline and only made one request during the session after this skill was introduced. She returned to baseline rates through follow-up. A clear ceiling effect was observed in the baseline sessions for the percent of requests the participant denied. A large downward level change occurred in the last baseline session and this downward trend continued after this skill was introduced in session five. An upward level change can be observed at the sixth session, and jumps again at follow-up to her initial high rate of responding observed during baseline.

In sum, participant 300 showed slight increase in eye contact when the skill was introduced. She maintained elevated rates of eye contact for the duration of the intervention. She showed a clear change in her volume and tone of voice when the skill was introduced. It dropped in the final session of the intervention, but elevated again at the follow-up

## Observational Data for Participant 400

Participant 400's percent of eye contact slightly decreased in baseline (Figure 2.3). The percent of eye contact she maintained through the intervention phase varied but was consistent with the variability noted in her baseline. This style of responding continued into the follow-up session. A clear increase in her volume of voice was noted during the baseline and this change in level maintained at the ceiling throughout intervention; however, she was rated lower in session six due to her volume being aggressively loud. At the four week follow-up her volume returned to the ceiling. Her assertive nonverbals were stable at baseline, and a clear level change was noted after these skills were introduced and maintained at the ceiling through the intervention and at the follow-up. She did not make any requests during the baseline, and only made one during the intervention which occurred during the session this skill was introduced. She did not make any requests at the follow-up session. A clear upward trend for the percent of requests

denied was observed in the baseline sessions with a drop occurring in the baseline session just prior to the skill being introduced. A clear level change was observed in the session the skill was introduced; however, during session five the participant did not deny any requests, which was the lowest rate of responding in which the participant engaged. At the last session of the intervention she denied every request and continued to deny all requests at the follow-up.

In sum, Participant 400 exhibited an increase in assertive nonverbal behaviors after this skill was introduced after two baseline sessions. Her rate of responding reached the ceiling during the intervention and maintained at baseline.

## **Observational Data for Participant 500**

Participant 500 only attended one baseline session for the first set of skills (i.e. eye contact, volume and tone of voice, and assertive nonverbals), which limits the conclusions that can be made from data for these skills. Visual inspection of the graphs for participant 500 (Figure 2.5) indicates a fairly low percent of eye contact maintained at baseline with a slight increase occurring after the skill was introduced. During the intervention a slight decrease is noted from the introduction of the skill into session four, followed by an increasing trend into session six. Her volume of voice was fairly high at baseline which was continued at the first intervention session. A slight decrease in her volume occurred in session three. However, an increasing trend is observed out of session three with her volume plateauing at the ceiling for sessions five and six. Participant 500 was exhibiting relatively high rates of assertive nonverbals at baseline which maintained after the skill was introduced. At session four her assertive nonverbals at baseline which maintained after the skill was introduced. At session four her assertive nonverbals at baseline which maintained after the skill was introduced. At session four her assertive nonverbals at baseline which was followed by an increasing trend that ended in session six at the ceiling. She did not make any requests during baseline. A clear level change is noted after this skill was introduced. She continued to make a request in the intervention session

until the last intervention session when she returned to baseline rates. She denied a moderate amount of requests initially in the first baseline session but increased this response to the ceiling which maintained during the intervention.

Participant 500 did not show any increases in assertiveness skills after their introduction that maintained for the duration of the study. A clear increase in request making was noted when the skills was introduced, however this did not maintain at the last intervention session or followup.

## **Observational Data for Participant 600**

Participant 600 only attended the two baseline sessions and one intervention session; thus no graph is displayed. The percent of eye contact participant 600 engaged in is relatively high at baseline and increased in level at the first intervention session. Her volume of voice and assertive nonverbals maintained consistency from baseline to the first intervention session. Her number of requests made was consistent at baseline, and she increased the percent of requests she denied in baseline up to the ceiling.

## **Observational Data for Participant 700**

Participant 700 only attended one baseline session for the first set of skills (i.e. eye contact, volume and tone of voice, and assertive nonverbals), which limits the conclusions that can be made from data for these skills. Participant 700's percent of eye contact was relatively high at baseline and a slight increasing trend is observed after the skill was introduced (Figure 2.7). This slight increase maintained in the last two intervention sessions though she missed an intermediate session. Her volume of voice at baseline was at the ceiling. A drop in this skill occurred when it was introduced at intervention and it was noted she was yelling or aggressively

loud at the time. In the subsequent session her volume returned to the highest rating possible. She missed a session and a clear level change occurred for the remaining two sessions of the intervention. Importantly, she was marked below the highest score due to her volume and tone being loud at times. Her assertive nonverbals were relatively high at baseline and dropped after they were introduced due to her laughing during part of the observation. After this intervention session her assertive nonverbals increased to the ceiling where they maintained in the intervention despite missing an intermediate session. She exhibited a downward trend in the requests she made during baseline but increased this skill when the skill was introduced. However, after she missed a session the requests she made dropped to zero for the remaining two intervention sessions. The percent of requests she denied trended up to the ceiling during baseline. Despite missing the session the skill was introduced, she exhibited 100% denial of requests at the last two intervention sessions.

In summary, participant 700 did not show any clear increases in assertiveness skills after their introduction that maintained for the duration of the study.

## Summary of Participant Data

With regard to observational data, participant 200 exhibited increases in the number of requests she denied after the skill was introduced that maintained throughout the intervention (except at follow-up). Participant 300 showed higher percentages of eye contact when that skill was introduced. She also exhibited an increase in her use of an assertive volume and tone of voice. Though this skill did not maintain throughout the full intervention, she showed improvements for the majority of the intervention and again at follow-up. Participant 400 exhibited higher levels of assertive nonverbal behaviors at the introduction of that skill. Finally,

participant 500 increased the number of requests she made when that skill was introduced, however this skill did not maintain at the last session or follow-up.

Results from the single-subject data gathered in the present study does not meet Evidence Standards as outlined by the What Works Clearinghouse (Kratochwill et al., 2010), and thus should be interpreted with extreme caution. Nonoverlap of All Pairs (NAPs; Parker & Vannest, 2009 and Petersen-Brown, Karich, & Symons, 2012) were conducted for all observational data which showed improvement upon visual inspection. NAPs for observational data indicate changes in the number of requests denied for participant 200, eye contact and tone/ volume of voice for participant 300, nonverbal assertiveness skills for participant 400, and the number of requests made by participant 500. NAPs for the assertiveness vignettes indicate changes in assertive nonverbals and assertive tone/ volume of voice for participant 500.

## DISCUSSION

The risk for sexual victimization is frighteningly high among adolescent females. Nearly 32% females in the United States face an unwanted sexual experience between the ages of 12 and 17 (Tjaden & Theonnes, 2006). Literature suggests that assertiveness reduces the risk for these unwanted experiences (Greene and Navarro, 1998; Vogel & Himelein, 1995; and Yeater, et al., 2008). However, most of the research examining this relationship is conducted among college-aged samples (Brecklin, 2004; Brecklin & Ullman, 2005; Simpson Rowe, Jouriles, McDonald, Platt, & Gomez, 2012; Weitlauf, Smith, & Cervone, 2000). It should be emphasized that unwanted sexual experiences are never the fault of the victim, and that even when protective strategies are used perpetration may still occur. However, research suggests that use of assertive

behaviors may provide protection in some cases (Brecklin, 2004; Brecklin & Ullman, 2005; Simpson Rowe, Jouriles, McDonald, 2014; Simpson Rowe, Jouriles, McDonald, Platt, & Gomez, 2012; Weitlauf, Smith, & Cervone, 2000) The present study examined the effects of an assertiveness training program on assertiveness skill acquisition among adolescent females,. A single subject multiple baseline design was used to systematically teach assertiveness skills and to assess if assertiveness skill acquisition was associated with changes in observed assertiveness, self-reported assertiveness, and risk for sexual coercion.

Results from the present study indicated no significant changes in risk for sexual coercion or assertiveness skills on self-report measures. Though no statistically significant changes were observed, means changes suggests slight increases in general assertiveness skills, signaling sexual boundaries, and refusal. Further, mean changes showed expected decreases in conflict in dating relationships. These trends indicate some movement in desired direction. With a larger sample, or longer periods between assessment administrations, it is possible that significant changes could be seen

Participants were asked to report how they believe they would respond in hypothetical vignettes. Results from these assessments indicate that one participant reported an increase in their hypothetical use of assertive nonverbal behaviors and one participant reported an increase in hypothetical use of assertive tone and volume of voice. These results suggest some changes, but generally speaking, participants did not report many significant changes to how they would respond in hypothetical scenarios. One possible explanation for this finding could be that this assessment was administered at each session, and the scenarios were the same at each administration. Participants may have become familiar with the measure and reported things similarly across time as that is how they became comfortable completing the assessment. It is

possible that as a means to finish the assessment they drew upon what they previously wrote as opposed to responding to a novel situation and relying on their recollection of the skills.

Participants were asked to report what skills they used between group sessions and with whom. They also reported when they could have used these skills but did not, and provided why they chose not to use these skills. Two participants showed increases in reports of making requests after these skills were introduced in session. One participant reported an increase in the number of requests she was denying outside of session after that skill was introduced. Generally speaking, most often participants reported using assertive volume and tones of voice outside of session, followed by making requests, then eye contact and assertive nonverbals, and finally denying requests. However, changes in most of these skills were not occurring after the skill was introduced in session. Interestingly, participants noted using the skills most with their friends, but also had the most difficulties using these skill with their friends. This amplifies the notion that interpersonal relationships are complex and it can be difficult to be assertive even with those one feels most comfortable.

Participants reported that they did not use these skills because they did not want to be rude or hurt someone's feelings. They also noted being uncertain about how they were feeling, or feeling nervous or anxious. These data are important because they help indicate when and with whom these skills can be practiced or needed the most. Finally, observational data indicated one participant showed improvements in denying request after this skill was introduced. One participant showed increases in eye contact and volume of voice after those skill were covered in session, and one showed improvements in assertive nonverbal behaviors when that skill was introduced. Generally speaking, ceiling effects were noted with assertive nonverbal skills, assertive tone and volume of voice, and twice with request denying. Request denying was

measured in percentage, thus if a participant denied the only request that was made they met the ceiling for that session. Assertive tone of voice and volume, as well as assertive nonverbal skills were rated on a five point scale which may have led to limited abilities to observe meaningful change. Further limitations to these scales are detailed below.

Taken together, one participant showed improvements in skills across all three measurements (i.e. Assertiveness Vignettes, Applied Assertiveness Skills Questionnaire, and in observed role plays). She reported increase in making requests on the AASQ and in her observed role plays. Her endorsement of an assertive volume and tone and assertive nonverbal skills on the Assertiveness Vignettes also increased. However, she did not show noticeable changes in these, or any other behaviors in her role plays. One participant showed self-reported changes in her use of making requests outside of session on the AASQ, and exhibited increases in observed assertive nonverbal behaviors. She did not show any increases in her use of these skills in hypothetical vignettes. One participant exhibited increases in the percentage of time she maintained eye contact and the assertiveness tone and volume of voice she used in her role plays. She did not show improvements in these skills across other measures. One participant exhibited increases on observed request denying, but did not show improvements in these skills on selfreport measures. Finally, one participant indicated denying more requests between sessions but did not show improvements on this skill in hypothetical scenarios or actual role plays.

It is possible that disparities occurring across observed and self-reported skill use are accounted for by the type of skill that was being assessed. Three participants reported improvements in either making or denying requests. These skills are fairly discrete instances of behavior that are made consciously by the speaker, as opposed to nonverbal counterparts (e.g. body language, eye contact, and tone of voice), thus lending themselves to be more identifiable

and reportable. Improvements on each skill was only noted for role play data, which also suggests that assertive skills are more readily identifiable to those observing them as opposed to those engage in them. Interestingly, the only participant to show improvements across all three measures was the only participant who endorsed improvements in using an assertive tone and volume of voice and assertive nonverbal behaviors. More research is needed to identify the best methods for measuring changes in assertive behaviors.

The present study moderately supports contemporary literature suggesting that using a behavioral skills training model to teach assertiveness skills improves skill acquisition and use. Literature has noted the importance of using this type of training model to improve preventative skills (e.g. saying "No" or "Stop") among children (Wurtele, 2008). Using role plays with members of the opposite sex has been another important means to teach and practice assertiveness skills (Simpson Rowe, Jouriles, McDonald, Platt, & Gomez, 2012). Research also exhibits that teaching assertiveness skill among adolescents using a training system that allows for modeling, rehearsal in realistic simulations, and feedback also improves skill use (Simpson Rowe, Jouriles, & McDonald, 2014). It is also suggested that when college-aged women engage in sexual victimization prevention programs that focus on self-defense and verbal denial of advances, they show improvements in assertiveness skills (Brecklin, 2004; Brecklin & Ullman, 2005; Simpson Rowe, Jouriles, McDonald, Platt, & Gomez, 2012; Weitlauf, Smith, & Cervone, 2000). However, these aforementioned studies did find that the use of these skills after exposure to the assertiveness training programs was associated with reduced risk for unwanted sexual experiences, yet the present study did not yield similar results. It is possible that previous research has found this reduction in risk due to using group designs with larger sample sizes. Possible explanations and limitations for these and other findings are detailed below.

Limitations and Implications

One limitation to the present research is the sample size. Though the methodology is single-subject, group based analyses were conducted to examine changes in critical dependent variables (i.e. risk for sexual coercion and assertiveness skills). To increase power for these analyses a larger group design would be favorable as opposed to the seven participants in the present study. Group designs could also be effective at examining group differences in the introduction of skills sets. Presently, all skills across the three small groups were introduced in the same order. It could be beneficial to introduce the skills in differing orders across groups to examine if the order in which the skills are taught affect the ability to learn subsequent skills, and how the order affects risk for sexual coercion.

Several participants were exhibiting high rates of assertiveness skills at baseline with little to no room for change. These early ceiling effects hinder the ability to measure meaningful changes. Future research should address this using different ways to measure change. For example, a larger Likert type scale could capture finer changes in behavior, and providing operational definitions for each point on the scale will allow for more precise measurement.

It's also important to consider the type of assertiveness skills being taught. Previous literature indicated specifically targeting sexual assertiveness may provide skills generalizable to dating specific situations, and lead to reduced risk for sexual victimization (e.g. Kelley, Orchowski, & Gidycz, 2016). The present study focused on teaching general assertiveness skill and how to use those in potentially coercive situations. Future research should look at teaching sexual assertiveness skills to improve the generalization of these skills to potentially coercive situations.

Baseline data should ideally be collected long enough to note stability. The present study allowed between two to four sessions to collect baseline data. Longer baseline phases are necessary to understand the nature of the behavior prior to intervention, and to use as a control condition against which change can be measured. These brief baseline phases did not provide enough time to note any true trends, changes, or stability prior to introducing the intervention. Introducing an intervention without a more comprehensive understanding of the behavior at baseline limits the interpretation of the results. Thus changes noted during the intervention may be a function unaccounted for by unobserved trends in the baseline, the introduction or practice of the intervention, or due to extraneous variables (e.g. interactions with peers outside of the group).

Another limitation is the lack of intervention fidelity data. Assertiveness skills were taught by different group leaders across the three different groups. The first group was initially led by the present author and four additional research assistants. The author trained the co-leaders how to teach the assertiveness skills using a BST model. The second group was initially led by two of the original group leaders, but the author was no longer present at the group, so two additional leaders were introduced to the study. They were appraised of the model and training procedure, but did not receive the same training as the original group leaders. These two research assistants continued to lead the third group, with assistance of one original group member. Though supervision was provided by the author to the group leaders, no formal training was provided, and no fidelity data was gathered on their implementation of the intervention. Thus is it not possible to conclude that the intervention was provided to each group in a standardized way or with fidelity. Future research needs to address this through standardized training and tracking of the delivery of the intervention protocol.

Further, the present study did not control for possible risk factors, such as parental supervision and substance use, in the group level analyses. Future research should address ways parental supervision and substance use influence risk for sexual coercion, Future research could include parents in the training process to help guide their adolescent using and recognizing assertiveness skills outside of session.

It is important to consider the external validity of the study when examining ways to reduce the risk for sexual coercion and increase assertiveness. Adolescent social relationships are rapidly moving away from in-person interactions to more virtual ones (i.e. Snapchat and Instagram), which is impacting rates of sexual coercion and unwanted sexual experiences (e.g. sexting) through the use of technology (Henry & Powell, 2018). Future research should focus on reducing rates of unwanted sexual experiences among adolescents which occur through technology.

Another important limitation to address is the gender- and hetero-normative overtones of the program. Role plays were created to mimic interactions that may occur between the participant and a male peer, most likely in a heterosexual context. It is important to broaden prevention programs to be more inclusive to those who do not identify at heterosexual or cis gender, especially given that individuals in the LGBTQ community are among those at the highest risk for sexual victimization (NSVRC and PCAR, 2012).

Finally, this study, along with many other studies, have examined ways to improve protective factors for at-risk females as a means prevent sexual victimization. While it is important to empower those at risk to protect themselves against sexual coercion, it is valuable to address the other side of the interaction. Victimization is never a victim's fault, and engaging in protective strategies will not stop all perpetration. It is imperative that further prevention

strategies be examined through skill training for those who are at risk to perpetrate unwanted sexual experiences. Further research should focus on both speaker and listener behaviors to reduce escalation in sexually coercive situations.

In sum, adolescent sexual coercion may be influenced by a number of variables, including communication styles. The present study focused on increasing assertive communication styles in one-on-one interactions to reduce the risk for sexual coercion. Modest changes were found in regards to assertiveness and no changes were found for risk for sexual coercion. In addition, many participants engaged in assertive behaviors at the onset of the study. Changes to the methodology could be made to address the major limitations to the current study's design. However, given the swift changes in adolescent relationship dynamics, it may also be important to turn attention to means of communication and address ways to reduce unwanted sexual experiences in other high risk contexts (e.g. social media).

#### REFERENCES

- Bornstein, M., Bellack, A., & Hersen, M. (1977). Social-skills training for unassertive children: A multiple-baseline analysis. *Journal of Applied Behavior Analysis*, *10*, 183-195.
- Bramsen, R., Lasgaard, M., Koss, M., Elklit, A. & Banner, J. (2012), Adolescent sexual victimization: A prospective study on risk factors for first time sexual assault. *European Child and Adolescent Psychiatry*, 21, 521-526.
- Bramsen R, Lasgaard M., Elklit A., Koss M. (2010) The development and psychometric assessment of the adolescent sexual coercion risk scale. J Interpers Violence 28:1524– 154
- Brecklin, L. (2004). Self-defense/ assertiveness training, women's victimization history, and psychological characteristics. *Violence Against Women, 10*, 479-497.
- Brecklin, L. & Ullman, S. (2005). Self-defense or assertiveness training and women's responses to sexual attacks. *Journal of Interpersonal Violence*, 20, 738-762. DOI: 10.1177/0886260504272894
- Brown, A., Testa, M., and Messman-Moore, T. (2009). Psychological consequences of sexual victimization resulting from force, incapacitation, or verbal coercion. *Violence Against Women, 15*, 898-919. DOI: 10.1177/1077801209335491
- Chen L., Murad, M., Paras, M., Colbenson, K., Sattler, A., Goranson, E., Elamin, M., Seime, R., Shinozaki, G., Prokop, L., & Zirakzadeh, A.(2010). Sexual abuse and lifetime diagnosis of psychiatric disorders: Systematic review of meta-analysis. *Mayo Clinic Proceedings*, 85, 618-629.

- Classen, C., Palesh, O., & Aggarwal, R. (2005) Sexual revictimization: A review of the empirical literature. *Trauma Violence Abuse*, *6*, 103-129. DOI: 10.1177/1524838005275087
- Conte, J. & Fogarty, L. (1990). Sexual abuse prevention programs for children. *Education and Urban Society*, 22, 270-284. DOI: 10.1177/0013124590022003004
- Greene, D. & Navarro, R. (1998). Situation-specific assertiveness in the epidemiology of sexual victimization among university women: A prospective path analysis. *Psychology of Women Quarterly*, 22, 589-604.
- Greenfeld, L. (1997). Sex offenses and offenders: An analysis of data on rape and sexual assault,(Report number: NCJ: 163392). Report prepared for U.S Department of Justice, Officeof Justice Programs, Bureau of Justice Statistics.
- Henry, N. & Powell, A. (2018). Technology-facilitated sexual violence: A literature review of empirical research. *Trauma, Violence, & Abuse, 19*, 195-208.
- Humphrey, J. & White, J. (2000). Women's vulnerability to sexual assault from adolescence to young adulthood. *Journal of Adolescent Health*, 27, 419-424.
- Jacobson, N. & Truax, P. (1991). Clinical significance: A statistical approach to defining meaningful change in psychotherapy research. *Journal of Consulting and Clinical Psychology*, 59, 12-19.
- Kelley, E., Orchowski, L., & Gidycz, C. (2016) Sexual victimization among college women:Role of sexual assertiveness and resistance variables. *Psychology of Violence*, 6, 243-252

- Koss, M., Abbey, A., Campbell, R., Cook, S., Norris, J., Testa, M., Ullman, S., West, C., &
  White, J. (2007) Revising the SES: A collaborative process to improve assessment of sexual aggression and victimization. *Psychology of Women Quarterly*, *31*, 357-370.
- Koss, M., & Oros, C.(1982). The Sexual Experience Survey: An empirical instrument investigating sexual aggression and victimization. *Journal of Consulting and Clinical Psychology 50*, 455–457.
- Kratochwill, T. R., Hitchcock, J., Horner, R. H., Levin, J. R., Odom, S. L., Rindskopf, D. M. & Shadish, W. R. (2010). Single-case designs technical documentation. Retrieved from What Works Clearinghouse website: http://ies.ed.gov/ncee/wwc/pdf/wwc\_scd.pdf.
- Lacasse, A. & Mendelson, M. (2007) Sexual coercion among adolescents: Victims and perpetrators. *Journal of Interpersonal Violence*, 22, 424-437. DOI: 10.1177/0886260506297027
- Livingston, J., Hequembourg, A., Testa, M., & Vanzile-Tamsen, C. (2007). Unique aspects of adolescent sexual victimization experiences. *Psychology of Women Quarterly*, 31, 331-343.
- Mason, F. & Lodrick, Z. (2013) Psychological consequences of sexual assault. *Best Practice & Research Clinical Obstetrics and Gynaecology*, 27, 27-37.
- Morokoff, P., Quina, K., Harlow, L., Whitmire, L., Grimley, D., Gibson, P., & Burkholder, G. (1997). Sexual Assertiveness Scale (SAS) for women: Development and Validation. *Journal of Personality and Social Psychology*, *4*, 790-804.

- National Sexual Violence Resource Center and Pennsylvania Coalition Against Rape (2012). *Sexual violence and individuals who identify as LGBTQ: Research brief.* Retrieved from <u>http://www.nsvrc.org/sites/default/files/Publications\_NSVRC\_Research-Brief\_Sexual-</u> Violence-LGBTQ.pdf
- Parker. R., & Vannest, K. (2009). An improved effect size for single-case research: Nonoverlap of all pairs. *Behavior Therapy*, 40, 357-367
- Petersen-Brown, S., Karich, A., & Symons, F. (2012) Examining estimates of effects using nonoverlap of all pairs in multiple baseline studies of academic intervention. *Journal of Behavioral Education*, 21, 203-216.
- Planty, M., Langton, L., Krebs, C., Berzofsky, M., & Smiley-McDonald, H., (2013) Special report: female victims of sexual violence 1994-2010. Washington D.C.: U.S. Department of Justice Office of Justice Programs Bureau of Justice Statistics.
- Radin, L. (2000) Outspoken and future expectancies in adolescents: The relationship of gender and role orientation (Unpublished doctoral dissertation). Fairleigh Dickinson University, Teaneck, NJ
- Rathus, S. (1973), A 30-item schedule for assessing assertive behavior. *Behavior Therapy*, *4*, 398-406.
- Simpson Rowe, L., Jouriles, E., & McDonald R. (2014). Reducing sexual victimization among adolescent girls: A randomized controlled pilot trial of My Voice, My Choice. *Behavior Therapy*, 46, 315-327 doi: 10.1015/j.beth.2014.11.003

- Simpson Rowe, L., Jouriles, E., McDonald, R., Platt, C., & Gomez, G. (2012). Enhancing women's resistance to sexual coercion: A randomized controlled trial of the DATE program. *Journal of American College Health*, 60, 211-218.
- Small, S. & Kerns, D. (1993) Unwanted sexual activity among peers during early and middle adolescence: Incidence and risk factors. *Journal of Marriage and Family*, 55, 914-952.
- Testa, M. & Dermen, K. (1999) The differential correlates of sexual coercion and rape. *Journal of Interpersonal Violence, 14*, 548-561. DOI: 10.1177/088626099014005006
- Testa, M., VanZile-Tamsen, C., Livingston J., & Koss, M. (2004) Assessing women's experiences of sexual aggression using the Sexual Experiences Survey: Evidence for validity and implications for research. *Psychology of Women Quarterly*, 28, 256-265.
- Tjaden, P. & Theonnes, N. (2006). Extent, nature, and consequences of rape victimization:
   Findings from the National Violence Against Women Survey. Washington D.C.: U.S
   Department of Justice, Office of Justice Programs, National Institute of Justice.
- Topping, K. & Barron, I. (2009). School-based child sexual abuse prevention programs: A review of effectiveness. *Review of Educational Research*, 79, 431-463. DOI: 10.3102/0034654308325582
- Ullman, S. (2007) A 10-year update of "Review and critique of empirical studies of rape avoidance". *Criminal Justice and Behavior*, *34*, 411-429. DOI: 10.1177/0093854806297117
- Vaal, J. & McCullagh, J. (1977). The Rathus Assertiveness Schedule: Reliability at the Junior High School level. *Adolescence*, 12, 411-419.

- Vogel, R. & Himelein, M. (1995) Dating and sexual victimization: An analysis of risk factors among precollege women. *Journal of Criminal*
- Weitlauf, J., Smith, R., & Cervone, D. (2000) Generalization of effects of coping-skills training: Influence of self-defense training on women's efficacy beliefs, assertiveness, and aggression. *Journal of Applied Psychology*, 85, 625-633. DOI: 10.1037//0021-9010.85.4.625
- Wolfe, D., Scott, K., Reitzel-Jaffe, D., Wekerle, C., Grasley, C., & Straatman, A. (2001)
   Development and validation of the Conflict in Adolescent Dating Relationship Inventory.
   *Psychological Assessment, 13* (2), 277-293. doi: 10.1037//1040-3590.13.2.277
- Wurtele, S. (2008) Behavioral approaches to educating young children and their parents about child sexual abuse prevention. *Journal of Behavior Analysis of Offender and Victim Treatment and Prevention*, 1, 52-64.
- Yeater, E., Lenberg, K., Avina, C., Rinchart, J., & O'Donohue, W. (2008). When social situations take a turn for the worse: Situational and interpersonal risk factors for sexual aggression. Sex Roles, 59, 151-163. DOI: 10.1007/s11199-008-9437-z

## APPENDICES

## Appendix A: Participant Data

Participant	Age	Group	Sessions Attended	Grade	Race	Family Annual Income
100	17	1	Consent & session 1	10 <sup>th</sup>	African American	\$35,000-49,999
200	14	1	Sessions 1- follow-up	8 <sup>th</sup>	White, Hispanic/Latino, African American, & Native American	\$12,000-24,999
300	12	2	Consent - follow-up	7 <sup>th</sup>	White	\$75,000-99,999
400	14	2	Consent - follow-up	8 <sup>th</sup>	White	\$75,000-99,999
500	13	3	Session 1- follow-up	8 <sup>th</sup>	White	\$35,000-49,999
600	14	3	Sessions 1 & 2	9 <sup>th</sup>	White	\$100,000 or higher
700	17	3	Sessions 1-3 & 5-follow- up	11 <sup>th</sup>	White	\$75,000-99,999

# Table 1Participant Demographics

## Table 2

## ANOVA means and standard deviations

Measure	Time 1           M (SD)	Time 2           M (SD)	Time 3           M (SD)	Time 4           M (SD)
SRAS	87.50 (17.60)	95.8 (50.3)	98.8 (23.3)	106.8 (20.8)
CADRI	117.3 (25)	119.3 (31.4)	119.2 (33.1)	120.4 (29.6)
SAS				
Refusal	19.25 (7.63)	24.00 (9.54)	22.50 (10.61)	17.00 (7.07)
Pregnancy and STD Prevention	26.33 (6.35)	24.33 (6.66)	20.50 (7.78)	19.2 (15.3)
ASCRS				
Signaling Boundaries	44.67 (7.20)	49.02 (5.55)	46.20 (10.08)	46.20 (7.29)
Risky Sexual Behavior	10.95 (2.59)	10.25 (2.22)	11.60 (4.51)	11.80 (7.66)

SRAS: Simple Rathus Assertiveness Schedule; CADRI: Conflicts in Adolescent Dating Relationships Inventory; SAS: Sexual Assertiveness Scale; ASCRS: Adolescent Sexual Coercion Risk Scale

## Table 3.1

## RCI ASCRS- Signaling Sexual Boundaries Subscale

Participant	RC Score	RCI Met Yes/No
200	-0.26	No
300	0.53	No
400	-4.47	Yes
500	-0.79	No
700	2.63	Yes*

\* Reliable change was noted for participant 700, however it was in the unexpected direction, indicating a significant reduction in signaling sexual boundaries; ASCRS- Adolescent Sexual Coercion Risk Scale; RC- Reliable Change; RCI- Reliable Change Index; Reliable change has occurred if the obtained RC is >1.96

#### Table 3.2

## RCI ASCRS- Risky Sexual Behavior Subscale

Participant	RC Score	RCI Met Yes/No
200	-0.53	No
300	-2.14	Yes*
400	-1.07	No
500	-0.53	No
700	-4.28	Yes*

\* Reliable change was noted for participants 300 and 700, however it was in the unexpected direction, indicating a significant increase in selfreported risky sexual behaviors; ASCRS- Adolescent Sexual Coercion Risk Scale; RC- Reliable Change; RCI- Reliable Change Index; Reliable change has occurred if the obtained RC is >1.96\*S

## Table 3.3

## RCI SAS- Refusal Subscale

Participant	RC Score	RCI Met Yes/No
500	0	No
700	-0.44	No

Complete data at pre- and post-intervention were obtained from participants 500 and 700; SAS- Sexual Assertiveness Scale for Women; RC-Reliable Change; RCI- Reliable Change Index; Reliable change has occurred if the obtained RC is >1.96

#### Table 3.4

## RCI SAS- Pregnancy & STD Prevention Subscale

Participant	RC Score	RCI Met Yes/No
500	0.76	No
700	0.76	No

Complete data at pre- and post-intervention were obtained from participants 500 and 700; SAS- Sexual Assertiveness Scale for Women; RC-Reliable Change; RCI- Reliable Change Index; Reliable change has occurred if the obtained RC is >1.96

## Table 3.5

## RCI- CADRI

Participant	RC Score	RCI Met Yes/No
200	0.30	No
300	0.10	No
400	-0.10	No
500	1.30	No
700	-0.60	No

CADRI- Conflicts in Adolescent Dating Relationships Inventory; RC- Reliable Change; RCI- Reliable Change Index; Reliable change has occurred if the obtained RC is >1.96

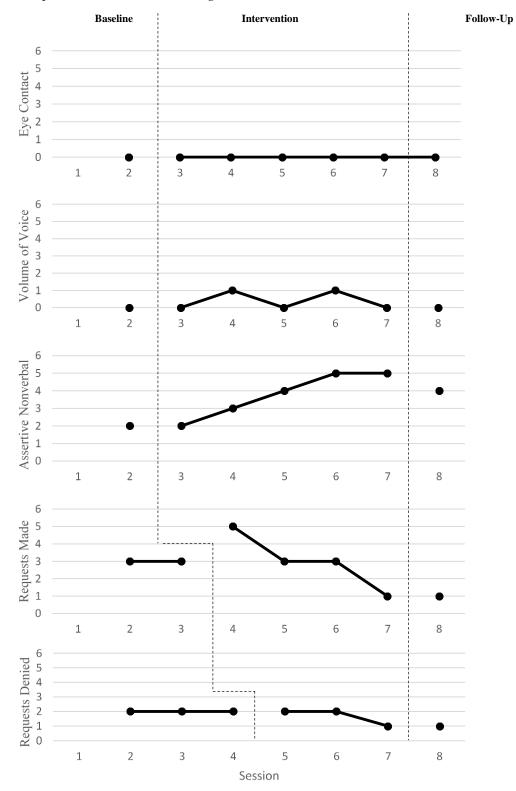
## Table 3.6

## RCI- SRAS

Participant	RC Score	RCI Met Yes/No
200	1.17	No
300	-0.39	No
400	-0.29	No
500	0.39	No
700	-0.97	No

SRAS- Simple Rathus Assertiveness Schedule; RC- Reliable Change; RCI- Reliable Change Index; Reliable change has occurred if the obtained RC is >1.96

Figure 1.1



Participant 200 Assertiveness Vignettes

## Figure 1.2

Participant 300 Assertiveness Vignettes

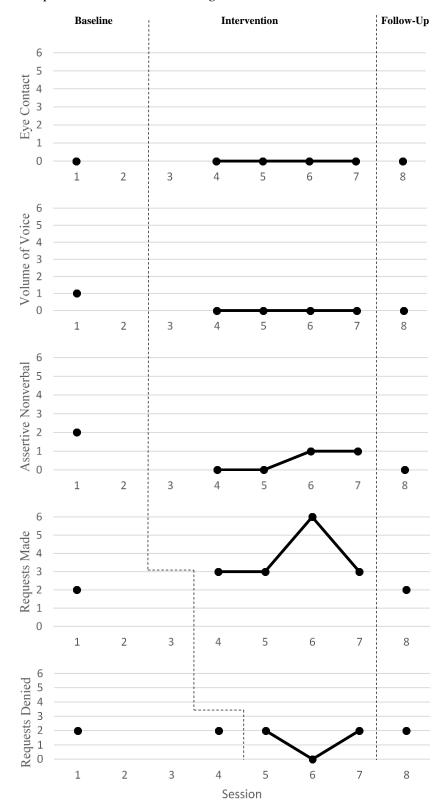
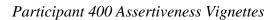


Figure 1.3



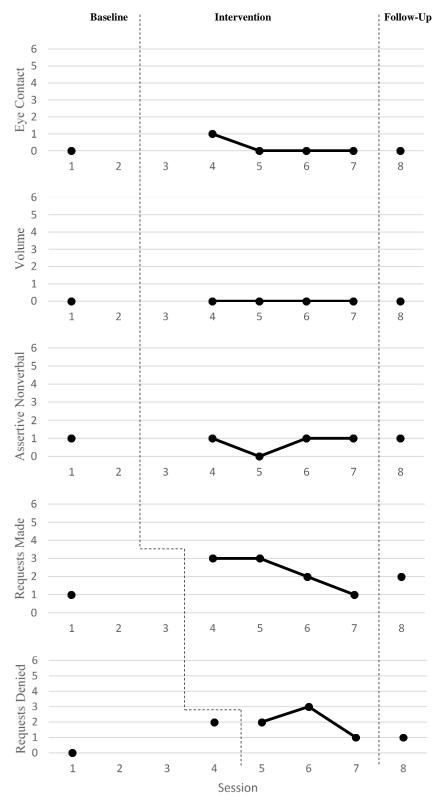


Figure 1.4

Participant 500 Assertiveness Vignettes

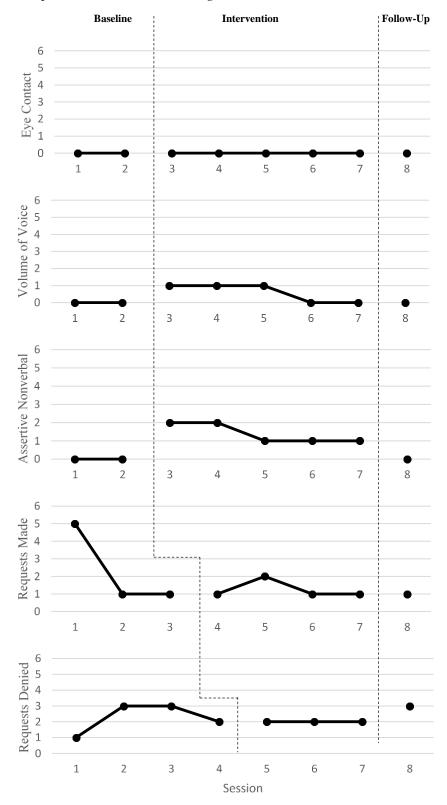
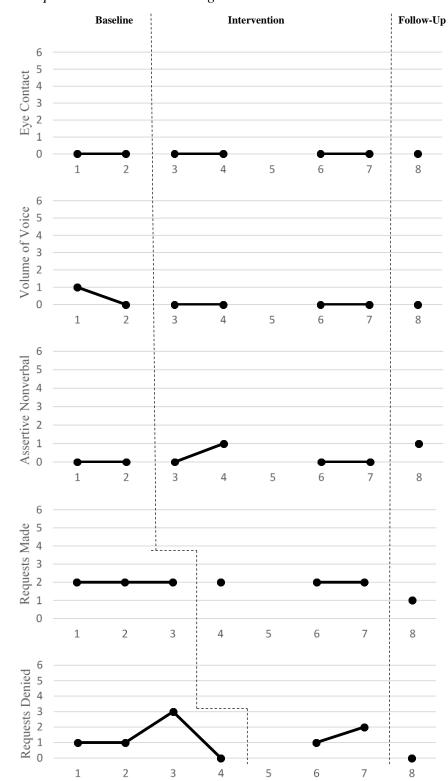


Figure 1.5



Participant 700 Assertiveness Vignettes

Session

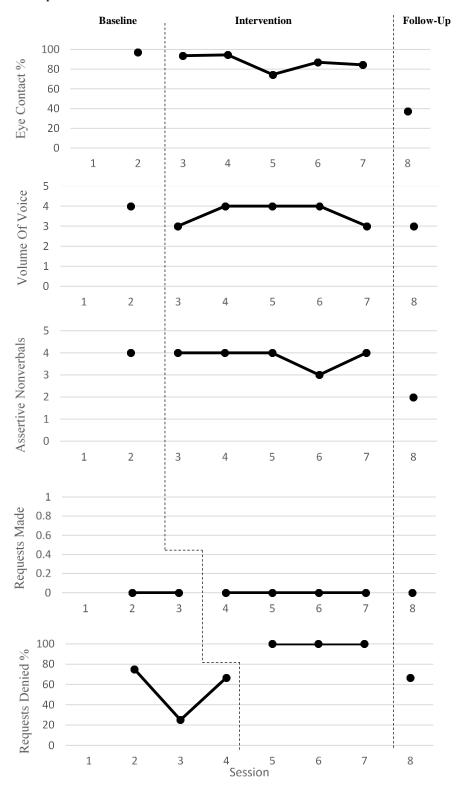
# Table 4Observational data statistics by participant

	Consent/	Session	Session	Session	Session	Session	Session	Follow-
	Assent	1	2	3	4	5	6	Up
Participant 100								
Eye	71.42%	87.09%	-	-	-	-	-	-
Contact %								
Volume/	4	5	-	-	-	-	-	-
Tone (1-5)								
Assert.	3	4	-	-	-	-	-	-
Nonverbal								
(1-5)	-							
Requests	0	1	-	-	-	-	-	-
Made								
(Total)	1000/	1000/						
Requests	100%	100%	-	-	-	-	-	-
Denied %								
Participant 200								
Eye	-	97.22%	93.62%	94.44%	74.51%	87.01%	84.4%	37.5%
Contact %								
Volume/	-	4	3	4	4	4	3	3
Tone (1-5)								
Assert.	-	4	4	4	4	3	4	2
Nonverbal								
(1-5)								
Requests	-	0	0	0	0	0	0	0
Made								
(Total)		<b>- - - - -</b>			10001	10004	10001	
Requests	-	75%	25%	66.67%	100%	100%	100%	66.67%
Denied %								
Participant 300								
Eye	47.4%	55%	63.6%	85.5%	61.2%	81.4%	57.4%	92.9%
Contact %	+/.+/0	5570	03.070	05.570	01.270	01.470	57.470	12.170
Volume/	3	3	3	4	4	4	3	5
Tone (1-5)	5	5	5	Т	т	т	5	5
Assert.	2	3	2	4	4	4	3	3
Nonverbal	_		_					
(1-5)								
Requests	0	0	0	0	1	0	0	0
Made								
(Total)								
Requests	100%	100%	100%	50%	25%	0%	50%	100%
Denied %				68				

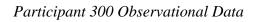
Participant 400								
Eye	76.2%	64.3%	64.5%	78.5%	58.1%	78%	70%	64.7%
Contact %			~	_				_
Volume/ Tone (1-5)	4	5	5	5	5	5	3	5
Assert. Nonverbal (1-5)	4	4	5	5	5	5	5	5
Requests Made (Total)	0	0	0	1	0	0	0	0
Requests Denied %	33.3%	66.7%	100%	40%	100%	0%	100%	100%
Participant 500								
Eye Contact %	-	28%	34.1%	34%	18.2%	28.6%	40%	61.1%
Volume/ Tone (1-5)	-	4	4	3	4	5	5	4
Assert. Nonverbal (1-5)	-	4	4	4	3	4	5	5
Requests Made (Total)	-	0	0	1	1	1	0	0
Requests Denied %	-	66.7%	100%	100%	100%	100%	100%	100%
Participant 600								
Eye Contact %	-	77.3%	96.9%	-	-	-	-	-
Volume/ Tone (1-5)	-	4	4	-	-	-	-	-
Assert. Nonverbal (1-5)	-	3	3	-	-	-	-	-
Requests Made (Total)	-	0	0	-	-	-	-	-
Requests Denied %	-	66.7%	100%	-	-	-	-	-
Participant 700								
Eye Contact %	-	70.6%	72.9%	82.9%	-	86.5%	86.7%	70%

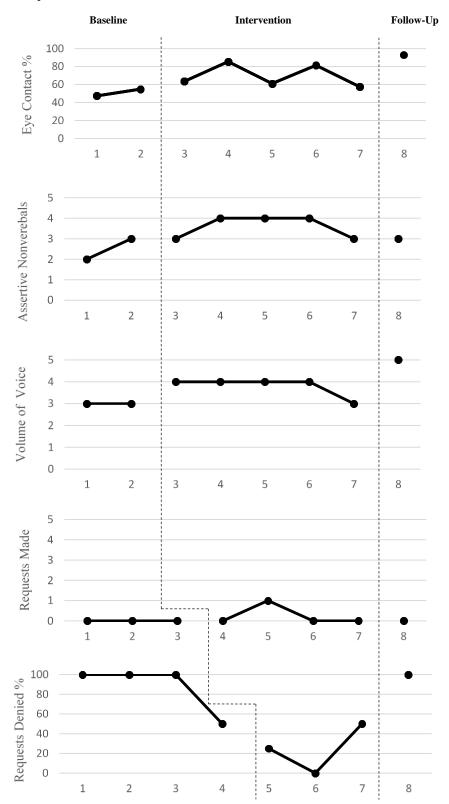
Volume/ Tone (1-5)	-	5	3	5	-	4	4	5
Assert. Nonverbal	-	4	3	5	-	5	5	5
(1-5) Requests Made (Total)	-	2	1	2	-	0	0	1
Requests Denied %	-	66.7%	33.3%	100%	-	100%	100%	100%

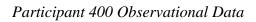


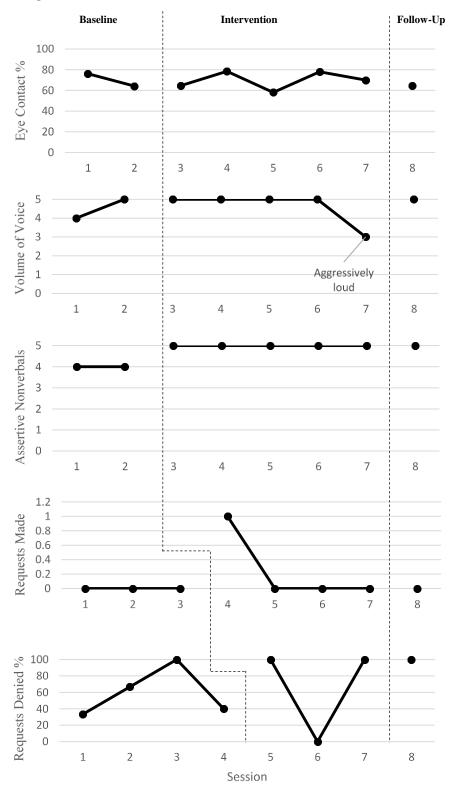


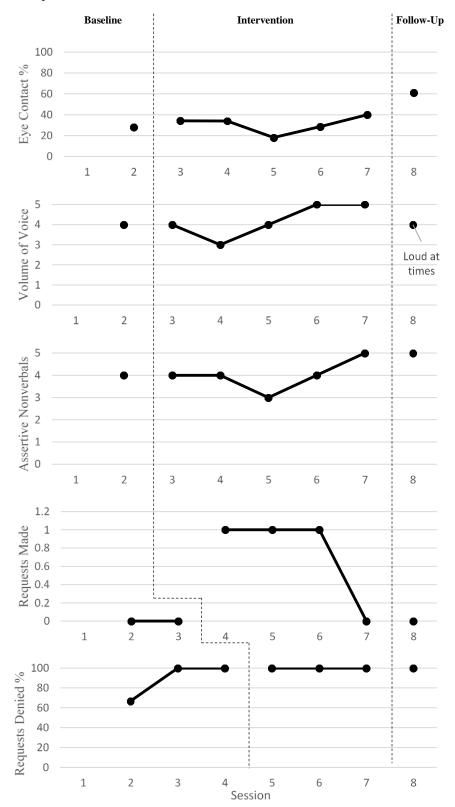
Participant 200 Observational Data





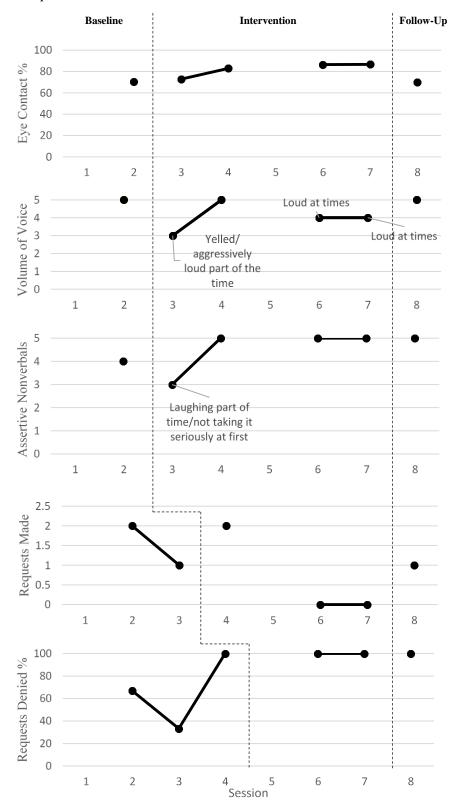






Participant 500 Observational Data

Participant 700 Observational Data



#### Appendix B: Session Outline

#### **Consent Session** (110 minutes)

- 1. Introduction to the study (20 minutes)
  - The study will consist of six weekly session and one four-week follow-up.
     Sessions will last between one and a half to two hours
  - b. The purpose of the study is to teach young women how to use assertiveness skills in interpersonal and dating relationships
  - c. Possible consequences to acting passively or aggressively as opposed to assertively
    - i. Engaging in verbal or physical confrontations
    - ii. Engaging in activities that they are uncertain about or unprepared for (e.g. alcohol use or engaging in sexual behavior)
  - d. Participants will engage in weekly role-plays
    - i. With peers and male research assistants
    - ii. Role-plays with males will be video recorded
  - e. Participants will complete measures assessing past sexual experiences, risk for sexual coercion, and assertiveness skills during this session, the first and sixth sessions, and the four-week follow-up session.
- 2. Review consent form (10 minutes)
  - a. Parents will complete their consent forms
  - b. Adolescents will complete their consent forms
- 3. Role-plays with male research assistants (50 minutes)

- a. Participants will be taken individually to engage in role-plays with male research assistants
- b. Role-plays will be video recorded
- 4. Measures (20 minutes)
  - a. Parent completes: Demographics (Completed by the participant's parent)
  - b. Adolescent completes:
    - 1. Conflicts in Adolescent Dating Relationships
    - 2. Adolescent Sexual Coercion Risk Scale
    - Sexual Assertiveness Scale for Women (using the 'Refusal' and 'Pregnancy-STD Prevention' subscales)
    - 4. Assertiveness Vignettes
- Answer questions, hand out a calendar sheet with the times and dates of each session, thank the parents and participants. (10 minutes)

#### Session I (120 minutes)

- 1. Role-plays with male research assistants (50 minutes)
- a. Participants will be taken individually to engage in role-plays with male research assistants
  - b. Role-plays will be video recorded
- 2. Measures (20 minutes)
  - a. Conflicts in Adolescent Dating Relationships (asks of experiences in the past month)
  - b. Adolescent Sexual Coercion Risk Scale
  - c. Sexual Assertiveness Scale for Women (using the 'Refusal' and 'Pregnancy-STD Prevention' subscales)
  - d. Assertiveness Vignettes
- 3. Introduction (5 minutes)
  - a. Researchers
  - b. The study

i. Improve assertiveness skills to improve quality of social relationships and reduce the risk of unwanted sexual experiences

ii. Learning assertive behaviors through observing a model, practicing the skills with the group, receiving feedback, and giving feedback

- - c. Today's session outline
    - i. Discuss risks
- ii. Communication types/ introduction of first set of skills
- iii. "When is assertiveness important?"

#### iv. Assertiveness in dating

- d. Questions
- 4. Rules (5 minutes)
  - The matters discussed in the session may be sensitive, and to keep this environment a safe place no personal information shared in the session will be discussed outside of session.
  - ii. Give feedback only when instructed to do so
  - iii. Be mindful of your feedback (state it positively and with the intention to help).
  - iv. Be on time and ready to go at the start of each session
- 5. Discussion of general risk reduction strategies (5 minutes)
  - a. What we say/do can put us at risk for unwanted experiences
    - i. Posts on social media
    - ii. Texts
    - iii. Social behavior (e.g. going places we don't know well, being alone with people we are not well acquainted with, and alcohol and drug use)
  - b. Ask the group what other examples can be, that they or others may do to put someone at risk for unwanted experiences.
  - c. Discuss how they may handle situations that are undesirable
- 6. The researcher will engage the participants in a conversation regarding the role-play and the differences in assertive, aggressive, and passive communication styles. (10 minutes)
  - a. Aggressive "you" statements, and use of threats
  - b. Passive "umm" and "maybe" "I don't know"

- c. Assertive "I statement" and making requests versus demands
- 7. The group leaders will facilitate a group discussion about the use of assertiveness in real-life and ask "when is acting assertively difficult?" (5 minutes)
  - a. With parents
  - b. With friends
  - c. With significant others
  - d. It allows others to know your needs
  - e. It allows you to express your needs clearly
- 8. Introduction of first set of assertiveness skills (10 minutes; researchers should model examples of these behaviors during discussion)
  - a. Eye contact (maintaining eye contact throughout the interaction)
  - b. Volume of voice (loud enough to be heard but not yelling)
  - c. Congruency of face and body with the content of speech.
- 9. The group leader will guide a discussion with the participants regarding assertiveness and dating. Specific topics that are covered will include: (10 minutes)
  - a. When assertiveness is needed or important
  - b. When acting assertively is difficult or easy in a dating situation
  - c. The pros and cons of acting assertively with a dating partner.
- 10. Hand out Applied Assertiveness Skills Questionnaire, answer questions, and dismiss group

#### Session II (90 minutes)

- 1. Review Rules (2 minutes)
  - a. The matters discussed in the session may be sensitive, and to keep this environment a safe place no personal information shared in the session will be discussed outside of session.
  - b. Give feedback only when instructed to do so
  - c. Be mindful of your feedback (state it positively and with the intention to help).
  - d. Be on time and ready to go at the start of each session
- 2. Turn in homework: Applied Assertiveness Skills Questionnaire (3 minutes)
  - a. Answer any questions
  - b. Ask if anyone has an example they would like to share
- Review of assertive vs. passive vs. aggressive communication and discussion recapping last week's session (5 minutes)
  - a. Aggressive "you" statements, and use of threats
  - b. Passive "umm" and "maybe" "I don't know"
  - c. Assertive "I statement" and making requests versus demands
- Review of first set of assertiveness skills (10 minutes; researchers should model examples of these behaviors during review)
  - a. Eye contact (maintaining eye contact throughout the interaction)
  - b. Volume of voice (loud enough to be heard but not yelling)
  - c. Congruency of face and body with the content of speech.
- 5. One-on-one role play practice (10 minutes)
  - a. Participants will switch roles after 5 minutes

- 6. Group role play/ individual role-plays (50 minutes)
  - a. Each participant will engage in the group role plays
- i. Participants will provide one another with feedback based on their practices
  - b. During group practice participants will be systematically taken from the group to engage in video recorded role-plays with male research assistants
  - 7. Administer the Assertiveness Vignettes (10 minutes)
  - Hand out Applied Assertiveness Skills Questionnaire, answer questions, and dismiss group

#### Session III (90 minutes)

- 1. Review Rules (2 minutes)
  - a. The matters discussed in the session may be sensitive, and to keep this environment a safe place no personal information shared in the session will be discussed outside of session.
  - b. Give feedback only when instructed to do so
  - c. Be mindful of your feedback (state it positively and with the intention to help).
  - d. Be on time and ready to go at the start of each session
- 2. Turn in homework: Applied Assertiveness Skills Questionnaire (3 minutes)
  - a. Answer any questions
  - b. Ask if anyone has an example they would like to share
- 3. Review of last week's skills (5 minutes)
  - a. Eye contact
  - b. Volume
  - c. Congruency
- 4. Introduce request making (10 minutes)
  - a. Give examples of making requests with parents
  - b. Give examples of making request with friends
  - c. Give examples of making requests with a date/ romantic partner
- 5. One-on-one role play practice (10 minutes)
  - a. Participants will switch roles after 5 minutes
- 6. Group role play/ individual role-plays (50 minutes)
  - a. Each participant will engage in the group role plays

- i. Participants will provide one another with feedback based on their practices
  - b. During group practice participants will be systematically taken from the group to engage in video recorded role-plays with male research assistants
  - 7. Administer the Assertiveness Vignettes (10 minutes)
  - Hand out Applied Assertiveness Skills Questionnaire, answer questions, and dismiss group

#### Session IV (90 minutes)

- 1. Review Rules (2 minutes)
  - a. The matters discussed in the session may be sensitive, and to keep this environment a safe place no personal information shared in the session will be discussed outside of session.
  - b. Give feedback only when instructed to do so
  - c. Be mindful of your feedback (state it positively and with the intention to help).
  - d. Be on time and ready to go at the start of each session
- 2. Turn in homework: Applied Assertiveness Skills Questionnaire (3 minutes)
  - b. Answer any questions
  - c. Ask if anyone has an example they would like to share
  - 3. Review of last week's skill (5 minutes)
    - a. Request making
- i. With parents
- ii. With friends
- iii. With date/ romantic partner
  - 4. Introduce request denying (10 minutes)
    - a. Give examples of denying requests from friends
    - b. Give examples of denying requests from a date/ romantic partner
  - 5. One-on-one role play practice (10 minutes)
    - a. Participants will switch roles after 5 minutes
  - 6. Group role play/ individual role-plays (50 minutes)

- a. Each participant will engage in the group role plays
- i. Participants will provide one another with feedback based on their practices
  - b. During group practice participants will be systematically taken from the group to engage in video recorded role-plays with male research assistants
  - 7. Hand out Applied Assertiveness Skills Questionnaire, answer questions, and dismiss group

#### Session V (90 minutes)

1. Review Rules (2 minutes)

a. The matters discussed in the session may be sensitive, and to keep this environment a safe place no personal information shared in the session will be discussed outside of session.

- b. Give feedback only when instructed to do so
- c. Be mindful of your feedback (state it positively and with the intention to help).
- d. Be on time and ready to go at the start of each session
- 2. Turn in homework: Applied Assertiveness Skills Questionnaire (3 minutes)
  - a. Answer any questions
  - b. Ask if anyone has an example they would like to share
- 3. Review of all skills (15 minutes)
  - a. Eye contact
  - b. Volume of voice
  - c. Congruency of body and face with speech content
  - d. Request making
  - e. Request denying
- 4. One-on-one role play practice (10 minutes)
  - a. Participants will switch roles after 5 minutes
- 5. Group role play/ individual role-plays (50 minutes)
  - a. Each participant will engage in the group role plays
- i. Participants will provide one another with feedback based on their practices
  - b. During group practice participants will be systematically taken from the group to engage in video recorded role-plays with male research assistants

- 6. Administer the Assertiveness Vignettes (10 minutes)
- Hand out Applied Assertiveness Skills Questionnaire, answer questions, and dismiss group

#### Session VI (110 minutes)

1. Review Rules (2 minutes)

a. The matters discussed in the session may be sensitive, and to keep this environment a safe place no personal information shared in the session will be discussed outside of session.

- e. Give feedback only when instructed to do so
- f. Be mindful of your feedback (state it positively and with the intention to help).
- g. Be on time and ready to go at the start of each session
- 2. Turn in homework: Applied Assertiveness Skills Questionnaire (3 minutes)
  - a. Answer any questions
  - b. Ask if anyone has an example they would like to share
- 3. Measures (20 minutes)
  - a. Conflicts in Adolescent Dating Relationships (asks of experiences in the past month)
  - b. Adolescent Sexual Coercion Risk Scale
  - c. Sexual Assertiveness Scale for Women (using the 'Refusal' and 'Pregnancy-STD Prevention' subscales)
  - d. Assertiveness Vignettes
- 4. Review of all skills (15 minutes)
  - a. Eye contact
  - b. Volume of voice
  - c. Congruency of body and face with speech content
  - d. Request making
  - e. Request denying

- 5. One-on-one role play practice (10 minutes)
  - a. Participants will switch roles after 5 minutes
- 6. Group role play/ individual role-plays (50 minutes)
  - a. Each participant will engage in the group role plays
  - i. Participants will provide one another with feedback based on their practices
    - b. During group practice participants will be systematically taken from the group to engage in video recorded role-plays with male research assistants
- 7. Thank everyone and remind them of the four-week follow-up session.

#### Four-Week Follow- Up Session (120 minutes)

- 1. Introduce agenda (3 minutes)
  - a. Review rules
  - b. Role-play with male research assistant
  - c. Administer assessments
  - d. Review the skills
  - e. Answer any questions
  - f. Thank you snacks/ drinks
- 2. Review Rules (2 minutes)
  - a. The matters discussed in the session may be sensitive, and to keep this environment a safe place no personal information shared in the session will be discussed outside of session.
  - b. Give feedback only when instructed to do so
  - c. Be mindful of your feedback (state it positively and with the intention to help).
- 3. Group role play (60 minutes)
- a. Each participant will practice with research assistant in front of the group

b. Participants will be taken out of the group one at a time to be recorded separately using these

skills with a male research participant one-on-one

- 4. Measures (20 minutes)
  - a. Conflicts in Adolescent Dating Relationships (Revised to ask "in the past month")
  - b. Adolescent Sexual Coercion Risk Scale
  - c. Sexual Assertiveness Scale for Women (using the 'Refusal' and 'Pregnancy-STD Prevention' subscales)

- d. Assertiveness Vignettes
- 5. Review Skills (5 minutes)
  - a. Making Requests
  - b. Denying Requests
  - c. Eye Contact
  - d. Volume of Voice
  - e. Congruency of face/body and speech content
- 6. Answer questions and thank-yous (30 minutes)
  - a. Have pizza and drinks
  - b. Give hand-out about the skills they learned over the course of the study

Session	Content	Assessment
Consent	<ul> <li>Obtain consent/ assent</li> <li>Explain the study to the participants and their parents</li> </ul>	<ul> <li>Role-play with males</li> <li>First Baseline for observational data with males</li> <li>First Baseline for self- report assertiveness skills, sexual experiences, and sexual coercion risk</li> <li>Administer         <ul> <li>Demographics</li> <li>Conflicts in Adolescent Dating Relationships</li> <li>Sexual Assertiveness Scale for Women</li> <li>Adolescent Sexual Coercion Risk Scale</li> </ul> </li> </ul>
Session I	<ul> <li>Introduce the researchers and the study to the participants</li> <li>Discuss general risks (e.g. texts and social media)</li> <li>Discuss the differences between assertive, passive, and aggressive styles of communication</li> <li>Introduce first skill set (eye contact, volume of voice, and congruency of body and speech content)</li> <li>Discuss when being assertive is difficult</li> </ul>	<ul> <li>Role-play with male research assistants</li> <li>Second Baseline for observational data with males</li> <li>Second Baseline for self-report assertiveness skills, sexual experience, and sexual coercion risk</li> <li>Administer         <ul> <li>Conflicts in Adolescent Dating Relationships</li> <li>Sexual Assertiveness Scale for Women</li> <li>Adolescent Sexual Coercion</li> </ul> </li> </ul>

## Appendix C: Sessions Flow Chart

Session II	<ul> <li>Review communication styles</li> <li>One-on-one practice with females peers</li> <li>Group practice of skills</li> </ul>	<ul> <li>Risk Scale         <ul> <li>Assertiveness Vignettes</li> </ul> </li> <li>Assign Applied Assertiveness Skills Questionnaire for homework</li> <li>Assertiveness skills assess through Assertiveness Vignettes (Increases on reports of eye contact, volume of voice, and congruency of body and speech content are expected for scenarios with males and females)</li> <li>Individual participants taken from group practice to record role- plays with male research assistant</li> <li>First observational data point obtained for eye contact, volume of voice, and congruency of body and speech content (Increases in these skills are expected in role-plays with males)</li> <li>Third Baseline for observational data of request denying and request making</li> <li>Assign Applied Assertiveness Skills Questionnaire for</li> </ul>
Session III		homework
50551011 111	<ul> <li>Introduce request making</li> <li>One-on-one practice with females peers</li> <li>Group practice of skills</li> </ul>	<ul> <li>Assertiveness skills assess through Assertiveness Vignettes (Increases on reports of eye contact, volume of voice, and congruency of body and speech content are expected for</li> </ul>

		<ul> <li>scenarios with males and females)</li> <li>Individual participants taken from group practice to record role-plays with male research assistant</li> <li>First observational data point obtained for request making (Increase use of request making is expected in role-plays with males)</li> <li>Second observational data point obtained for eye contact, volume of voice, and congruency of body and speech content (Increased use of these skills is expected in role-plays with males)</li> <li>Fourth Baseline observational data point obtained for request denying</li> <li>Assign Applied Assertiveness Skills Questionnaire for homework</li> </ul>
Session IV	<ul> <li>Introduce request denying (saying "no")</li> <li>One-on-one practice with females peers</li> <li>Group practice of skills</li> </ul>	<ul> <li>Assertiveness skills assess through Assertiveness Vignettes (Increases on reports of eye contact, volume of voice, and congruency of body and speech content and request denying are expected for scenarios with males and females)</li> <li>Individual participants taken from group practice to record role- plays with male research assistant</li> <li>First observational data point obtained for</li> </ul>

Session V	<ul> <li>Review all of the skills</li> <li>Group practice of all</li> </ul>	<ul> <li>request denying         <ul> <li>(Increases in the amount of requests denied is expected in role-plays with males)</li> </ul> </li> <li>Second observational data point obtained for request making         <ul> <li>(Increases in request making is expected in role-plays with males)</li> <li>Third observational data point obtained for eye contact, volume of voice, and congruency of body and speech content (Increased use of these skills are expected in role-plays with males)</li> <li>Assign Applied Assertiveness Skills Questionnaire for homework</li> <li>Assertiveness skills assess through Assertiveness Vignettes</li> </ul> </li> </ul>
	skills	<ul> <li>(Increases on reports of eye contact, volume of voice, and congruency of body and speech content, request making, and request denying are expected for scenarios with males and females)</li> <li>Individual participants taken from group practice to record role-plays with male research assistant</li> <li>Second observational data point obtained for request denying (Increases in the amount of requests denied is expected in role-plays with males)</li> </ul>

		<ul> <li>Third observational data point obtained for request making (Increases in requests made is expected in role- plays with males)</li> <li>Fourth observational data point obtained for eye contact, volume of voice, and congruency of body and speech content (Increases in these skills is expected in role-plays with males)</li> <li>Assign Applied Assertiveness Skills Questionnaire for homework</li> </ul>
Session VI	<ul> <li>Review all of the skills</li> <li>Group practice of all skills</li> </ul>	<ul> <li>Assess assertiveness skills, sexual experiences, and coercion risk         <ul> <li>Conflicts in Adolescent Dating Relationships</li> <li>Sexual Assertiveness Scale for Women</li> <li>Adolescent Sexual Coercion Risk Scale</li> <li>Adolescent Sexual Coercion Risk Scale</li> <li>Assertiveness Vignettes (Increases are expected for request making/denying, eye contact, volume of voice, and congruency for scenarios with males and females)</li> </ul> </li> <li>Individual participants taken from group</li> </ul>

		<ul> <li>practice to record role- plays with male research assistant</li> <li>Third observational data point obtained for request denying (Increases in the amount of requests denied is expected in role-plays with males)</li> <li>Fourth observational data point obtained for request making (Increases in request making is expected in role-plays with males)</li> <li>Fifth observational data point obtained for eye contact, volume of voice, and congruency of body and speech content (Increases in the use of these skills is expected in role-plays with males)</li> <li>Assign Applied Assertiveness Skills Questionnaire for homework</li> </ul>
Follow-Up	<ul> <li>Review of request making/denying, eye contact, volume of voice, and congruency of body and speech content</li> <li>Thank-you party</li> <li>Give information to participants about assertiveness skills</li> </ul>	<ul> <li>Follow-up observational data obtained for request making/denying, eye contact, volume of voice, and congruency with males (Increases in these skills are expected in the role-plays with males)</li> <li>Rotate individual participants out during self-report measures to role-play with male research assistant</li> <li>Assess assertiveness skills, sexual experiences, and coercion risk</li> </ul>

	0	Conflicts in Adolescent
		Dating
		Relationships
	0	Sexual
		Assertiveness
		Scale for Women
	0	Adolescent
		Sexual Coercion
		Risk Scale
	0	Assertiveness
		Vignettes
		(Increases are
		expected for
		request
		making/denying,
		eye contact,
		volume of voice,
		and congruency
		with males and
		females)

## Appendix D: Measures

### ASCRS

# Please answer the following questions about yourself using a scale 1 (disagree strongly) to 6 (agree strongly)

1. I think about the signals I send out with	1	2	3	4	5	6	
my behavior       2. I am very aware of which signals I send	1	2	3	4	5	6	
out.           3. I consider which signals I send out with	1	2	3	4	5	6	
my appearance.							
4. I am very aware of my own sexual boundaries.	1	2	3	4	5	6	
5. I only send out signals that I can vouch for.	1	2	3	4	5	6	
6. If I think a guy has crossed the line, I will tell him.	1	2	3	4	5	6	
7. I will put my foot down if a guy tries to kiss me and I don't want to be kissed.	1	2	3	4	5	6	
8. I always know exactly when a guy has crossed the line.	1	2	3	4	5	6	
9. I am aware that the signals I send out may have consequences.	1	2	3	4	5	6	
10. When I go out, I might leave a drink unattended and then return to it later.	1	2	3	4	5	6	
11. I might go home with a guy even thought I don't know him very well.	1	2	3	4	5	6	
12. I might have sex with a guy even though I don't know him very well.	1	2	3	4	5	6	
13. I might put sexually suggestive pictures of myself on the internet.	1	2	3	4	5	6	
14. I might meet up with a guy by myself whom I have only met on the internet.	1	2	3	4	5	6	
15. I might keep dating a guy even if he is only interested in having sex with me.	1	2	3	4	5	6	
16. I might drink alcohol when I am on a date with a guy.	1	2	3	4	5	6	
17. I might be with a guy (kissing, petting) even though I don't want to have sex with him.	1	2	3	4	5	6	

# The Simple Rathus Assertiveness Schedule

Iain McCormick PhD

WHAT TO DO: Read each sentence carefully. Write down on each line the number that is correct for you.

- 6 very much like me
- 5 rather like me
- 4 somewhat like me
- 3 somewhat unlike me
- 2 rather unlike me
- 1 very unlike me

\_\_\_\_\_ 1. Most people stand up for themselves more than I do. \*

\_\_\_\_\_ 2. At times I have not made or gone on dates because of my shyness. \*

\_\_\_\_\_ 3. When I am eating out and the food I am served is not cooked the way I like it, I complain to the person serving it.

\_\_\_\_\_ 4. I am careful not to hurt other people's feelings, even when I feel hurt. \*

\_\_\_\_\_ 5. If a person serving in a store has gone to a lot of trouble to show me something, which I do not really like, I have a hard time saying "No". \*

- \_\_\_\_\_ 6. When I am asked to do something, I always want to know why.
- \_\_\_\_\_ 7. There are times when I look for a good strong argument.
- \_\_\_\_\_ 8. I try as hard to get ahead in life as most people like me do.
- \_\_\_\_\_ 9. To be honest, people often get the better of me.\*
- \_\_\_\_\_ 10. I enjoy meeting and talking with people for the first time.
- \_\_\_\_\_ 11. I often don't know what to say to good-looking people of the opposite sex. \*
- \_\_\_\_\_ 12. I do not like making phone calls to businesses or companies. \*
- \_\_\_\_\_ 13. I would rather apply for jobs by writing letters than by going to talk to the people. \*
- \_\_\_\_\_ 14. I feel silly if I return things I don't like to the store that I bought them from. \*

\_\_\_\_\_ 15. If a close relative that I liked were upsetting me, I would hide my feelings rather than say that I was upset. \*

\_\_\_\_\_ 16. I have sometimes not asked questions for fear of sounding stupid. \*

\_\_\_\_\_ 17. During an argument I am sometimes afraid that I will get so upset that I will shake all over.  $^*$ 

\_\_\_\_\_ 18. If a famous person was talking in a crowd and I thought he or she was wrong, I would get up and say what I thought. \*

\_\_\_\_\_ 19. I don't argue over prices with people selling things. \*

\_\_\_\_\_ 20. When I do something important or good, I try to let others know about it.

\_\_\_\_\_ 21. I am open and honest about my feelings.

\_\_\_\_\_ 22. If someone has been telling false and bad stories about me, I see him (her) as soon as possible to "have a talk" about it.

\_\_\_\_\_ 23. I often have a hard time saying "No". \*

\_\_\_\_\_ 24. I tend not to show my feelings rather than upsetting others. \*

\_\_\_\_\_ 25. I complain about poor service when I am eating out or in other places.

\_\_\_\_\_ 26.. When someone says I have done very well, I sometimes just don't know what to say. \*

\_\_\_\_\_ 27. If a couple near me in a theatre were talking rather loudly, I would ask them to be quiet or to go somewhere else and talk.

\_\_\_\_\_ 28. Anyone trying to push ahead of me in a line is in for a good battle.

\_\_\_\_\_ 29. I am quick to say what I think.

\_\_\_\_\_ 30. There are times when I just can't say anything. \*

# **Revised SAS**

Using the scale A = disagree strongly, B = disagree somewhat, C = mixed, D = agree somewhat, E = agree strongly, please answer the following questions about yourself.

1.	I give in and kiss if my partner	А	В	С	D	E
2.	pressures me, even if I already said no I put my mouth on my partner's genitals if my partner wants me to, even if I don't want to.	А	В	C	D	E
3.	I refuse to let me partner touch my breasts if I don't want that, even if my partner insists.	А	В	C	D	E
4.	I have sex if my partner wants me to,	А	В	С	D	Е
_	even if I don't want to.		_	~	_	_
5.	If I said no, I won't let my partner touch my genitals even if my partner pressures me.	A	В	С	D	E
6.	I refuse to have sex if I don't want to, even if my partner insists	А	В	С	D	Е
7.	I have sex without a condom or latex barrier if my partner doesn't like them,	А	В	С	D	E
8.	even if I wanted to use one. I have sex without using a condom or latex barrier if my partner insists, even if I don't want to.	А	В	C	D	Е
9.	I make sure my partner and I use a condom or latex barrio when we have	А	В	C	D	Е
10	sex. I have sex without using a condom or	А	В	С	D	Е
10	latex barrier if my partner wants.		2	C	2	-
11	. I insist on using a condom or latex barrier if I want to, even if my partner doesn't like them.	А	В	C	D	E
12	. I refuse to have sex if my partner refuses to use a condom or latex barrier.	А	В	C	D	E

#### CADRI

The following questions ask you about things that may have happened to you with a boy while you were having an argument. Circle the number that corresponds with your best estimate of how often these things have happened with any boy in the past year. Please remember that all answers are confidential. As a guide use the following scale:

Never- this has never happened
 Seldom- this has happened only 1-2 times
 Sometimes- this has happened about 3-5

times

4: Often- this has happened 6 times or more

I gave him reasons for my side of the argument	1	2	3	4
urgument				
He gave me reasons for his side of the argument	1	2	3	4
I touched him sexually when he didn't want me to.	1	2	3	4
want nie to.				
He touched me sexually when I didn't	1	2	3	4
want him to.				
I tried to turn his friends against him.	1	2	3	4
He tried to turn my friends against me.	1	2	3	4
I did something to make him feel	1	2	3	4
jealous.				
He did something to make me feel jealous.	1	2	3	4
I destroyed or threatened to destroy something he valued.	1	2	3	4
He destroyed or threatened to destroy something I valued.	1	2	3	4
I told him that I was partly to blame.	1	2	3	4
He told me that he was partly to blame.	1	2	3	4
I brought up something bad that he had				
done in the past.	1	2	3	4
He brought up something bad that I had done in the past.	1	2	3	4

I threw something at him.	1 2 3 4
He threw something at me.	1 2 3 4
I said things just to make him angry.	1 2 3 4
He said things just to make me angry.	1 2 3 4
I gave reasons why I thought he was wrong.	1 2 3 4
He gave reasons why he thought I was wrong.	1 2 3 4
I agreed that he was partly right.	1 2 3 4
He agreed that I was partly right.	1 2 3 4
I spoke to him in a hostile or mean tone of voice.	1 2 3 4
He spoke to me in a hostile or mean tone of voice.	1 2 3 4
I forced him to have sex when he didn't want to.	1 2 3 4
He forced me to have sex when I didn't want to.	1 2 3 4
I offered a solution that I thought would make us both happy.	1 2 3 4
He offered a solution that he thought would make us both happy.	1 2 3 4
I threatened him in an attempt to have sex with him.	1 2 3 4
He threatened me in an attempt to have sex with me.	1 2 3 4
I put off talking until we calmed down.	1 2 3 4
He put off talking until we calmed down.	1 2 3 4
I insulted him with put-downs.	1 2 3 4
He insulted me with put-downs.	1 2 3 4

1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1       2         1	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$

He accused me of flirting with another guy.	1	2	3	4
I deliberately tried to frighten him.	1	2	3	4
He deliberately tried to frighten me.	1	2	3	4
I slapped him or pulled his hair.	1	2	3	4
He slapped me or pulled my hair.	1	2	3	4
I threatened to hurt him.	1	2	3	4
He threatened to hurt me.	1	2	3	4
I threatened to end the relationship.	1	2	3	4
He threatened to end the relationship.	1	2	3	4
I threatened to hit him or throw something at him.	1	2	3	4
He threatened to hit me or throw something at me.	1	2	3	4
I pushed, shoved, or shoot him.	1	2	3	4
He pushed, shoved, or shook me.	1	_	3	4
I spread rumors about him.	1	2	3	4
He spread rumors about me.	1	2	3	4

#### **Applied Assertiveness Skills Questionnaire**

In the past week, have you practiced being assertive? If yes, please provide a brief description of the event/s below and indicate which skills you used in Part A. Also, in part B, please indicate if there were any times that you did not use your assertiveness skills but you could have or wished that you did.

#### Part A – Use of assertiveness skills

Example:

<u>I told my friend I did not want to go to a party with her. I did this because I did not know the</u> other people who were attending the party and it made me uncomfortable.\_\_

#### Did you use any of these skills?

Said "no" to a request made by someone else: Yes No

Maintained eye contact: Yes No

Spoke clearly: Yes No

Spoke at a volume that the listener could hear you clearly: Yes No

Made a request that was difficult for you: Yes No

Maintained consistency between my message and facial expression Yes No

1. Please describe a situation when you acted assertively in the past week:

1a. Did you use any of these skills?

Said "no" to a request made by someone else: Yes No

Maintained eye contact: Yes No

Spoke clearly: Yes No

Spoke at a volume that the listener could hear you clearly: Yes No

Made a request that was difficult for you: Yes No

2. Please describe a situation when you acted assertively in the past week:

2a. Did you use any of these skills?

Said "no" to a request made by someone else: Yes No

Maintained eye contact: Yes No

Spoke clearly: Yes No

Spoke at a volume that the listener could hear you clearly: Yes No

Made a request that was difficult for you: Yes No

#### Part B – Times when you could have used assertiveness skills

 Please describe any situations from the past week when you could have used the skills but did not:

3a. Why was it difficult to be assertive in that situation?

3b. What could you have done differently?

#### Assertiveness Vignettes Worksheet

You asked your parents a week ago if your curfew could be extended this Friday night. They
agreed under the condition that you complete your chores first, which you have done.
Tomorrow is Friday and you want to talk to your parents about having your curfew extended,
how would you do it? What would you do if they said "no"?

2.) Your friend tells you that another friend of yours was saying some mean things about you behind your back. How would you deal with this? What would you say? What would you do?

3.) You're in your friend's car and she is driving. You notice that she is blowing some stop signs and is speeding, which makes you a little nervous and uncomfortable. What would you say to her about her driving?

4.) You are hanging out with a group of friends and one of them takes out some drugs that you know are illegal. You are curious about them, but you don't feel comfortable trying them at this time. What would you do? What would you say?

5.) It's your friend's birthday so you and your friends are celebrating. Your boyfriend/ the guy you like is there and he asks you to leave early with him and go back to his place. You are excited about the offer, but aren't too comfortable going back to his place alone. What would you do and say?

6.) You and your boyfriend are celebrating being together for two months. He mentions that he really likes you and enjoys being with you. He states that he is ready to take things further physically. You really like him too and want to show him that you care about him, but you're not sure if you're ready to get more physical. What would you say and do?

#### **Demographics Questionnaire**

- 1) How old are you? \_\_\_\_\_
- 2) How old is your daughter? \_\_\_\_\_
- 3) What is your marital status? Please circle an answer:
  - Married or living with partner Widowed
  - Divorced/separated
  - Single, never married
- 4) What is your ethnic origin (or Race)? Please circle an answer:
  - White
  - Hispanic or Latino
  - Black or African American
  - Native American or American Indian
  - Asian/ Pacific Islander
  - Other
- 5) What is your daughter's ethnic origin (or Race)? Please circle an answer:
  - White
  - Hispanic or Latino
  - Black or African American
  - Native American or American Indian
  - Asian/ Pacific Islander
  - Other
- 6) What is the highest level of education you have completed? Please circle an answer:
  - Completed some high school
  - High school graduate
  - Completed some college
  - Associate degree
  - Bachelor's degree
  - Completed some postgraduate education
  - Graduate or advanced degree
- 7) What was your estimated total household income in the past year? Please circle an answer:

- Less than \$12,000
- 12,000 to \$24,999
- \$25,000-\$34,999
- \$35,000-\$49,999
- \$50,000-\$74,000
- \$75,000-\$99,999
- \$100,000 or more

8) Are you currently employed?

- Yes
- No

9) If you are employed, what is your job? \_\_\_\_\_

10) What year in high school is your daughter? Please circle an answer:

- Freshman (9<sup>th</sup> grade)
- Sophomore (10<sup>th</sup> grade)
- Junior (11<sup>th</sup> grade)
- Senior (12<sup>th</sup> grade)
- Other (specify)

11) How many children are living in your house?

12) How old are your other children and what is their gender?

13) How many adults are living in your house? \_\_\_\_\_

14) Please list each adult's relationship to your daughter:

a	e
b	f
c	g
d	h

#### Satisfaction Survey

Please answer the following questions using the 5-point scale (1-not at all/no, 2-a little bit, 3-somewhat/maybe, 4-quite a bit/probably, and 5-a lot/definitely)

Did you enjoy this group?	1	2	3	4	5
Do you think you will use these skills in the future?	1	2	3	4	5
Did you feel comfortable while in the groups?	1	2	3	4	5
Would you recommend this group to a friend?	1	2	3	4	5
Did you learn new skills by attending this group?	1	2	3	4	5
Would you talk to your friends about the skills you learned?	1	2	3	4	5
Would you attend a group like this again in the future?	1	2	3	4	5

Please write any comments or suggestions you have:

#### Appendix E: Individual Role-Play Scripts

#### Individual Role-Plays with Male Research Assistants

The scenarios below are to be read to the participant and male research assistant by a female researcher. The female researcher will read the scenarios as indicated by the title "narrator" and the male researcher will then recite his line.

After the scenarios have been read and the male research assistant has recited his line the female researcher will say to the participant "Using the skills you have been learning in this group, roleplay how you would behave in this situation".

Absolutely no physical contact is made between the participant and male research assistant are made during the role-plays.

- Narrator: You and a few of your friends are hanging out at your friend's place. Your friend mentions how difficult school has been lately and how his parents have been on him for the littlest things lately. You agree that things have been pretty rough lately, but you don't feel much like drinking.
  - Male research assistant: "Man, I've been really stressed out lately. Let's have some drinks. It'll make us feel better."."
- Narrator: You and your boyfriend have been dating for about a month and have not yet had sex. You really like him, but you're not ready yet.
  - Male research assistant: "We've been dating for a while, and I really like you. I think we should make things official. What do you say?"
- Narrator: You're at a party with a group of friends, and your friend drove you there. You notice that the guy you like is also there. The two of you start talking.
  - Male research assistant: "I wanted to let you know that I've liked you for a while, and I'm really happy we getting to talk right now and get to know each other better. Want to leave and go to my place to talk some more?"
- Narrator: You are with a male friend. He is a nice guy, but he can be a little pushy at times. You are watching a movie on his couch and he puts his hand on your lap, and that makes you uncomfortable. You reposition yourself so he is no longer touching your lap.
  - Male research assistant: "Come on, you're being such a prude. People have 'cuddle buddies'; why can we do that?"
- Narrator: You're with your boyfriend and you two have been kissing. He begins to move his hand on your body to places you are uncomfortable with, so you back away.
  - Male research assistant: "Fine, I guess you just don't care about me as much as I care about you"

- Narrator: You are with a group of friends and a male acquaintance is there too. You don't know him too well, but he is friends with your best friend's boyfriend. He can be funny, but a lot of the time his sense of humor is offensive. You are not interested in him in a romantic way.
  - Male research assistant: "Everyone here seems to be in a relationship. I feel left out. Wanna make out?"

#### Appendix F: Coding Sheets

#### **Applied Assertiveness Skill Coding Sheet**

Part A:							
Did the participant use the assertiveness skills in the past week?	Yes	No					
If yes, what skills did they report using?							
If yes, who did they use these skills with?							
Did the participant use the assertiveness skills in the past week?	Yes	No					
If yes, what skills did they report using?							
If yes, who did they use these skills with?							

#### Part B:

Did the participant report any times they could have used assertiveness skills, but didn't? Yes No What was the situation and who was it with?

How did the participant report it being difficult to use assertiveness skill in this situation?

What skills did they report that they could h	ave used to addres	ss this situation assertively?
Eye Contact	Yes	No
Volume/ Tone of Voice	Yes	No
Assertive Nonverbal	Yes	No
Make a Request	Yes	No
Deny a Request	Yes	No

Note anything else the participant mentioned they would have done, or anything else regarding this situation that made it difficult for them to be assertive.

#### Assertiveness Vignettes Coding Sheet

Circle "yes" or "no" for each of the assertive behaviors the participant mentioned they would use in each vignette. In the space provided, write how the participant reported using the skill. Note any instances of non-assertive (e.g. aggressive or passive) behaviors reported by the participant.

Vignette 1:			
Eye Contact	Yes	No	
Volume/Tone of Voice	Yes	No	
Assertive Nonverbal Body Language	Yes	No	
Making a Request	Yes	No	
Denying a Request	Yes	No	
Vignette 2:			
Eye Contact	Yes	No	
Volume/Tone of Voice	Yes	No	

Assertive Nonverbal Body Language	Yes	No		
Making a Request	Yes	No		 
Denying a Request	Yes	No	 	 
Vignette 3:			 	 
Eye Contact	Yes	No	 	 
Volume/Tone of Voice	Yes	No		 
Assertive Nonverbal Body Language	Yes	No		
Making a Request	Yes	No	 	 
Denying a Request	Yes	No	 	 

# Vignette 4:

Eye Contact	Yes	No
Volume/Tone of Voice	Yes	No
Assertive Nonverbal Body Language	Yes	No
Making a Request	Yes	No
Denying a Request	Yes	No
<u>Vignette 5:</u>		
Eye Contact	Yes	No
Volume/Tone of Voice	Yes	No

Assertive Nonverbal Body Language	Yes	No
Making a Request	Yes	No
Denying a Request	Yes	No
Vignette 6:		
Eye Contact	Yes	No
Volume/Tone of Voice	Yes	No
Assertive Nonverbal Body Language	Yes	No
Making a Request	Yes	No
Denying a Request	Yes	No

#### Assertiveness Video Coding Sheet

#### **SKILL 1: EYE CONTACT**

To calculate percent of eye contact maintained, take the seconds of eye contact made within the role-play and divide that by the number of seconds of the whole role-play

Start:	Stop:	Length in seconds:	Eye contact length in seconds:

Percentage of eye contact made: \_\_\_\_\_

#### **SKILL 2: VOLUME OF VOICE**

On a scale of 1 (not assertive)-5 (very assertive) how assertive was her volume of voice? For ratings between 1 and 4 highlight or underline her volume level (e.g. 1- <u>could not hear</u> or 4- <u>loud at times</u>).

- 1- Could not hear or Shouting
- 2- Could hear a little or Very loud
- 3- Could hear part of the time or Yelled/ aggressively loud part of the time
- 4- Could hear most of the time or Loud at times
- 5- Could hear the whole time and not aggressively loud

#### **SKILL 3: ASSERTIVE NONVERBALS**

On a scale of 1 (not at all) -5 (very) how assertive was her nonverbal behaviors (e.g. body language, facial expressions, and tone of voice)?

- 1- Not assertive at all
- 2- Somewhat assertive
- 3- Assertive about half of the time
- 4- Mostly assertive
- 5- Very assertive or assertive the whole time

#### SKILL 4: REQUESTS MADE:

In the space below write each request the participant made (if she made any). Then write the total number of requests that the participant made.

#### SKILL 5: REQUESTS DENIED

Tally how many requests the male research assistant made, and then tally how many of these requests the participant denied (e.g. "I don't want to do that", "No", "I'm not ready to do that"). Finally, divide the number of requests denied by the requests made to get the percentage of requests denied.

Number of requests male made:	Number of requests participant denied:	Percentage:

In the space below write the exact statements, suggestions, or requests that the male research assistant made, and the exact responses of the participant. Note if any instances occurred when a male research assistant made a request and the participant complied, or a compromise was made.

#### Appendix G: Recruitment Script

# Recruitment Script: Preventing Sexual Victimization: An Assertiveness Training Program for Female Adolescents

Remember to record each phone contact with a family in the recruitment log book.

\_\_\_\_\_

# IF YOU GET A FAMILY MEMBER:

I: (*Interviewer*) Hello, my name is \_\_\_\_\_\_. I am calling from Western Michigan University in regard to a research project. May I please speak with\_\_\_\_\_\_ (parent/ guardian name)?

#### If a guardian is unavailable

I: When would be a good time for me to call back? (*If asked to identify yourself*) My name is \_\_\_\_\_\_. I work on the Assertiveness Training Program for Female Adolescents

at Western Michigan University. Is there a time I could ca	ll back to reach her? <i>Fix a specific time</i>
if possible. And then say) Okay, I'll call back later. Thank	you. Good-bye.

#### Family member indicates that they are not interested:

I: Because \_\_\_\_\_\_ had been referred to us by the site coordinator at (school) about participation, would it be alright if we called back to speak with <u>him/her\_</u>? If yes, get a good time to call back. Thank you, goodbye.

(If still not interested) Thank you for considering the project.

I appreciate your taking time to speak with me. Thank you for considering the project. Goodbye.

#### Family member asks for information about the project:

I: It is a project related to a group targeted at training assertiveness skills in adolescent females; I would like to call back when he/she will be available because he/she is the one who would be involved in approval for participation. When would be a good time for me to get back to him/her? (*Arrange a time*)

#### (If FM doesn't know when you can reach the guardian)

I: Okay, I'll try to reach him/her another time. Thank you.

\_\_\_\_\_

# WHEN YOU DO GET THE GUARDIAN (G):

I: Hello, am I speaking with \_\_\_\_\_?

G: Yes

I: Hi \_\_\_\_\_. I am glad I was able to reach you. My name is \_\_\_\_\_\_. I am a research assistant for the Assertiveness Training Program for Female Adolescents search project. Recently, you told a site coordinator at (school) that it would be alright to contact you regarding your daughter's participation in the study. Are you interested in discussing her possible participation?

# If not interested in participating:

I: Thank you anyway for considering the project. Just for our records, may I ask why you decided not to participate? (*Clear up any misconceptions about the project. If she still decides not to participate, continue as follows*) Again, thank you for considering the project. Good-bye.

#### If guardian expresses interest:

I: Is this a good time to talk about it? It will take about 10 minutes. *(if no, get a call back time, If yes, continue)* I want to tell you about the project and answer any questions you may have. First, though, I need to ask you a few things about you and your daughter to make sure you are eligible to participate.

(Answer any other questions, when you get a "yes" continue)

I: First, are you and your daughter fluent in English? (*If not, give explanation for Ineligibility. If yes, continue*)

I: Is your adolescent daughter between the ages of 12 and 17?

If no, provide ineligibility explanation.

G: Yes

#### After general information is gathered:

I: Excellent, you and your daughter are eligible to participate if you choose to do so. Let me explain in more detail what we would be asking of you and your daughter. There are many different types of situations where being assertive can be difficult; whether it's with a friend, a family member, or a dating partner we may find that we have a hard time stating our needs. What this program aims to do is train a group of adolescent girls in assertive communication styles to avoid dangerous situations and reduce the risk of sexual assault. The program includes six weekly group sessions with other teenage girls. It will take place at her school at xxxxxx (*insert dates and times*). The sessions will be led by graduate students in clinical psychology who are studying at Western Michigan University. During the group sessions, adolescent girls will learn what types of statements and behaviors are assertive and they will participate in role-plays to practice these skills. More specifically, your daughter would learn these skills and practice them with adolescent peers as well as male research assistants. The practicing with peers will help teach (daughter's name) how to use assertiveness skill with peers. Practicing with male research assistants will help her learn how to use these skills with a member of the opposite sex or a potential dating partner.

If you and your daughter are interested, you and your daughter will attend an initial consent session with other interested teens and parents. At this consent session you and your daughter will obtain more information about the study and you will decide whether or not you would like to sign the consent form. If you and your daughter decide to participate, during this session, you will complete measures regarding yourself and your household (e.g., your age, number of people

in your home) and your daughter will also complete several questionnaires that will ask about her typical communication styles and her dating history. After this session, the group training sessions will be held once a week for six weeks and will last for an hour and a half. Only your daughter needs to be present for these sessions. Finally, a four-week follow-up session will be held, and a thank-you party will take place for all of your daughter's hard work.

We will always hold the groups at the same time and location every week, and we will contact you as soon as possible if either of these are to change.

I want to reassure you that the information that you provide will be kept confidential, and your names will not be attached to your data forms. However, we are required to take action in order to prevent serious harm to yourself, your child or others, such as in cases of child abuse or neglect.

You can stop participating in this study at any time.

I: Do you have any questions? (*Pause for response and answer any questions that guardian has*) Do you think you might be interested in learning more about participating?

#### If not willing to participate:

I: Thank you anyway for considering the project. Just for our records, could I ask why you decided not to participate?

(*Clear up any misconceptions about the project. If she still decides not to participate, continue as follows*) I appreciate your taking time to speak with me. Again, thank you for considering the project. Good-bye.

# If willing to participate:

I: Great! We will provide your contact information to our staff person, Emily, and she will contact you shortly to provide you with the time and date of the consent session, at which both you and your daughter will need to be present. We look forward to working with you. Do you

have any other questions? In case you need to reach me, my phone number is xxxxx. Thank you. Good-bye.

**Explanation for Ineligibility:** Thank you for your information. I am sorry that we are not able to include \_\_\_\_\_\_ in this study. We can only include individuals who are (fluent in English or are between the ages of 12 and 17). Do you have any questions? (*Pause for response*) Thank you. Good-bye.

Ineligibility Options:

- Non-fluent in English
- Adolescent daughter not between the ages of 12 and 17.

# WESTERN MICHIGAN UNIVERSITY



Human Subjects Institutional Review Board

Date: December 15, 2015

To: Amy Damashek, Principal Investigator Emily Morgan, Student Investigator for thesis

From: Daryle Gardner-Bonneau, Ph.D., Vice Chair Deryle g. Hardner-Bonneau

Re: HSIRB Project Number 15-01-01

This letter will confirm that your research project titled "Preventing Sexual Victimization: An Assertiveness Training Program for Female Adolescents" was reviewed under the **full** category of review on **January 21, 2015** by the Human Subjects Institutional Review Board.

This letter will confirm that your research project titled "" has been **approved** under the **full** category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note: This research may **only** be conducted exactly in the form it was approved. You must seek specific board approval for any changes in this project (e.g., *you must request a post approval change to enroll subjects beyond the number stated in your application under "Number of subjects you want to complete the study*)." Failure to obtain approval for changes will result in a protocol deviation. In addition, if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

Reapproval of the project is required if it extends beyond the termination date stated below.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: January 20, 2016

1903 W. Michigan Ave., Kalamazoo, MI 49008-5456 рноме: (269) 387-8293 гях: (269) 387-8276 самрчз sitte: 251 W. Walwood Hall