

**THE BLACK FEMALE LEADERSHIP DEVELOPMENT INSTITUTE PROGRAMS  
YEAR ONE EVALUATION**

by

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Jeanette Trauth, PhD

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### **YEAR ONE EVALUATION**

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#### **ABSTRACT**

The objective of this thesis is to evaluate the first year of the Black Female Leadership Development Institute (BFLDI) program of the Urban League of Greater Pittsburgh (ULPGH) and to provide the organization with program recommendations. The BFLDI aims to increase self-efficacy, knowledge about reproductive sexual health information, dating abuse recognition, how to reduce high-risk behaviors, increase social supports, and facilitate healthy psychosocial development through a variety of program activities conducted over eight months. Evaluation information was collected from 36 minority adolescent females. A pre and post survey measuring self-efficacy, self-image, gender norm beliefs, reproductive sexual health attitudes, dating abuse recognition, and reproductive sexual health knowledge was conducted with study participants. The analysis included calculating descriptive statistics, construct averages, and cross tabulations in order to evaluate the BFLDI program. Participants reported high levels of program satisfaction. There was no significant difference observed in knowledge, attitudes, or beliefs between the pre and post surveys. However, a positive association between self-efficacy and gender norm beliefs ( $p = .023$ ) was observed. Two trends were observed in the associations between age and reproductive sexual health attitudes and age and dating abuse recognition. Recommendations for year two include modifications in activities such as topics focused more directly on program goals and increased evaluation measurements such as collection of

behavioral data. This program is relevant to public health as it serves as an intervention to reduce the health problems of sexually transmitted infection, teenage pregnancy, and dating abuse among minority adolescent females.

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## **PREFACE**

I would like to acknowledge and thank the following individuals and organizations:  
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## **1.0 INTRODUCTION**

### **1.1 STATEMENT OF PURPOSE**

During adolescence, youth experience many novel situations, emerging stressors, and added independence (St Lawrence, 1993). Youth's behaviors and attitudes have the power to significantly impact future behaviors, attitudes, and health outcomes (Bauman, Karasz, & Hamilton, 2007; Buhi & Goodson, 2007; Scholly, Katz, Gascoigne, & Holck, 2005). Given this knowledge, programs aimed at the adolescent population often target positive behavior, knowledge, and attitude change. In order to achieve the desired internal and external changes, adolescent programs require evaluation of both process and product outcomes. The purpose of this thesis is to report on an evaluation of the Black Female Leadership Development program, a two year program for minority adolescent females, run by the Black Female Leadership Development Institute (BFLDI), of the Urban League of Greater Pittsburgh (ULPGH). This program was initiated in December 2015 and had a number of objectives aimed at improving the behaviors and attitudes of minority adolescent females. This thesis reports the preliminary findings of the evaluation of the first year's activities of the BFLDI program with the intention of providing program recommendations for year two.

## **1.2 URBAN LEAGUE OF GREATER PITTSBURGH**

The Greater Pittsburgh Chapter of the Urban League (ULPGH) was founded in 1918, with an organizational mission to empower and facilitate African Americans in the pursuit of economic self-reliance, equality, power, and civil rights ("Urban League of Greater Pittsburgh Black Female Leadership Development Institute ", 2014). The organization operates a number of supportive and educational initiatives to help African Americans excel in academic, social, and personal pursuits. The ULPGH serves thousands of individuals annually regardless of ethnic or racial identity and while aiming to improve the health and wellbeing of disenfranchised community members.

ULPGH operates an Education and Youth Development Department which primarily focuses on: academic support, social development, workforce development, and postsecondary support ("Urban League of Greater Pittsburgh Black Female Leadership Development Institute ", 2014). The BFLDI program operates under the social development section with an overarching program mission to increase positive psychosocial development, resiliency, and ethnic identity. The program recognizes a number of potential stressors or threats to the complete well-being of black adolescent females and aims to reduce the incidence of and mitigate the consequences of such problems. These problems include sexually transmitted infections (STIs), teenage pregnancy, dating violence, negative self-image, low academic achievement, and perceived social inferiority ("Urban League of Greater Pittsburgh Black Female Leadership Development Institute ", 2014). Through a variety of activities over an eight month period, BFLDI hopes to accomplish the following: increase African American early adolescent girls' knowledge of and self-efficacy regarding reproductive sexual health, increase African American early adolescent girls' knowledge and self-efficacy related to interpersonal violence prevention, increase

connectedness to a supportive adult and additional perceived social supports, and to promote civic engagement and advocacy skills to address racial justice, gender norms change, and community building (ULPGH, 2014b). The Urban League also provides additional related programs for parents or adult caregivers such as increasing communication about interpersonal violence and reproductive sexual health and increasing parent or adult caregiver self-efficacy regarding communicating with youth; these programs are not discussed in detail as they are beyond the scope of this evaluation.

From November 2015 to June 2016, adolescent females enrolled in the BFLDI program participated in a number of activities including orientation and skills building workshops, “Sister Circles”, “Saturday Institutes”, Community Service Day, and the “January Leadership Identity Retreat” (Medina, 2015; ULPGH, 2014b). The focus of each activity relates to the main program objectives. For example, one of the “Sister Circle” events examined bullying and discussed how to speak up against it (Medina, 2015). During the “Sister Circles”, participants met in groups and discussed topics, expressed their feelings, explored self-acceptance, and learned from one another (Medina, 2015; "Urban League of Greater Pittsburgh Black Female Leadership Development Institute ", 2014). The “Saturday Institute” events involved focused workshops facilitated by professional experts. The goal of the various program activities was to achieve a number of targeted positive health outcomes such as, improved self-esteem and an improved ability to make healthy choices (ULPGH, 2014a). A more detailed description of the main program activities is provided in Chapter 3.1.

### **1.3 SCOPE OF WORK**

The Urban League sought outside assistance to evaluate the program and identify potential program modifications. Through collaboration with Dr. Elizabeth Miller, Chief of the Division of Adolescent and Young Adult Medicine at Children's Hospital of Pittsburgh of UPMC, I met with ULPGH to discuss plans for the evaluation of the first year's activities and explore opportunities for involvement in the design of the process and outcome evaluation. Subsequently, I reviewed BFLDI program goals, discussed objectives with ULPGH staff, and reviewed the literature to identify known factors that contribute to the health concerns of interest. As a result of this process, I identified appropriate constructs to be measured in the evaluation. With an understanding of the program goals and factors that contribute to the public health problems, I then reviewed the literature to identify validated instruments that measure the key constructs related to determinants of reproductive sexual health.

The BFLDI program Director reviewed and discussed the outputs from the literature search to determine which existing scales best met program needs and aligned with organizational values. The ULPGH implemented the program evaluation and provided me with a copy of all of the surveys. I was responsible for conducting the basic analysis and synthesizing the findings for ULPGH.

## **1.4 RESEARCH QUESTIONS**

This thesis examines three overarching research questions.

1. What are some validated scales that measure the constructs that are central to the BFLDI program?
2. Did any change occur in these key participant measures between the pre and post surveys?
3. Is there an association between self-efficacy and gender norms, reproductive attitudes, and dating abuse recognition?

## **1.5 THESIS OUTLINE**

The thesis is organized as follows. Chapter Two provides epidemiological information on the public health problems of STI, teenage pregnancy, and interpersonal violence and an overview of existing scales addressing these issues for potential use in the program evaluation. Chapter 3 describes the methodology used to evaluate the program. Chapter four presents the results of the data analysis. And Chapter five discusses the evaluation results, discusses the collaborative process utilized in the BFLDI evaluation and the limitations of the research. The final chapter provides a brief conclusion.



## **1.6 PUBLIC HEALTH SIGNIFICANCE**

The findings from this evaluation will be used to inform year two of the BFLDI program. The information regarding the combined use of multiple scales can be utilized to advise evaluation of similar programs for adolescents. In addition, any information regarding the relationship between study constructs contributes to the existing knowledge base and can be utilized to develop more effective intervention models or programs. More effective programs aimed at reducing the incidence of adolescent STI, teenage pregnancy, and interpersonal violence will contribute positively to the health and wellbeing of adolescents and reduce the overall economic impact of these wicked, or complex social and political problems (Kreuter, De Rosa, Howze, & Baldwin, 2004).

## **2.0 BACKGROUND**

Adolescence is a time of transition, new experiences, and formation of life long attitudes, beliefs, and values. It is during this time that youth have the opportunity to lay the critical foundation for their behavior during their adult years. With this opportunity also comes the risk for development of unhealthy patterns of physical and mental health behaviors (Bauman et al., 2007; Buhi & Goodson, 2007; Scholly et al., 2005). Adolescents may make unhealthy decisions due to their stage of development and how this stage directly impacts their understanding of the consequences of their behavior (Lesser & Pope, 2007). Three critical public health problems that adolescent girls face are sexually transmitted infections (STIs), teenage pregnancy, and interpersonal (i.e. dating) violence. Efforts aimed at intervening with adolescent girls prior to the initiation of unhealthy behaviors and attitude development are critical components of programs designed to reduce the prevalence and consequences of these problems.

### **2.1 SEXUALLY TRANSMITTED INFECTIONS**

The Centers for Disease Control and Prevention (CDC) estimates that there are nearly 20 million new cases of STIs annually with half of these cases occurring in individuals between the ages of 15 and 24 years (CDC, 2015a). Reports of chlamydia in 2014 totaled more than 1.4 million cases or a rate of 456 per 100,000 people (CDC, 2015a). Individuals between the ages of

15-19 years accounted for 26% of the total chlamydia incidence. Between 2013 and 2014 the national rates of chlamydia, gonorrhea, and syphilis infections increased (CDC, 2015a). One in four sexually active females has a STI (CDC, 2014). There is a disproportionate burden on young people, people of color, and sexual minorities (CDC, 2015a; Wingood & DiClemente, 1998). Negative health consequences including emotional distress, reproductive sexual health complications, and sequelae are associated with STI infections (CDC, 2015a). Reproductive sexual health complications (such as infertility or ectopic pregnancy) and sequelae (such as Pelvic Inflammatory Disease or recurrent STI infection) produce a number of secondary health problems. In addition, the repercussions of undiagnosed STIs cause 20,000 women to become infertile each year (CDC, 2015a). An estimated 16 billion dollars is spent on healthcare costs associated with STIs annually (CDC, 2015a). Considering more than 45% of teens report engagement in sexual activity by the age of 17 years and teens contribute significantly to the overall STI prevalence, understanding potential risk and protective factors is of great public health importance (Bleakley, Hennessy, & Fishbein, 2006; Kohler, Manhart, & Lafferty, 2008).

The World Health Organization (WHO) defines risk factors as “any attribute, character, or exposure that increases an individual’s likelihood of developing a disease or injury” (World Health Organization, 2016). STI risk factors often emphasize high-risk sexual health behaviors. High-risk sexual health behaviors include a number of situations such as unprotected sex, early initiation of first sexual experience, substance use (alcohol or drug use) and having multiple sexual partners (CDC, 2012, 2016b). A partner age difference greater than three years constitutes a risk factor (Lepušić & Radović-Radovčić, 2013). Other STI risk factors involve the beliefs, attitudes, and values of individuals— such as, conceptions about societal norms, stigmas, partner

trust, knowledge, and misunderstandings about health consequences-- which also influence STI risk (Barth, Cook, Downs, Switzer, & Fischhoff, 2002; Du, Thomas, McNutt, & Coles, 2008).

Some research has found associations between norms and reproductive sexual health outcomes (Bauman et al., 2007; Haberland, 2015; Impett, Breines, & Strachman, 2010). Associations have also been observed between traditional gender norms and negative health outcomes (Haberland, 2015). Gender norms, which are a type of social norms, are defined as a set of rules or ideas suggesting how men or women “should” behave. These norms help to create gender roles. Roles are important for the establishment of one’s identity (Burke, Stets, & Pirog-Good, 1988). Therefore, espousing healthy gender norms is one potential protective factor for STIs, teenage pregnancy, and dating violence (Burke et al., 1988). One study by Impett et al. (2010), found young women who adhered to stereotypical feminine ideologies were less likely to use condoms during sexual intercourse. A study by Bauman et al. (2007), reported teenage women purposely engaged in unprotected sex to feel like their perception of what it meant to be a ‘real woman’. Multiple studies have reported that women attribute their lack of condom enforcement or the lack of contraceptive conversations to concerns about partner trust. These women believe that if they have the conversation about condom negotiation it implies that one or both partners are cheating and for this reason they want to avoid the conversation (Bauman et al., 2007; Tolman, Striepe, & Harmon, 2003; Wingood & DiClemente, 1998). Evidence suggests that adherence to traditional gender roles may influence sexual victimization (Burke et al., 1988). Inspection of these factors suggests interventions focused on the development of healthy gender norms could reduce the overall prevalence and impact of adolescent STIs.

A number of social and behavioral theories exist which can be used to explain adolescent sexual health behavior and guide intervention design. Social Norms Theory and the Health Belief

Model (HBM) are two theories that offer an explanation of the causal chain between attitudes and beliefs and specific health behaviors (Glanz, Rimer, & Lewis, 2002). Social Norms Theory suggests behavior is influenced by someone's direct perception of the social behavioral norm (Scholly et al., 2005). Norms are a set of rules or beliefs espoused by a group or individual and that impact subsequent behavioral patterns (Glanz, Rimer, & Viswanath, 2008). This theory posits, for instance, that when young people believe the majority of their peers engage in a specific behavior, healthy or unhealthy, they too will initiate that behavior (Scholly et al., 2005). Interventions or programs targeted prior to and during the period when adolescent norms and values are being formed have the ability to positively impact the health trajectory of youth.

The Health Belief Model provides a different explanation for behavior change (Glanz et al., 2008). In contrast to social norms theory, which says behavior changes as a function of peer influence, the health belief model says that if a young woman believes that it is likely that she could contract a STI and that there are serious consequences of doing so, then she is likely to adopt a recommended prevention behavior if the barriers to doing so can be easily overcome and she is reminded to do so. Both of these models help to explain behavior change and offer frameworks to guide intervention designs. If guided by theoretical models and an understanding of the potential risks and protective factors that affect adolescent sexual health behavior, programs like the BFLDI can aim to intervene at various points to elicit positive behavior change. Some factors that protect against STIs include a desire to do well in school and feelings of being connected to a caring adult (Lepušić & Radović-Radovčić, 2013). Comprehensive sexual health education, behavioral and cognitive skill development, and linking to services facilitate the reduction in adolescent rates of STIs.

### 2.1.1 Scales to measure STIs

Based on a review of the literature, I identified a number of valid and reliable scales that could be included in the BFLDI evaluation related to STI risks. The scales identified measured behaviors, knowledge, attitudes, beliefs, and norms. There is a considerable amount of overlap between the risk and protective factors for the three health issues addressed in the BFLDI intervention--STIs, teenage pregnancy, and dating violence. Table 1 lists scales or items that measure sexual and related health behavior, reproductive sexual health knowledge, attitudes, and beliefs, and gender equitable norms (Brafford & Beck, 1991; CDC, 2016a; Frost, Lindberg, & Finer, 2012; Galambos, Petersen, Richards, & Gitelson, 1985; Guttmacher Institute, 2016; Miller, 2015; Pulerwitz & Barker, 2008; Tolman & Porche, 2000). A number of the survey items were adapted from the *Engendering Healthy Masculinities to prevent sexual violence survey* (Miller, 2015).

**Table 1. Condom Negotiation Self-efficacy**

<b>Condom Negotiation Self-efficacy (Brafford &amp; Beck, 1991)</b>	
<b>Items</b>	<b>Response Options</b>
1. I feel confident in my ability to discuss condom use with any partner I might have. 2. I feel confident in my ability to suggest using condoms with a new partner. 3. If I were to ask my partner to use a condom, I would be afraid that my partner would be upset with me. 4. If I were unsure of my partner’s feelings about using condoms, I would not ask my partner to use one. 5. If my partner didn’t want to use a condom during sex, I feel confident in my ability to refuse to have sex.	<i>5-pt. Likert scale</i>  1. Strongly agree 2. Agree 3. Neutral 4. Disagree 5. Strongly Disagree
<b>Attitudes Related to Condom and Contraceptive Use (Miller, 2015)</b>	
<b>Items</b>	<b>Response Options</b>

**Table 1 continued**

<ol style="list-style-type: none"> <li>1. Using birth control keeps your partner from worrying about getting pregnant.</li> <li>2. Using birth control gives you a sense of control.</li> <li>3. Using birth control is too much trouble or too much of a hassle to use.</li> <li>4. Using birth control takes too much planning ahead of time to have birth control on hand when you're going to have sex.</li> <li>5. Using birth control lets you have sex without worrying about getting your partner pregnant.</li> <li>6. Using birth control makes sex feel unnatural.</li> <li>7. Using birth control makes sex less exciting.</li> <li>8. It does not matter whether you use birth control or not; when it's your time to get pregnant, it will happen.</li> <li>9. It is mainly a girl or woman's responsibility to make decisions about birth control.</li> <li>10. I am in favor of my partner and me using birth control.</li> </ol>	<p style="text-align: right;"><i>5-pt. Likert scale</i></p> <ol style="list-style-type: none"> <li>1. Strongly agree</li> <li>2. Agree</li> <li>3. Neutral</li> <li>4. Disagree</li> <li>5. Strongly Disagree</li> </ol>
<p><b>Sexual History/Behaviors</b> (CDC, 2016a; Guttmacher Institute, 2016; Miller, 2015)</p>	
<p><b>Items</b></p>	<p><b>Response Options</b></p>
<ol style="list-style-type: none"> <li>1. Have you ever had vaginal sex (someone's penis went into your vagina)?</li> <li>2. Have you ever had anal sex (someone's penis went into your anus)?</li> <li>3. How old were you when you had sexual intercourse for the first time?</li> <li>4. During your life, with how many people have you had sexual intercourse?</li> </ol>	<p>Items 1-2: Yes or No</p> <p>Items 3-4:</p> <p>Continuous number</p>
<p><b>Sexual Communication</b> (Miller, 2015)</p>	
<p><b>Items</b></p>	<p><b>Response Options</b></p>
<ol style="list-style-type: none"> <li>1. During the past 3 months, how many times have you and the people you are having sex with talked about how to use condoms?</li> <li>2. During the past 3 months, how many times have you and the people you are having sex with talked about how to prevent getting HIV?</li> <li>3. During the past 3 months, how many times have you and the people you are having sex with talked about how to prevent getting STD's?</li> </ol>	<ol style="list-style-type: none"> <li>1. Never</li> <li>2. 1-3 times</li> <li>3. 4-6 times</li> <li>4. 7 or more times</li> </ol>
<p><b>Condom &amp; Contraception Use</b> (CDC, 2016a)</p>	
<p><b>Items</b></p>	<p><b>Response Options</b></p>

**Table 1 continued**

<p>1. When you had vaginal or anal sex in the past 3 months how often did your partner use a condom?</p>	<p>1. never 2. hardly ever 3. sometimes 4. almost all the time 5. every time</p>
<p>2. The last time you had vaginal sex (someone put their penis into your vagina) did you or your partner use any method (other than condoms) to prevent pregnancy?</p>	<p>1. did not use anything to prevent pregnancy 2. birth control pills 3. depo-provera (or any injectable birth control) 4. nuva ring (or any birth control ring) 5. implanon (or any implant) 6. an IUD (intrauterine device) 7. withdrawal 8. some other method 9. not sure</p>
<p><b>Substance Use (CDC, 2016a)</b></p>	
<p><b>Items</b></p>	<p><b>Response Options</b></p>
<p>1. When you had vaginal or anal sex in the past 3 months, how often did you drink alcohol or use drugs beforehand?</p>	<p>1. never 2. hardly ever 3. sometimes 4. almost all the time 5. every time</p>
<p><b>STI (CDC, 2016a)</b></p>	
<p><b>Items</b></p>	<p><b>Response Options</b></p>
<p>1. Have you been tested for an STI (STI means sexually transmitted infection like chlamydia, gonorrhea, syphilis, HIV, trichomonas) in the past 9 months? 2. Have you ever been told by a doctor or nurse that you have an STI (STI means sexually transmitted infection like chlamydia, gonorrhea, syphilis, HIV, trichomonas)</p>	<p>1. Yes 2. No</p>
<p><b>Sexual Health Knowledge (Frost et al., 2012)</b></p>	
<p><b>Items</b></p>	<p><b>Response Options</b></p>
<p>1. It is okay to use the same condom more than once 2. Condoms have an expiration date 3. When putting on a condom, it is important to leave space</p>	<p>1. True 2. False</p>



**Table 1 continued**

<p>at the tip</p> <ol style="list-style-type: none"> <li>4. It is okay to use petroleum jelly or Vaseline as a lubricant when using latex condoms</li> <li>5. When using a condom, it is important for the man to pull out right after ejaculation</li> <li>6. Wear two latex condoms will provide extra protection</li> <li>7. Birth control pills are effective even if a woman misses taking them for two or three days in a row</li> <li>8. Women should “take a break” from the pill every couple of years</li> <li>9. If a woman is having side effects with one kind of pill, switching to another type or brand might help</li> <li>10. Birth control pills reduce the chances that women will get certain types of cancer</li> <li>11. After a woman stops taking birth control pills, she is unable to get pregnant for at least two months</li> <li>12. In order to get the birth control pill, a woman must have a pelvic exam</li> <li>13. All IUDs are banned from use in the United States</li> <li>14. A woman can use an IUD even if she has ever had a child</li> <li>15. Women who use IUDs cannot use tampons</li> <li>16. To obtain an IUD, a woman must undergo a surgical operation</li> <li>17. An IUD cannot be felt by a woman’s partner during sex</li> <li>18. IUDs can move around in a woman’s body</li> <li>19. Women using the birth control shot, depo provera, must get an injection every three months</li> <li>20. Even if a woman is late getting her birth control shot, she is still protected from pregnancy for at least three more months</li> <li>21. Negative effects that a woman has from depo-provera can last for the rest of her life</li> <li>22. Women using the vaginal ring, NuvaRing ,must have it inserted by a doctor or health care provider every month</li> <li>23. Long-acting methods like the implant or IUD cannot be removed early, even if a woman changes her mind about wanting to get pregnant</li> </ol>	
<p><b>Attitudes Towards Women Scale for Adolescents</b> (Galambos et al., 1985)</p>	
Items	Response Options
<ol style="list-style-type: none"> <li>1. Swearing is worse for a girl than for a boy.</li> <li>2. On a date, the boy should be expected to pay all the expenses.</li> <li>3. On average, girls are as smart as boys.</li> <li>4. More encouragement in a family should be given to sons</li> </ol>	<p style="text-align: center;"><i>4-pt. Likert scale</i></p> <ol style="list-style-type: none"> <li>1. Strongly agree</li> <li>2. Agree</li> <li>3. Disagree</li> </ol>

**Table 1 continued**

<p>than daughters to go to college.</p> <ol style="list-style-type: none"> <li>5. It is alright for a girl to want to play rough sports like football.</li> <li>6. In general, the father should have greater authority than the mother in making family decisions.</li> <li>7. It is alright for a girl to ask a boy out on a date.</li> <li>8. It is more important for boys than girls to do well in school.</li> <li>9. If both husband and wife have jobs, the husband should do a share of the household work such as washing dishes or doing the laundry.</li> <li>10. Boys are better leaders than girls.</li> <li>11. Girls should be more concerned with becoming good wives and mothers than desiring a professional or business career.</li> <li>12. Girls should have the same freedoms as boys.</li> </ol>	<p>4. Strongly Disagree</p>
<p><b>Gender Equitable Attitudes</b> (Miller, 2015; Pulerwitz &amp; Barker, 2008)</p>	
<p><b>Items</b></p>	<p><b>Response Options</b></p>
<ol style="list-style-type: none"> <li>1. A guy takes responsibility for his actions.</li> <li>2. A guy never needs to hit another guy to get respect.</li> <li>3. A girl wearing revealing clothing deserves to have comments made about her.</li> <li>4. It bothers me when a guy acts like a girl.</li> <li>5. Guys should sleep with as many girls as possible.</li> <li>6. If a guy tells people his worries, he will look weak.</li> <li>7. In a good dating relationship, the guy gets his way most of the time.</li> <li>8. Guys should only have sex with girls.</li> <li>9. I can respect a guy who backs down from a fight.</li> <li>10. I would be friends with a guy who is gay.</li> <li>11. A guy should share in household chores.</li> <li>12. If a girl is raped it is often because she did not say "no" clearly enough.</li> <li>13. Guys put women and children first.</li> </ol>	<p><i>5-pt Likert Scale</i></p> <ol style="list-style-type: none"> <li>1. Strongly agree</li> <li>2. Agree</li> <li>3. Neutral</li> <li>4. Disagree</li> <li>5. Strongly Disagree</li> </ol>
<p><b>The Adolescent Feminine Ideology Scale</b> (Tolman &amp; Porche, 2000)</p>	
<p><b>Items</b></p>	<p><b>Response Options</b></p>
<ol style="list-style-type: none"> <li>1. I would tell a friend she looks nice, even if I think she shouldn't go out of the house dressed like that</li> <li>2. I express my opinions only if I think of a nice way of doing it.</li> <li>3. I worry that I make others feel bad if I am successful.</li> </ol>	<p><i>5-pt Likert Scale</i></p> <ol style="list-style-type: none"> <li>1. Strongly agree</li> <li>2. Agree</li> </ol>

**Table 1 continued**

<p>4. I would not change the way I do things in order to please someone else</p> <p>5. I tell my friends what I honestly think even when it is an unpopular idea</p> <p>6. Often I look happy on the outside in order to please others, if I don't feel happy on the inside</p>	<p>3. Neutral</p> <p>4. Disagree</p> <p>5. Strongly Disagree</p>
<p>7. I wish I could say what I feel more often than I do</p> <p>8. I feel like it's my fault when I have disagreements with my friends</p> <p>9. When my friends ignore my feelings, I think that my feelings weren't very important anyway</p> <p>10. I usually tell my friends when they hurt my feelings</p> <p>11. The way I can tell that I am a good weight is when I fit into a small size</p> <p>12. I often wish my body were different</p> <p>13. I think a girl has to be thin to feel beautiful</p> <p>14. I think a girl has to have a light complexion and delicate features to be beautiful</p> <p>15. I am more concerned about how my body looks than how my body feels</p> <p>16. I feel comfortable looking at all parts of my body</p> <p>17. I often feel uncomfortable in my body</p> <p>18. There are times when I have really good feelings in my body</p> <p>19. The way I decide I am at a good weight is when I feel healthy</p> <p>20. I decide how much to eat by how hungry I am</p>	

## 2.2 TEENAGE PREGNANCY

Teenage birth rates in the United States have been declining in the past few years. They fell 9% from 2013 to 2014 (CDC, 2016b). There was an 11% decrease for young women aged 15-17 years and a 7% decrease for women aged 18-19 years (CDC, 2016b). However, there are racial disparities in teenage birth rates. The black non-Hispanic teenage rate in 2013 was 39 per 1,000 compared to 18.6 per 1,000 for white teens (CDC, 2016b). Reducing the number of

teenage pregnancies has a number of positive health impacts. Serious consequences are associated with teenage pregnancy including lower levels of educational achievement, poverty, and an increased risk for a second pregnancy within two years (CDC, 2016b; March of Dimes Foundation, 2012). One in four teen mothers under the age of 18 has a second baby within two years (March of Dimes Foundation, 2012). The health and social consequences of this situation cost an estimated 9.4 billion dollars nationwide in 2010 (CDC, 2016b). Included in that estimate are the costs of health care, foster care, incarceration rates of teen parents, and a loss of revenue (CDC, 2016b). Children of teen parents also face an increased risk for certain negative health outcomes such as lower educational achievement, health problems, incarceration, poverty, unemployment, and becoming a teen parent themselves (CDC, 2016b).

Evidence-based interventions recommend that the best way to address the risk factors for teen pregnancy are to increase access to contraceptive information and to ensure that teens have at least one supportive adult in their lives (CDC, 2016b). It is important to evaluate programs focused on reducing teenage pregnancy for efficacy. Criteria used to evaluate programs should include measurements of the impacts on high-risk sexual behavior. Reproductive health outcomes of interest include sexual activity, number of sexual partners, contraceptive use, STIs, and having a previous pregnancy (Lugo-Gil, Lee, Vohra, & Adamek, 2016).

### **2.2.1 Scales to measure teenage pregnancy**

Scales to measure reproductive sexual health factors, such as those included in the previous section are appropriate for evaluating teenage pregnancy risk and protective factors. Recommended intervention strategies for reducing teenage pregnancy are similar or analogous to strategies for reducing sexually transmitted infections. One question from the *Partner*

*Communication Scale* covers communication regarding pregnancy prevention (Milhausen et al., 2007). The other question measures previous pregnancies. Both questions were obtained from the *Engendering Healthy Masculinities Survey* (Miller, 2015). Table 2 includes two pregnancy specific questions.

**Table 2. Pregnancy Items**

Question	Response Options
1. During the past 3 months, how many times have you and the people you are having sex with talked about how to prevent pregnancy?	1. Never 2. 1-3 times 3. 4-6 times 4. 7 or more times
2. Have you ever been pregnant?	1. Yes 2. No

### 2.3 DATING VIOLENCE

Relationships exist on a spectrum ranging from healthy to unhealthy with a variety of types in between (National Domestic Violence Hotline, 2013). Healthy relationships include a number of positive characteristics such as respect, safety, honesty, choice independence, boundaries, welcomed outside relationships, and the ability to communicate without fear (National Domestic Violence Hotline, 2013). Intimate partner violence is one such example of an unhealthy relationship. Dating violence may be physical, sexual, emotional, verbal, or some combination of each (CDC, 2015b, 2016c; National Domestic Violence Hotline, 2013). Dating

violence can exist throughout the lifespan and is an important public health issue. One in three adolescents in the United States falls victim to physical, sexual, emotional, or verbal abuse from a partner; a rate which exceeds all other types of youth violence (National Domestic Violence Hotline, 2013). Nationwide, 1.5 million high school students experience physical abuse from a dating partner every year (National Domestic Violence Hotline, 2013). One in ten high school students have been purposefully hit, slapped, or physically hurt by a romantic partner.

Experience with dating violence has serious negative life impacts. Individuals are more likely to experience symptoms of depression and anxiety, engage in unhealthy behaviors (such as drug or alcohol use), exhibit antisocial behaviors, and consider suicide (CDC, 2015b, 2016c; Miller et al., 2015). In addition, risk for victimization in young adulthood increases. Experience with dating violence can impact a person's education and earning power. Victims of dating violence complete fewer years of schooling and earn less than their peers (Battered Women's Justice Project, 2016; Miller et al., 2015). Research supports associations between dating violence and eating disorders, teenage pregnancy, suicide ideation, and attempted suicide. Suicide attempts are 6-9 times more common among adolescent girls who report dating violence (Silverman, Raj, Mucci, & Hathaway, 2001). Studies also report an association between dating violence and unintended pregnancy (Miller et al., 2010). Reproductive coercion and control can be achieved through a number of actions including impacting women's decision making, sabotaging contraception, or varying forms of dating violence (e.g. verbal threats, physical threats, demands).

Severe economic costs are associated with intimate partner violence. The health-related costs of rape, physical violence, and stalking exceed 5.8 billion dollars each year (CDC, 2003). Almost 90% of those costs are attributable to physical assaults. Physical assault costs on average

548 dollars per visit to a health care provider (CDC, 2003). Both medical and mental health utilization is higher for women who experience dating violence (Bonomi, Anderson, Rivara, & Thompson, 2009).

There are a number of risk factors associated with dating violence. Believing dating violence is acceptable, depression, anxiety, and other trauma symptoms increase risk. Other risk factors include aggression towards peers, general aggressive behavior, substance use, early sexual activity, and having multiple sexual partners (CDC, 2015b). Experience with violence such as a friend involved with dating violence, partner conflict, and witness or experiencing in-home violence increases the likelihood of dating violence (CDC, 2015b, 2016c). Low self-esteem of the victim is specifically associated with sexual abuse. In addition, the behavioral and cognitive impacts of gender identity are related to experience of sexual abuse (Burke et al., 1988).

The serious consequences of intimate partner violence make this health issue greatly important. Adolescence is an ideal time to form understanding of healthy relationships and ultimately reduce IPV prevalence. Consistent with programs aimed at reducing STI and teenage pregnancy, programs invested in healthy relationship formation increase positive skill building, development of healthy attitudes and perceived social norms, improve problem solving, and addresses experience and other high risk behaviors (e.g. substance use, high-risk sexual health behaviors).

### **2.3.1 Scales to measure dating violence**

In addition to the scales which address STIs and teen pregnancy, two other scales specifically related to dating violence were identified in the literature—the Recognition of

Adolescent Relationship Abuse and the Conflict in Adolescent Dating Relationships Inventory short form (Fernández-González, Wekerle, & Goldstein, 2012; Miller, 2015; Rothman, Decker, & Silverman, 2006). The first scale addresses the ability of a person to recognize dating abuse and the latter one examines a person’s actual experience with abuse. Table 3 lists each item in these scales.

**Table 3. Scales to measure dating violence**

<b>Scale- Recognition of Adolescent Relationship Abuse</b>	
<b>Questions</b>	<b>Response Options</b>
<p><i>Please rate each of the following actions towards a girlfriend or boyfriend as not abusive, a little abusive, somewhat abusive, very abusive or extremely abusive.</i></p> <ol style="list-style-type: none"> <li>1. Name calling or insulting them.</li> <li>2. Telling them they're ugly or stupid.</li> <li>3. Making fun of them in front of other people.</li> <li>4. Telling them what to do all the time.</li> <li>5. Telling them which friends they can and can't see or talk to.</li> <li>6. Pressuring them not to break up with them.</li> <li>7. Not listening to what they have to say.</li> <li>8. Trying to convince them to have sex.</li> <li>9. Preventing them from leaving a room.</li> <li>10. Keeping tabs on them or spying on them.</li> <li>11. Threatening to hit them.</li> <li>12. Forcing them to have sex.</li> </ol>	<p><i>5-pt Likert scale</i></p> <ol style="list-style-type: none"> <li>1. Not abusive</li> <li>2. A little abusive</li> <li>3. Somewhat abusive</li> <li>4. Very abusive</li> <li>5. Extremely abusive</li> </ol>
<b>Scale- The Conflict in Adolescent Dating Relationships Inventory short form</b>	
(Fernández-González et al., 2012)	
<b>Questions</b>	<b>Response Options</b>
<ol style="list-style-type: none"> <li>1. I spoke to my partner in a hostile or mean tone of voice.</li> <li>2. My partner spoke to me in a hostile or mean tone of voice.</li> <li>3. I insulted my partner with put-downs.</li> <li>4. My partner insulted me with put-downs.</li> <li>5. I said things to my partner’s friends about my partner to try and turn them against him/her</li> </ol>	<ol style="list-style-type: none"> <li>1. never</li> <li>2. seldom</li> <li>3. sometimes</li> <li>4. often</li> <li>5. n/a</li> </ol>



**Table 3 continued**

<ol style="list-style-type: none"><li>6. My partner said things to my friends about me to turn them against me.</li><li>7. I kicked, hit, or punched my partner.</li><li>8. My partner kicked, hit, or punched me.</li><li>9. I slapped or pulled my partner's hair.</li><li>10. My partner slapped or pulled my hair.</li><li>11. I threatened to hurt my partner.</li><li>12. My partner threatened to hurt me.</li><li>13. I threatened to hit or throw something about my partner.</li><li>14. My partner threatened to hit or throw something at me.</li><li>15. I spread rumors about my partner.</li><li>16. My partner spread rumors about me.</li><li>17. I touched my partner sexually when they didn't want me to.</li><li>18. My partner touched me sexually when I didn't want them to.</li><li>19. I forced my partner to have sex when they didn't want to.</li><li>20. My partner forced me to have sex when I didn't want to.</li></ol>	
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## **2.4 OTHER FACTORS TO CONSIDER**

Risk factors for STI, teenage pregnancy, and dating violence include knowledge, attitudes, beliefs, and behaviors and these elements should be considered for measurement when evaluating programs focused on reducing these health issues. As mentioned previously, self-esteem impacts behaviors and attitudes and is an important component for behavior change (Glanz et al., 2008). Self-esteem is related to other risk factors such as delinquency, school performance, and mental health (Rosenberg, Schooler, & Schoenbach, 1989). Studies suggest low self-esteem influences acceptance of aggression (Burke et al., 1988). Feelings of belonging and identifying with a social group increase self-esteem and reduce insecurity (Naslund, Aschbrenner, Marsch, & Bartels, 2016). Given the relationship between self-efficacy and certain risk and protective behaviors for STIs, teen pregnancy and dating violence, including a

measurement of self-esteem is critical in an evaluation of programs focusing on these issues. Accordingly, other items to measure in a program evaluation would include mental health, substance use, school connectedness, and social supports. Table 4 lists six scales, some of which were adapted from the *Engendering Healthy Masculinities Survey* (Miller, 2015), to address these issues (CDC, 2016a; Richardson et al., 2010; Rosenberg et al., 1989; Sarason, Sarason, Shearin, & Pierce, 1987; Spitzer, Kroenke, Williams, & Löwe, 2006).

**Table 4. Additional measurements**

<b>The Rosenberg Self-Esteem Scale (Rosenberg et al., 1989)</b>	
<b>Items</b>	<b>Response Options</b>
1. On the whole, I am satisfied with myself. 2. At times, I think I am no good at all. 3. I feel that I have a number of good qualities. 4. I am able to do things as well as most other people. 5. I feel I do not have much to be proud of. 6. I certainly feel useless at times. 7. I feel that I'm a person of worth, at least on an equal plane with others. 8. I wish I could have more respect for myself. 9. All in all, I am inclined to feel that I am a failure. 10. I take a positive attitude toward myself.	4-pit Likert scale  1. Strongly agree 2. Agree 3. Disagree 4. Strongly disagree
<b>Depression- The Patient Health Questionnaire 2 (Richardson et al., 2010)</b>	
<b>Items</b>	<b>Response Options</b>
<i>Over the past two weeks, how often have you been bothered by any of the following problems?</i> 1. Little interest or pleasure in doing things 2. Feeling down, depressed, or hopeless	1. not at all 2. several days 3. more than half the days 4. nearly every day

**Table 4 continued**

<b>Anxiety- Generalized Anxiety Disorder 7-item (Spitzer et al., 2006)</b>	
<b>Items</b>	<b>Response Options</b>
<p><i>Over the past two weeks, how often have you been bothered by any of the following problems?</i></p> <ol style="list-style-type: none"> <li>1. Feeling nervous, anxious, or on edge</li> <li>2. Not being able to stop or control worry</li> <li>3. Worrying too much about different things</li> <li>4. Trouble relaxing</li> <li>5. Being so restless that it's hard to sit still</li> <li>6. Becoming easily annoyed or irritable</li> <li>7. Feeling afraid as if something awful might happen</li> </ol>	<ol style="list-style-type: none"> <li>1. not at all</li> <li>2. several days</li> <li>3. more than half the days</li> <li>4. nearly every day</li> </ol>
<b>Substance Use- Youth Risk and Behavioral Surveillance (CDC, 2016a)</b>	
<b>Items</b>	<b>Response Options</b>
<ol style="list-style-type: none"> <li>1. During the past 30 days, on how many days did you smoke cigarettes (or other tobacco products)?</li> <li>2. During the past 30 days, on how many days did you have at least one drink of alcohol?</li> <li>3. During the past 30 days, how many days did you use marijuana?</li> </ol>	<ol style="list-style-type: none"> <li>1. 0 days</li> <li>2. 1 or 2 days</li> <li>3. 3 to 5 days</li> <li>4. 6 to 9 days</li> <li>5. 10 to 19days</li> <li>6. 20 to 29 days</li> <li>7. all 30 days</li> </ol>
<b>School Connectedness (Miller, 2015)</b>	
<b>Items</b>	<b>Response Options</b>
<ol style="list-style-type: none"> <li>1. I feel close to people at my school</li> <li>2. I feel happy at my school</li> <li>3. My school is a supportive and inviting place for students to learn</li> <li>4. My school fosters an appreciation of student diversity and respect for each other.</li> <li>5. I feel like I am part of my school.</li> <li>6. I feel teachers at my school treat students fairly.</li> <li>7. My school is a safe place for students.</li> </ol>	<p><i>5-pt Likert Scale</i></p> <ol style="list-style-type: none"> <li>6. Strongly agree</li> <li>7. Agree</li> <li>8. Neutral</li> <li>9. Disagree</li> <li>10. Strongly Disagree</li> </ol>
<b>Social Supports (Miller, 2015; Sarason et al., 1987)</b>	

**Table 4 continued**

<b>Items</b>	<b>Response Options</b>
<p>How often is each of the following supports available to you when you need it?</p> <ol style="list-style-type: none"><li>1. Someone you really count on to be dependable when you need help</li><li>2. Someone you really count on to care about you, regardless of what is happening to you.</li><li>3. Someone you can really count on to help you feel better when you are feeling generally down-in-the-dumps.</li></ol>	<p>5 pt. Likert scale from 'none of the time' to 'all of the time'</p>

### **3.0 METHODS**

The ULPGH reached out to the Children’s Hospital of Pittsburgh of UPMC (CHP) for consultation on the evaluation of the BFLDI program. The Director of Adolescent Medicine at the University of Pittsburgh had a relationship with ULPGH and a positive reputation for conducting program evaluation which contributed to the partnership formation. Given the quick timeline for implementation of the BFLDI program activities, it was decided CHP would provide consultation on program evaluation for year one and further contract evaluation services for year two of the BFLDI program. I was recruited by the Director of Adolescent Medicine to conduct an evaluation of the first year’s program activities.

#### **3.1 DESCRIPTION OF PROGRAM INTERVENTION ACTIVITIES**

The BFLDI program consisted of a number of different activities which included the “Sister Circles”, “Penn State Saturday Institutes”, the January Identity Retreat, and the Community Service Day. Together these activities intended to address the major program objectives. This evaluation assessed the overall impact of all program activities combined, rather than each individual activity. The purpose was to assess any changes in the knowledge, attitudes, beliefs, and behaviors of participants from the pre and post survey time period. Table 5 describes each activity, the topics addressed, a description of who facilitated the activities, the duration,

and the frequency (Medina, 2015; ULPGH, 2015). The girls participated in a few other activities not listed in the table, including an orientation and one workshop session that utilized the Gender Norms, Health and Wellness for Black Girls curriculum (True Child, 2016).

**Table 5. Program Activities**

<b>Activity</b>	<b>Description</b>	<b>Topics</b>	<b>Facilitated By:</b>	<b>Duration</b>	<b>Frequency</b>
Sister Circles	Participants are split into smaller groups, by age, and assigned one staff facilitator. These mini groups remain the same throughout the program. Each meeting a topic is assigned and used as the focus for discussion. Participants pull questions out of a bag to facilitate group discussion about that particular topic.	Youth violence prevention, speak up and speak out, bullying	ULPGH program staff	90-120 minutes	One Wednesday a month for 8 months
Penn State Saturday Institutes	Girls are randomly split into two groups. Each group participates in one activity then rotates to the other. These sessions are more instructional in nature and include various worksheets or handouts. The girls reflect on the activities at the end. These sessions largely focuses on leadership and self-development.	internal peace, understanding and identifying self, external peace and sisterhood, goal setting, I am because we are, purpose and visioning	Outside expert collaborators, 5AElite Youth Empowerment, CORO Pittsburgh	3 hour sessions, split into two segments	One Saturday a month for 8 months
January Identity Retreat	This was a weekend retreat focused on fostering identity and leadership and to strengthen the participants bonds with one another. The girls participated in activities similar to the sister circles and other leadership focused exercises. CHP facilitated a visual	Gender identity, finding yourself, power of your words, tenants of leadership girls bonding through recreation activities (manicures, movies, etc.)	ULPGH staff, CHP research team (visual voices only)	Friday evening – Monday morning	One weekend in January

**Table 5 continued**

	voices session and ULPGH staff lead group exercises.				
Community Service Day	Annual Comcast Cares Day. This event took place at family support center affiliated with the ULPGH. The girls helped to clean up the center's garden and plant new crops. They also created paintings that represented the environment in some way.	Environmental Awareness	ULPGH staff	½ day	One time occurrence

### **3.2 DEVELOPMENT OF THE EVALUATION INSTRUMENT**

The ULPGH first shared BFLDI program materials including the logic model, activities timeline, and the Gender Norms, Health and Wellness for Black Girls curriculum with the evaluation team. The first consultation between me and the ULPGH occurred in November 2015, after the BFLDI participants met one another and received the Gender Norms, Health and Wellness for Black Girls curriculum. The terms of the consultation agreement specified the active involvement of the BFLDI's Program Director in the design of the evaluation. I reviewed documents listing main program objectives and identified appropriate constructs to be measured in the evaluation. The key constructs reflected the overall objectives of the program, specific behavioral changes of interest and possible underlying factors that contribute to the health problems of STI, teenage pregnancy, and dating violence. The primary objectives of the Urban League's program are for participants to be able to: 1) demonstrate improved self-esteem and self-confidence, 2) demonstrate improved cognitive abilities, improved function, and

successfully transition out of high school, 3) reduce engagement in risky behaviors and 4) develop continuous healthy social supports.

A list of validated questions from the *Engendering Healthy Masculinities Survey* (Miller, 2015) utilized in research by the Director of Adolescent Medicine was provided to me for reference. I then conducted a cursory review of the literature to identify other validated scales to be considered for use in the evaluation. See chapter 2 for a list of these instruments which were recommended to BFLDI. The items recommended to include in the survey were: condom negotiation self-efficacy, attitudes related to condom and contraceptive use, recognition of adolescent relationship abuse, gender equitable attitudes, experience with dating violence, reproductive sexual health behaviors (history, communication, contraceptive use, drug and alcohol use before sex, STI testing and diagnoses, and pregnancy history), substance use, school connectedness, social supports, attitudes towards women, mental health, reproductive sexual health knowledge, adolescent femininity ideology, and self-esteem.

I presented the compiled list of survey recommendations to the BFLDI Program Director in mid-January 2016. The program director then examined the complete list and decided to use some scales in their entirety as well as to modify some of the other scales by, in some cases, eliminating specific questions and/or adding a small number of self-created questions—including one question on race-related self-image. The final list of items included condom negotiation self-efficacy, attitudes related to condom and contraceptive use, recognition of adolescent relationship abuse, attitudes towards women, reproductive sexual health knowledge, and self-esteem. Refer to Appendix A to view the final post survey.

The selected scales and the corresponding items omitted or added to the final BFLDI pre-survey and post-surveys are described below.



The recommendation for condom negotiation self-efficacy included five items duplicated from the *Engendering Healthy Masculinities Survey* (Miller, 2015). The five items are derived from the 28-item *Condom Use Self-Efficacy Scale* (Brafford & Beck, 1991). All five items were included in the pre/post survey. Response options were on a five point Likert scale ranging from “strongly agree” to “strongly disagree”. See Table 6 below.

**Table 6. Condom negotiation self-efficacy**

Question
1. I feel confident in my ability to discuss condom use with any partner I might have.
2. I feel confident in my ability to suggest using condoms with a new partner.
3. If I were to ask my partner to use a condom, I would be afraid that my partner would be upset with me.
4. If I were unsure of my partner’s feelings about using condoms, I would not ask my partner to use one.
5. If my partner didn’t want to use a condom during sex, I feel confident in my ability to refuse to have sex.

Attitudes related to condom and contraceptive use included ten items from the *Engendering Healthy Masculinities Survey* (Miller, 2015). These items were derived from a number of other surveys including the 32-item *Contraceptive Attitude Scale* and the 2009 *National Survey of Reproductive and Contraceptive Knowledge* (Guttmacher Institute, 2016). Of the ten items recommended, nine were included in the final pre/post survey. Response options were on a five point Likert scale ranging from “strongly agree” to “strongly disagree”. See Table 7 below.

**Table 7. Attitudes related to condom and contraceptive use**

Items Included	Items Omitted
<ol style="list-style-type: none"> <li>1. Using birth control keeps your partner from worrying about getting pregnant.</li> <li>2. Using birth control gives you a sense of control.</li> <li>3. Using birth control is too much trouble or too much of a hassle to use.</li> <li>4. Using birth control lets you have sex without worrying about getting your partner pregnant.</li> <li>5. Using birth control makes sex feel unnatural.</li> <li>6. Using birth control makes sex less exciting.</li> <li>7. It does not matter whether you use birth control or not; when it's your time to get pregnant, it will happen.</li> <li>8. It is mainly a girl or woman's responsibility to make decisions about birth control.</li> <li>9. I am in favor of my partner and me using birth control.</li> </ol>	<ol style="list-style-type: none"> <li>1. Using birth control takes too much planning ahead of time to have birth control on hand when you're going to have sex.</li> </ol>

Recommendations for recognition of adolescent dating abuse included 12 items from the *Engendering Healthy Masculinities Survey* (Miller, 2015). These items are modified from Rothman et al. (2006) evaluation of a teen dating violence and social media campaign. Of the 12 recommended items, 8 were included in the final pre/post survey. Response options were rated on a 5 point scale and included the following options, not abusive, a little abusive, somewhat abusive, very abusive, and extremely abusive. See Table 8 below.

**Table 8. Dating violence**

<b>Items Included</b>	<b>Items Omitted</b>
<ol style="list-style-type: none"><li>1. Name calling or insulting them.</li><li>2. Telling them which friends they can and can't see or talk to.</li><li>3. Pressuring them no to break up with them.</li><li>4. Not listening to what they have to say.</li><li>5. Trying to convince them to have sex.</li><li>6. Preventing them from leaving a room.</li><li>7. Threatening to hit them.</li><li>8. Forcing them to have sex.</li></ol>	<ol style="list-style-type: none"><li>1. Telling them they're ugly or stupid.</li><li>2. Making fun of them in front of other people.</li><li>3. Telling them what to do all the time.</li><li>4. Keeping tabs on them or spying on them.</li></ol>

The Attitudes Towards Women Scale for Adolescents included 12-items from Galambos et al. (1985) on a 4-pt Likert scale from strongly agree to strongly disagree. The pre/post survey included 8 of the 12 items. See Table 9 below.

**Table 9. Gender norm beliefs**

<b>Items Included</b>	<b>Items Omitted</b>
<ol style="list-style-type: none"><li>1. Swearing is worse for a girl than for a boy.</li><li>2. On a date, the boy should be expected to pay all the expenses.</li><li>3. On average, girls are as smart as boys.</li><li>4. It is alright for a girl to want to play rough sports like football.</li><li>5. In general, the father should have greater authority than the mother in making family decisions.</li><li>6. It is alright for a girl to ask a boy out on a date.</li><li>7. If both husband and wife have jobs, the husband should do a share of the household work such as washing dishes or doing the laundry.</li><li>8. Girls should be more concerned with becoming good wives and mothers than desiring a professional or business career.</li></ol>	<ol style="list-style-type: none"><li>1. More encouragement in a family should be given to sons than daughters to go to college.</li><li>2. It is more important for boys than girls to do well in school.</li><li>3. Boys are better leaders than girls.</li><li>4. Girls should have the same freedoms as boys.</li></ol>

Questions regarding reproductive sexual health knowledge were recommended from the 2009 National Survey of Reproductive and Contraceptive Knowledge (Frost et al., 2012; Guttmacher Institute, 2016). Response options included true or false and questions about various types of contraception information. The four methods assessed included condoms, the pill, injection methods, and intrauterine devices (Frost et al., 2012). Of the original 23-items, 11 were eliminated from the pre/post surveys. The program director felt some information was beyond the scope of participant knowledge. Thus some questions were eliminated from all four contraception categories. All IUD items were omitted and replaced with one created question testing basic knowledge of the device. Three other questions were added to this section for a total of 16 items. All of these items explored STI knowledge. One item, “only people who are gay/lesbian have to worry about getting HIV/AIDS” was generated after the program director mentioned direct experience hearing the girls misconstrue HIV/AIDS information. None of these questions were piloted with the target population. Table 10 below lists the items included, removed, and created for the pre/post survey.

**Table 10. RSH Knowledge**

<b>Items Included</b>	<b>Items Omitted</b>
<ol style="list-style-type: none"> <li>1. It is okay to use the same condom more than once.</li> <li>2. Condoms have an expiration date.</li> <li>3. When putting on a condom, it is important to leave space at the tip.</li> <li>4. Wearing two latex condoms will provide extra protection.</li> <li>5. Birth control pills are effective even if a woman misses taking them for two or three days in a row.</li> <li>6. If a woman is having side effects with one kind of pill, switching to another type or brand might help.</li> <li>7. Birth control pills reduce the chances</li> </ol>	<ol style="list-style-type: none"> <li>1. It is okay to use petroleum jelly or Vaseline as a lubricant when using latex condoms.</li> <li>2. When using a condom, it is important for the man to pull out right after ejaculation.</li> <li>3. Women should “take a break” from the pill every couple of years.</li> <li>4. All IUDS are banded from use in the United States.</li> <li>5. A woman can use an IUD even if she has never had a child.</li> <li>6. Women who use IUDS cannot use tampons.</li> <li>7. To obtain an IUD, a woman must undergo a surgical operation.</li> <li>8. And IUD cannot be felt by a woman’s partner</li> </ol>

**Table 10 continued**

<p>that women will get certain types of cancer.</p> <p>8. After a woman stops taking birth control pills, she is unable to get pregnant for at least two months.</p> <p>9. In order to get the birth control pill, a woman must have a pelvic exam.</p> <p>10. An intrauterine device (IUD) is a small contraceptive device that is inserted into a woman's uterus.</p>	<p>during sex.</p> <p>9. IUDs can move around in a woman's body.</p> <p>10. Woman using the birth control shot Depo-Provera, must get an injection every three months.</p> <p>11. Women using the vaginal ring, NuvaRing, must have it inserted by a doctor or health care provider every month.</p>
	<p><b>Items Created</b></p>
<p>11. Even if a woman is late getting her birth control shot, she is still protected from pregnancy for at least three more months.</p> <p>12. Negative effects that a woman has from depo-provera can last for the rest of her life.</p> <p>13. Long-acting methods like the implant or IUD cannot be removed early, even if a woman changes her mind about wanting to get pregnant.</p> <p>14. All chlamydia and gonorrhea infections have symptoms.</p> <p>15. Being in a committed relationship means I am not at risk for any sexually transmitted infections.</p> <p>16. Only people who are gay/lesbian have to worry about getting HIV/AIDS.</p>	<p>1. An intrauterine device (IUD) is a small contraceptive device that is inserted into a woman's uterus.</p> <p>2. All chlamydia and gonorrhea infections have symptoms.</p> <p>3. Being in a committed relationship means I am not at risk for any sexually transmitted infections.</p> <p>4. Only people who are gay or lesbian have to worry about getting HIV/AIDS.</p>

The *Rosenberg Self-Esteem* scale (Rosenberg et al., 1989) consists of ten questions and utilized a four-point Likert scale ranging from strongly agree to strongly disagree. All ten items were included in the pre/post survey. The program director included one other question measuring racial pride. See Table 11 below.

**Table 11. Self-esteem**

Items Included	Items Created
<ol style="list-style-type: none"> <li>1. On the whole, I am satisfied with myself.</li> <li>2. At times, I think I am no good at all.</li> <li>3. I feel that I have a number of good qualities.</li> <li>4. I am able to do things as well as most other people.</li> <li>5. I feel I do not have much to be proud of.</li> <li>6. I certainly feel useless at times.</li> <li>7. I feel that I'm a person of worth, at least on an equal plane with others.</li> <li>8. I wish I could have more respect for myself.</li> <li>9. All in all, I am inclined to feel that I am a failure.</li> <li>10. I take a positive attitude toward myself.</li> </ol>	<ol style="list-style-type: none"> <li>1. I am proud of my racial/ethnic identity.</li> </ol>

All of the pre-survey items were included in the post-survey along with additional items to measure participant satisfaction. The Director of Adolescent Medicine provided me with two surveys to review as models for the satisfaction questions-- the *Feedback from Jobs Skills Module 1* and the end of program survey from the Manhood 2.0 Project (Miller, 2016a, 2016b). It was then determined that the Sister Circles, the Penn State Saturday Institutes, the Community Service Day, and the January Identity Retreat activities would all be assessed in the post-survey. Three questions reviewed overall program satisfaction. Participants were asked to select the answer that best matched their beliefs. Each question utilized a different 4-pt. Likert scale. Table 12 displays the three items.

**Table 12. Satisfaction items**

Statement	Response Options			
1. How satisfied were you with the BFLDI sessions?	Very Satisfied	Satisfied	Unsatisfied	Very Unsatisfied
2. Would you encourage a friend to join the BFLDI program?	Definitely Yes	Probably Yes	Probably No	Definitely No
3. How much do you feel you learned from the BFLDI sessions?	A Lot	Some	A Little	None

A total of seven items were included to assess the group dynamics and comfort with the BFLDI group leaders. Response options ranged a 5-pt. Likert scale from “strongly agree” to “strongly disagree”. See Table 13.

**Table 13. Satisfaction group**

1. I felt comfortable sharing personal things in front of the group.
2. I felt like the other teens in BFLDI were similar to me.
3. I felt included in these sessions.
4. I wish there were more of these sessions I could go to.
5. I liked the group leaders of these sessions.
6. I felt I could trust my group leaders.
7. The group leaders were able to get everyone to talk.

Finally, two questions in the survey assessed the four broad program activities. The first item assessed how much the activity was liked and the second item assessed how much it contributed to their perceived learning. The ‘like’ question offered five response options from “liked very much” to “did not like at all”. The ‘learning’ questions offered three response options including: “learned a lot of new things”, “learned some new things”, and “learned nothing new”. Participants were offered space on the survey to write any additional thoughts on how to improve the program.

### **3.3 DATA COLLECTION**

Pre-surveys were administered on January 16<sup>th</sup>, 2016 during the January Identity Retreat. Program staff administered the surveys and collected the survey results. The post-surveys were administered at the end of year one, May 28<sup>th</sup>, 2016. ULPGH staff managed all data collection. Copies of the surveys were provided to the author for analysis assistance.

### **3.4 IRB APPROVAL**

The University of Pittsburgh's Institutional Review Board (IRB) reviewed the evaluation protocol and approved it as an exempt study. No identifying information was obtained in the pre/post surveys and all participants were instructed in writing on confidentiality and voluntary completion. ULPGH administered and collected all data on year one of the BFLDI.

### **3.5 DATA ANALYSIS**

#### **3.5.1 Research Question One**

The first research question in this evaluation research was: *What are some validated scales or questions that currently exist to measure self-esteem, gender norm beliefs, reproductive sexual health behaviors, knowledge, attitudes, and beliefs, dating violence recognition and experience, and other high risk behaviors?* To answer this question, I conducted a literature review to identify relevant measurement scales and I also reviewed validated scales and questions utilized in previous studies examining program outcomes related to the BFLDI's main objectives. The project timeline prevented a complete review of validated measures. For a complete review of the scales and questions identified refer to chapter 2.



### 3.5.2 Research Question Two

The second research question addressed in this evaluation was: *Did any change occur in the knowledge, attitudes, beliefs and behaviors as a result of the BFLDI program?* Copies of completed surveys were provided to me several days after data collection. I then created an identical pre-survey in the University of Pittsburgh's Research Electronic Data Capture, or, RedCap System. RedCap is a tool utilized to organize data or to assist in the data collection process. All pre-survey responses were transferred into the system. RedCap exported the data downloads into Excel files for further analysis. Then I input post-survey responses using the same data format into Excel (bypassing the pre-survey RedCap step). The pre and post Excel files were opened in SPSS Version 24. Frequency tabulations were computed for each construct. All survey items were assigned a number value 1 through 5 during coding. Positive (more healthy) response options received a higher score. Skipped questions did not receive a number. Certain survey constructs included questions requiring reverse coding. Questions were transformed into new variables with the proper reversely coded value. For example, if the response selected was strongly agree and the question required reverse coding on a 4-pt. Likert scale, the new variable was assigned a value of one instead of four. A construct total value was computed for each scale by adding the corresponding item values. The average construct score for each participant was computed by dividing the total sum value by the total number of construct items with a clear response selected. This technique managed cases where a participant answered a number of the questions and left at least one blank or ambiguous. Pre and post construct averages were computed by adding the average scores of each individual case and dividing the sum total by the number of survey respondents. Pre and post survey averages were compared to assess for a potential change in the means in addition to Wilcoxon Rank-Sum Test

which was utilized to evaluate potential difference in the pre/post distributions. This analysis process aimed to answer the second research question; *did any change occur for the program constructs?*

### **3.5.3 Research Question Three**

In order to answer the third research question: *Is there a relationship between self-efficacy and gender norms, reproductive attitudes, and dating abuse recognition?* I assessed data from the pre-surveys. The constructs of interest included Rosenberg's Self-Efficacy Scale (Rosenberg et al., 1989), the modified Attitudes Towards Women Scale (Galambos et al., 1985), the modified and combined Condom Use Self-Efficacy Scale and the 2009 National Survey of Reproductive and Contraceptive Knowledge (Guttmacher Institute, 2016), and the modified recognition of adolescent relationship abuse questions (Rothman et al., 2006). I computed cross tabulations between the pre-survey self-efficacy categories and gender norms, reproductive sexual health attitudes, and adolescent recognition of abuse. In addition, cross tabulations were computed for different age and grade categories within the four selected constructs.

In order to provide the ULPGH with a more comprehensive evaluation, pre/post survey construct response rates and overall survey response rates were calculated. Lastly, frequency statistics were computed for questions regarding program satisfaction. I prepared a brief executive summary for the BFLDI program.

## 4.0 RESULTS

### 4.1 PARTICIPANT CHARACTERISTICS

Participants reported their age and grade on the pre and post surveys. The majority of participants (63.9%, n =23 pre survey) were 15 years or older. A fourth were in 6<sup>th</sup>-8<sup>th</sup> grade, a half in 9<sup>th</sup> or 10<sup>th</sup>, and a fourth in 11<sup>th</sup> or 12<sup>th</sup> grade. All participants were minority females. No other identifying information was included. Table 14 reports the complete data set.

**Table 14. Participant characteristics**

	Pre Survey % (n)	Post Survey % (n)
<b>Age: (yrs. old)</b>		
9	2.8 (1)	0 (0)
10	0 (0)	0 (0)
11	0 (0)	0 (0)
12	2.8 (1)	4.5(1)
13	11.1 (4)	13.6 (3)
14	19.4 (7)	9.1 (2)
15	36.1 (13)	36.4 (8)
16	11.1 (4)	18.2 (4)
17	13.9 (5)	13.6 (3)

**Table 14 continued**

18	2.8 (1)	
<b>Age Groupings: (yrs. old)</b>		4.5 (1)
9-11	2.8 (1)	
12-14	33.3 (12)	0.0 (0)
15-18	63.9 (23)	27.3 (6)
		72.7 (16)
<b>Grade:</b>		
6-8	25.0 (9)	22.7 (5)
9-10	50.0 (18)	50.0 (11)
11-12	25.0 (9)	27.2 (6)

## **4.2 RESEARCH QUESTION ONE**

The first research question in this evaluation asked, what are some validated scales or questions that currently exist to measure self-esteem, gender norm beliefs, reproductive sexual health behaviors, knowledge, attitudes, and beliefs, dating violence recognition and experience, and other high risk behaviors? This question was answered through the literature search. All suggested measures came from valid and reliable sources. Refer to chapter two for a full review.

### **4.3 RESEARCH QUESTION TWO**

The second research question addressed in this evaluation was: Did any change occur in the knowledge, attitudes, beliefs and behaviors as a result of the BFLDI program? To answer this question a number of statistical computations were performed. For each item on each scale pre and post survey frequencies were computed. All pre and post frequency data is available in Appendix B. Interesting individual results from the pre survey, which had a higher number of participants (n= 36 pre, n = 22 post) and a higher overall response rate (92.1% pre, 85.2% post) are reported below. Average scores computed for each measure on the survey were compared for significance. Distributions were compared using the Wilcoxon Rank-Sum Test.

#### **4.3.1 Frequency Results Construct Items**

There were a number of interesting or surprising results found for some individual items on the utilized scales. All ten of the items on the self-esteem scale were included in the survey. Over 90% (n= 33) of participants agreed or strongly agreed about being satisfied with themselves. An equal number agreed or strongly agreed they felt they had a number of good qualities. Three quarters (n = 27) of the participants strongly agreed they were proud of their racial and ethnic identity.

The scale assessing gender norm beliefs was modified ultimately omitting four out of twelve questions. About a quarter of participants (n = 9) disagreed or strongly disagreed that girls were equally as smart as boys. More than 10% of the girls agreed that girls should be less concerned about developing a career and more concerned about becoming good wives and mothers.

One of fifteen recommended questions about attitudes related to condom and contraception use was omitted. Twenty-four girls (66.7%) reported feeling neutral, disagreeing, or strongly disagreeing about birth control keeping their partner from worrying about pregnancy. More than half of the participants reported feeling neutral, agreeing, or strongly agreeing that when it was their time to get pregnant that it would happen regardless of birth control usage. Only one third of participants (n = 12) agreed or strongly agreed they were in favor of using birth control with their partners.

Four of twelve recommended questions regarding dating abuse recognition were omitted from the final pre and post surveys. The recognition of dating abuse scale offered 5 response options including not abusive, a little abusive, somewhat abusive, very abusive, and extremely abusive. More than 30% of participants (n = 11) reported a partner name calling or cussing at them as not abusive or a little abusive. The same results were reported for the question on their partner's pressuring them not to break up and preventing them from leaving a room.

Of the 23 questions assessing RSH knowledge, 16 were included in the final pre and post survey, 11 were omitted, and 4 were created. Participants selected either true or false in response. More than 20% of participants incorrectly believed wearing two latex condoms provides extra protection. A third (n = 12) incorrectly believed they could get not pregnant after they stopped taking birth control pills for a minimum of two months. One in ten of the participants did not correctly identify the description of an IUD. Nearly 20% (n = 7) incorrectly believed being late on the birth control shot still provided at least three more months of protection. Over 40% (n = 15) incorrectly reported effects from the depo shot can last lifelong. A third (n = 12) incorrectly believed the IUD cannot be removed early even if the woman changed her mind about pregnancy intention. More than 40% (n = 15) incorrectly reported that all chlamydia and gonorrhea

infection are symptomatic. Finally, over 20% (n = 8) incorrectly believed being in a committed relationship protected them from any STI.

#### **4.3.2 Participant Satisfaction**

There were 18 questions included to assess for BFLDI program satisfaction on the post survey. Post survey responses came from 22 participants. Participants rated program satisfaction high as reflected by 82% (n = 18) of participants reporting to be 'very satisfied' or 'satisfied' with the sessions. Nearly 82% (n = 18) of participants would be likely to encourage a friend to join the program; and more than 72% (n = 16) felt the program contributed to their knowledge base 'some' or 'a lot'. A positive response towards the group leaders was observed by response to three different questions. Seventy-three percent (n =16) strongly agreed or agreed to liking the group leaders and feeling that the group leaders successfully encouraged participation in the discussions. Over 68% (n =15) strongly agreed or agreed they could trust the group leaders. One question assessed how much participants liked and one question assessed how much the participants learned from the four main types of program activities (Sister Circles, Penn State Saturday Institutes, the January Identity Retreat, and the Community Service Day). More than 68% (n =15) of participants 'liked very much' or 'somewhat liked' the Sister Circles and the January Identity Retreat activities. There was a less positive response to the Penn State Saturday Institute's and Community Service Days; four participants respectively reported they 'did not like at all' these activities. Nearly 10% (n =2) reported they did not like at all the Penn State Saturday Institutes. More than 18% (n = 4) reported they only "liked a little" the Community Service Day.

Participants felt they learned from the BFLDI program activities. Half (n =11) of females reported learning a lot of new things from the Sister Circles and over 45% (n =10) reported learning a lot of new things from the Penn State Saturday Institute's. More than 72% (n =16) of females reported 'learning a lot of new things' or 'learning some new things' from the January Identity Retreat. Four participants (18.2%) reported they did not learn anything from the Community Service Day. For a complete review of the participant satisfaction frequencies refer to Appendix B.

#### **4.3.3 Construct Averages Pre/Post Comparison**

In order to assess if there were any significant changes for the selected constructs between the pre and post surveys, construct averages were computed and compared. An average score for the pre and post constructs was computed by averaging each participants score per construct. The summed construct value for each participant was divided by the total number of questions answered on the scale to compute individual average scores per construct. Each participants pre and post construct averages were summed and then divided by the total number of participants' pre and post survey to compute a group construct average score. The group averages were compared from the pre and post survey. There were no significant changes between the construct scores pre and post. Table 15 reports group averages for each construct pre and post. Construct distributions pre and post survey were compared through the Wilcoxon Rank-Sum Test. There were no significant differences between pre and post survey measures.



**Table 15. Pre/Post Construct Averages**

	<b>Scale Range</b>	<b>Pre</b>	<b>Post</b>
<b>Self-efficacy</b>	<b>1 – 4</b>	3.192	3.404
<b>Self-image</b>	<b>1-4</b>	3.290	3.260
<b>Gender Norms</b>	<b>1-4</b>	3.435	3.319
<b>Reproductive Attitudes</b>	<b>1-5</b>	3.758	3.714
<b>Dating Abuse Recognition</b>	<b>1-5</b>	3.691	3.594
<b>RSH Knowledge</b>	<b>0 – 1</b>	.690	.720

#### **4.4 RESEARCH QUESTION THREE**

In order to answer the third research question: Is there an association between self-efficacy and gender norms, reproductive attitudes, and dating abuse recognition, I assessed data from the pre-surveys. The pre-surveys were selected due to the larger sample size and higher overall response rate. Cross tabulations were computed for self-efficacy and gender norms, self-efficacy and reproductive sexual health attitudes, and self-efficacy and dating abuse recognition. Self-efficacy average scores did not include participants' response to the added question about

racial pride. Each participants average construct score was first rounded to the nearest whole number. Self-efficacy and gender norms scores ranged from 1 to 4 and reproductive attitudes and dating abuse scores ranged from 1 to 5. Pearson’s Chi-Square values were computed to determine association significance. A significant association was found between self-efficacy and gender norms ( $p = .023$ ). As self-efficacy scores increased so did gender equitable norm beliefs. There was no signification association between self-efficacy and reproductive attitudes and self-efficacy and dating abuse recognition. Table 16 reports on cross tabulations for self-efficacy and gender norms, Table 17 for self-efficacy and reproductive attitudes, and Table 18 for self-efficacy and dating abuse recognition.

**Table 16. Self-efficacy & gender norms**

	Gender Norms Average Score % (n)				Total % (n)
	1	2	3	4	
Self-efficacy Average Score % (n)					
1	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
2	0.0% (0)	0.0% (0)	5.7% (2)	2.9% (1)	8.6% (3)
3	0.0% (0)	0.0% (0)	34.3% (12)	25.7% (9)	60.0% (21)
4	0.0% (0)	0.0% (0)	2.9% (1)	28.6% (10)	31.4% (11)
Total % (n)	0.0% (0)	0.0% (0)	42.9% (15)	57.1% (20)	100% (35)

$p = .023^*$

**Table 17. Self-efficacy and reproductive attitudes**

	Reproductive Attitudes Average Score % (n)					Total % (n)
	1	2	3	4	5	
Self-efficacy Average Score % (n)						
1	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
2	0.0% (0)	0.0% (0)	2.9% (1)	5.9% (2)	0.0% (0)	8.8% (3)
3	0.0% (0)	0.0% (0)	11.8% (4)	44.1% (15)	2.9% (1)	58.8% (20)
4	0.0% (0)	0.0% (0)	8.8% (3)	23.5% (8)	0.0% (0)	32.4% (11)
Total % (n)	0.0% (0)	0.0% (0)	23.5% (8)	73.5% (25)	2.9% (1)	100% (34)

p = .907

**Table 18. Self-efficacy and dating abuse recognition**

	Reproductive Attitudes Average Score % (n)					Total % (n)
	1	2	3	4	5	
Self-efficacy Average Score % (n)						
1	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
2	0.0% (0)	0.0% (0)	2.9% (1)	5.7% (2)	0.0% (0)	8.8% (3)
3	0.0% (0)	11.4% (4)	5.7% (2)	28.6% (10)	14.3% (5)	58.8% (20)
4	0.0% (0)	0.0% (0)	11.4% (4)	8.6% (3)	11.4% (4)	32.4% (11)
Total % (n)	0.0% (0)	11.4% (4)	20.0% (7)	42.9% (15)	25.7% (9)	100% (35)

p = .240

#### 4.4.1 Age and Construct Cross Tabulations

Participants from the pre-survey were grouped into two age categories to assess the influence of age on self-efficacy, gender norms beliefs, reproductive attitudes, and dating abuse recognition. Age group one participants were under 15 years old (n = 13) and age group two participants included anyone 15 years or older (n = 23). Cross tabulations were computed using the two age groupings and the rounded average scores for the selected constructs. No significant

associations were found on the alpha = .05 level. At alpha = .10 a significant association between age and reproductive attitudes was found (p = .094). The older age group is associated with more positive reproductive sexual health attitudes. There is similar trend for age group and dating abuse recognition (p = .133) that does not reach significance. Table 19 reviews the cross tabulation output for age group and self-efficacy, Table 20 for age group and gender norm beliefs, Table 21 for age group and reproductive sexual health attitudes, and Table 22 for age group and dating abuse recognition.

**Table 19. Age group and self-efficacy**

	Self-efficacy Average Score % (n)				Total % (n)
	1	2	3	4	
Age Group % (n)					
1	0.0% (0)	2.8% (1)	22.2% (8)	11.1% (4)	36.1% (13)
2	0.0% (0)	5.6% (2)	38.9% (14)	19.4% (7)	63.9% (23)
Total % (n)	0.0% (0)	8.3% (3)	61.1% (22)	30.6% (11)	100% (36)

p = .995

**Table 20. Age group and gender norm beliefs**

	Gender Norms Average Score % (n)				Total % (n)
	1	2	3	4	
Age Group % (n)					
1	0.0% (0)	0.0% (0)	11.1% (4)	25.7% (9)	37.1% (13)
2	0.0% (0)	0.0% (0)	31.4% (11)	31.4% (11)	62.9% (22)
Total % (n)	0.0% (0)	0.0% (0)	42.9% (15)	57.1% (20)	100% (35)

p = .267

**Table 21. Age group and reproductive attitudes**

	Reproductive Attitudes Average Score % (n)					Total % (n)
	1	2	3	4	5	
Age Group % (n)						
1	0.0% (0)	0.0% (0)	14.7% (5)	20.6% (7)	2.9% (1)	38.2% (13)
2	0.0% (0)	0.0% (0)	8.8% (3)	52.9% (18)	0.0% (0)	61.8% (21)
Total % (n)	0.0% (0)	0.0% (0)	23.5% (8)	73.5% (25)	2.9% (1)	100% (34)

p = .094\*

**Table 22. Self-efficacy and dating abuse recognition**

	Dating Abuse Recognition Average Score % (n)					Total % (n)
	1	2	3	4	5	
Age Group % (n)						
1	0.0% (0)	8.6% (3)	11.4% (4)	8.6% (3)	8.6% (3)	37.1% (13)
2	0.0% (0)	2.9% (1)	8.6% (3)	34.3% (12)	17.1% (6)	62.9% (22)
Total % (n)	0.0% (0)	0.0% (0)	23.5% (8)	73.5% (25)	2.9% (1)	100% (35)

p = .133

## **5.0 DISCUSSION**

### **5.1 SUMMARY**

This thesis evaluated the first year of the Urban League of Greater Pittsburgh's BFLDI program. Evaluation data indicated high levels of program satisfaction. There were no significant changes found between the pre and post survey study constructs measuring self-efficacy, self-image, gender norm beliefs, reproductive sexual health attitudes, dating abuse recognition, and reproductive sexual health knowledge. Pre-survey data indicated a positive association between self-efficacy and gender norms beliefs ( $p = .023$ ). This finding is consistent with the literature which supports self-esteem influence on attitudes and indicates that lower levels of self-esteem are associated with less equitable gender norm beliefs (Burke et al., 1988; Glanz et al., 2008). Two positive trends were identified for associations between age and reproductive sexual health attitudes ( $p = .094$ ) and age and dating abuse recognition ( $p = .133$ ). Discussion of the frequency data for some survey items enhanced the overall evaluation recommendations for BFLDI year two.

## 5.2 BFLDI PROGRAM

### 5.2.1 Achievements/successes

The BFLDI program's logic model identified four main program objectives. The program aimed to increase minority adolescent females' knowledge and self-efficacy related to dating violence, to increase knowledge and self-efficacy of reproductive sexual health, to increase adult connectedness and social supports, and to promote civic engagement (ULPGH, 2014b). Additional program goals included increasing self-efficacy, increasing healthy choices, and reducing high-risk behaviors (ULPGH, 2014a). Collected evaluation data either does not or is unable to support the achievement of these objectives. However, participant self-efficacy levels (pre and post survey) were generally high. This is important because the role of self-esteem in healthy behavior and attitude development and in cognitive and behavioral change has been consistently supported in the literature (Burke et al., 1988; Glanz et al., 2008; Rosenberg et al., 1989). Although the evaluation data did not indicate an increase in self-esteem, the program participants demonstrated high levels of self-esteem which was indicated as an overall program objective.

The post-survey data measuring participant satisfaction does favor the BFLDI program. Overall satisfaction was high and more than 68% of respondents indicated they would 'definitely yes' encourage a friend to join for year two. Participants believed they learned new information from the program and reported positive relationships with the program staff. Participants indicated comfort sharing with the group and felt included in the sessions which is an important component for shaping positive beliefs and developing health behaviors (Maxwell, 2002). The

programs main successes include these high levels of activity satisfaction, staff satisfaction, and the creation of a positive peer learning environment.

### **5.2.2 Recommendations**

Part of the purpose of this evaluation was to provide the ULPGH with recommendations for year two of the BFLDI program. Assessment of frequency data for specific items on the pre-survey provide support for activity modifications and direct more focused attention to specific program goals. Frequency data measuring reproductive sexual health attitudes, reproductive sexual health knowledge, and dating abuse recognition suggest attention should be focused on providing these girls with needed, accurate information. Contraception attitudes suggested participants did not favor birth control methods and suggested that participants did not trust contraception. More than two-thirds of pre-survey respondents indicated birth control did not reduce worry about pregnancy. More than half believed when it is their time to get pregnant it will happen. This suggests participants do not understand the effectiveness of contraception. The CDC (2016b) recommends increasing contraceptive knowledge as an effective intervention for reducing teenage pregnancy. The BFLDI program will more effectively address this wicked health problem by incorporating activities that provide accurate comprehensive sexual health information.

Perhaps the more startling findings come from a number of the RSH knowledge questions. Participants demonstrated a low level of understanding about contraception methods and STI and pregnancy risk. Participants incorrectly answered questions about multiple types of birth control including condoms, pills, injections, and long-acting reversible contraception. A lack of accurate contraceptive knowledge is concerning given the high STI and teenage



pregnancy prevalence among this age group and the severe consequences associated with each. More than 40% of pre-survey respondents incorrectly indicated that all chlamydia and gonorrhea infections are symptomatic. This misunderstanding is thought to contribute to an individual's perceived susceptibility and their perceived severity of related health consequences. In addition, 20% of respondents believed being in a committed relationship protected them for STI risk, a result which is consistent with previous literature (Downing-Matibag & Geisinger, 2009). Studies have found that people may avoid seeking treatment for STIs because they misinterpret symptoms, perceive themselves at low risk, or fear social stigma (Barth et al., 2002; Blake, Kearney, Oakes, Druker, & Bibace, 2003; Cunningham, Kerrigan, Pillay, & Ellen, 2005). The BFLDI program aimed to increase RSH knowledge and self-efficacy, reduce high-risk behaviors, and increase healthy behaviors yet failed to focus activities on increasing RSH knowledge and encourage healthy behaviors such as using contraception and engaging in preventative medicine (like routine STI screening). I recommend the program activities include a session on comprehensive sexual health information and increase peer discussion surrounding contraception and strategies for increasing partner discussion around sexual health behaviors. There are a number of available resources to help with the inclusion of RSH knowledge and attitudes activities including working more closely with CHP or Planned Parenthood to schedule evidence-based activities.

Items included to measure dating abuse recognition largely focused on physical and sexual forms of abuse. The one question that centered on emotional abuse found that 30% of participants believed a partner name calling or cussing at them was not abusive or only a little abusive. As emotional development occurs adolescents are influenced by their relationships (CDC, 2015b) Therefore in order to develop healthy emotional responses it is important to create

and maintain healthy relationship behaviors. Emotional abuse, such as name calling or cussing at a partner, is not a healthy behavior. Adolescents that believe this type of behavior is acceptable are increasing their risk for unhealthy relationships (CDC, 2015b). The same number of participants believed pressuring a partner to keep them from breaking up and a partner preventing them from leaving a room was not at all or only a little abusive. I recommend the program evaluation include more measures for dating abuse (discussed further in limitations section) and offers at least one session about dating abuse facilitated by Dr. Miller's research lab.

### **5.3 STUDY LIMITATIONS**

There were a number of study limitations involved throughout the entire BFLDI program evaluation process. Limitations apriori largely involved timing, the survey items, and a general lack of behavioral measurements. The first evaluation meeting that I was involved in occurred after the initiation of the program. By this time the participants had already received the Gender Norms, Health and Wellness for Black Girls curriculum. Although this curriculum was only one activity for the overall program, no valid and reliable baseline data was collected prior to this point. The pre-survey administration occurred during the January Identity Retreat and by BLFDI program staff. This data does not accurately reflect measurements before the intervention time. This timing would have made it difficult to track real knowledge, attitude, belief, and behavior change. I recommend the year two pre-survey data be collected before the activities commence.

Limitations for survey items encompassed a number of issues including altering the valid and reliable scales, creating non-piloted questions, and failure to measure any behavioral items. The modifications of scales through question omission likely depleted the overall validity and

influenced the observed results. I discussed the importance of using complete validated scales and advised the Program Director to not modify items. These recommendations were ultimately not observed. Interestingly enough, I observed a pattern with the types of questions omitted from various scales. Gender norm questions related to schooling and leadership were excluded, questions about emotional and verbal abuse were excluded, and all valid IUD questions were omitted. It is unclear as to why certain kinds of questions were included and others were not. It is possible the Director felt the program addressed schooling and leadership and therefore felt they did not need to be assessed. Perhaps, emotional and verbal abuse items did not appear to be as equally abusive. There was a brief exchange regarding the IUD method. The Director did not know what an IUD was and felt the girls would not know either. For this reason they decided to remove those questions and instead generate one new IUD question. Other survey questions were created in a similarly collaborative process. None of the generated items were piloted with the target population before inclusion on the survey. Another major survey limitation involved the inability to include behavioral measures, especially high risk sexual high behaviors. The Program Director felt these questions were inappropriate to ask participants. However, this decision limited the ability to assess certain program goals such as demonstrated improved ability to make healthy choices and a reduction in number of minority adolescent females engaging in risky behaviors. Similarly, social connectedness was not measured through any of the included items although it was included as a program objective to facilitate the development of sustained relationships.

The number of participants and lack of collected characteristics further limited the BFLDI evaluation. There were 36 participants for pre-survey data and only 22 for the post-survey. Both numbers are actually lower than the roster size, which was mentioned to be over 40

girls. The big difference in the number of respondents influenced the ability to conduct statistical tests. It is possible that the BFLDI program influenced knowledge, attitude, and behavior change that were not observable due to the small sample size. No identifying information was included eliminating the possibility of pair-testing. In addition, it is possible the participants selected biased the results. These adolescent females may represent a smaller subset of girls who already display leadership qualities and high self-esteem.

Finally, the program activities planned failed to include (or identify) theory and influence from evidence informed interventions. The planned activities did not align with the program objectives. For example, the program would be unlikely to increase RSH knowledge, if RSH information is never provided. ULPGH staff and the evaluation team need to work together to plan the complete schedule for year two. The evaluation team can provide theoretical and evidenced-based guidance to ULPGH when planning the activities and strategies for implementation.

## **6.0 CONCLUSION**

The purpose of this thesis was to evaluate the BFLDI programs year one. The BFLDI program aims to improve the overall health and wellbeing of minority adolescent females through a number of planned activities. The evaluation data from this year does not support any significant changes between selected measures. However the data suggests participant satisfaction and provides insights for program modifications and future focus. A complete evaluation including behavioral measurements and qualitative assessment is recommended for the year two evaluation.

## APPENDIX A: POST SURVEY

We would like you to complete the following survey. Your answers will be kept completely **confidential** and **anonymous**, meaning that your answers will not be connected with your name. Completion of the survey is **voluntary**; you do not have to answer any questions you do not want to.

Thank you!

Your age: \_\_\_\_\_ Your Grade: \_\_\_\_\_ Date: \_\_\_\_\_

*For each statement, please select an answer that best matches how you feel.*

Statement	Strongly Agree	Agree	Disagree	Strongly Disagree
On the whole, I am satisfied with myself.	4	3	2	1
At times, I think I am no good at all.	4	3	2	1
I feel that I have a number of good qualities.	4	3	2	1
I am able to do things as well as most other people.	4	3	2	1
I feel I do not have much to be proud of.	4	3	2	1
I certainly feel useless at times.	4	3	2	1
I feel that I'm a person of worth, at least on an equal plane with others.	4	3	2	1
I wish I could have more respect for myself.	4	3	2	1
All in all, I am inclined to feel	4	3	2	1

that I am a failure.				
I take a positive attitude toward myself.	4	3	2	1
I am proud of my racial/ethnic identity.	4	3	2	1

*For each statement, please select the answer that best matches with your beliefs*

Statement	Strongly Agree	Agree	Disagree	Strongly Disagree
If I could change my natural hair texture I would.	4	3	2	1
Getting the latest hairstyle is more important than letting my hair grow naturally.	4	3	2	1
Nail extensions look better than natural nails.	4	3	2	1
I think guys prefer girls who have lighter skin.	4	3	2	1
I think guys prefer girls with straight hair.	4	3	2	1
Straightened hair looks better than natural hair.	4	3	2	1
Having long hair gives you a better appearance.	4	3	2	1
I think guys prefer girls who are small (thin).	4	3	2	1

*For each statement, please select the answer that best matches with your beliefs.*

Statement	Strongly Agree	Agree	Disagree	Strongly Disagree
Swearing is worse for a girl than for a boy.	4	3	2	1
On a date, the boy should be expected to pay all expenses.	4	3	2	1
On average, girls are as smart as boys.	4	3	2	1
It is alright for a girl to want to play rough sports like football.	4	3	2	1
In general, the father should have greater authority than the mother in making family decisions.	4	3	2	1
It is alright for a girl to ask a	4	3	2	1

boy out on a date.				
If both husband and wife have jobs, the husband should do a share of the household work such as washing dishes or doing the laundry.	4	3	2	1
Girls should be more concerned with becoming good wives and mothers than desiring a professional or business career.	4	3	2	1

*For each statement, please select the answer that best matches with your beliefs.*

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I feel confident in my ability to discuss condom use with any partner I might have.	5	4	3	2	1
I feel confident in my ability to suggest using condoms with a new partner.	5	4	3	2	1
If I were to ask my partner to use a condom, I would be afraid that my partner would be upset with me.	5	4	3	2	1
If I were unsure of my partner's feelings about using condoms, I would not ask my partner to use one.	5	4	3	2	1
If my partner didn't want to use a condom during sex, I feel confident in my ability to refuse to have sex.	5	4	3	2	1
Using birth control keeps your partner from worrying about getting pregnant.	5	4	3	2	1
Using birth control gives you a sense of control.	5	4	3	2	1
Using birth control is too much trouble or too much of a hassle to use.	5	4	3	2	1
Using birth control lets you have sex without worrying about getting your partner pregnant.	5	4	3	2	1



Using birth control makes sex feel unnatural.	5	4	3	2	1
Using birth control makes sex less exciting.	5	4	3	2	1
It does not matter whether you use birth control or not; when it's your time to get pregnant, it will happen.	5	4	3	2	1
It is mainly a girl or woman's responsibility to make decisions about birth control.	5	4	3	2	1
I am in favor of my partner and me using birth control.	5	4	3	2	1

*Please rate each of the following actions towards a girlfriend or boyfriend as not abusive, a little abusive, somewhat abusive, very abusive, or extremely abusive.*

Statement	Not Abusive	A Little Abusive	Somewhat Abusive	Very Abusive	Extremely Abusive
Name calling or insulting them. (ex. calling them a cuss word)	1	2	3	4	5
Telling them which friends they can and can't see or talk to.	1	2	3	4	5
Pressuring them not to break up with them.	1	2	3	4	5
Not listening to what they have to say.	1	2	3	4	5
Trying to convince them to have sex.	1	2	3	4	5
Preventing them from leaving a room.	1	2	3	4	5
Threatening to hit them.	1	2	3	4	5
Forcing them to have sex.	1	2	3	4	5

*For each statement, please select either True or False.*

Statement	True	False
It is okay to use the same condom more than once.	T	F
Condoms have an expiration date.	T	F
When putting on a condom, it is important to leave space at the tip.	T	F
Wearing two latex condoms will provide extra protection.	T	F
Birth control pills are effective even if a woman misses taking them for two or three days in a row.	T	F
If a woman is having side effects with one kind of pill, switching to another type or brand might help.	T	F
Birth control pills reduce the chances that women will get certain types of cancer.	T	F
After a woman stops taking birth control pills, she is unable to get pregnant for at	T	F

least two months.		
In order to get the birth control pill, a woman must have a pelvic exam.	<b>T</b>	<b>F</b>
An intrauterine device (IUD) is a small contraceptive device that is inserted into a woman's uterus.	<b>T</b>	<b>F</b>
Even if a woman is late getting her birth control shot, she is still protected from pregnancy for at least three more months.	<b>T</b>	<b>F</b>
Negative effects that a woman has from depo-provera can last for the rest of her life.	<b>T</b>	<b>F</b>
Long-acting methods like the implant or IUD cannot be removed early, even if a woman changes her mind about wanting to get pregnant.	<b>T</b>	<b>F</b>
All chlamydia and gonorrhea infections have symptoms.	<b>T</b>	<b>F</b>
Being in a committed relationship means I am not at risk for any sexually transmitted infections.	<b>T</b>	<b>F</b>
Only people who are gay/lesbian have to worry about getting HIV/AIDS.	<b>T</b>	<b>F</b>

*For each statement, please select the answer that best matches with your beliefs*

<b>Statement</b>	<b>Very Satisfied</b>	<b>Satisfied</b>	<b>Unsatisfied</b>	<b>Very Unsatisfied</b>
How satisfied were you with the BFLDI sessions?	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>

<b>Statement</b>	<b>Definitely Yes</b>	<b>Probably Yes</b>	<b>Probably No</b>	<b>Definitely No</b>
Would you encourage a friend to join the BFLDI program?	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>

<b>Statement</b>	<b>A Lot</b>	<b>Some</b>	<b>A Little</b>	<b>None</b>
How much do you feel you learned from the BFLDI sessions?	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>

*Please rate the following statements listed below from Strongly Agree to Strongly Disagree.*

<b>Statement</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
I felt comfortable sharing personal things in front of the group.	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
I felt like the other teens in BFLDI were similar to me.	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
I felt included in these sessions.	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
I wish there were more of	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>

these sessions I could go to.					
I liked the group leaders of these sessions.	5	4	3	2	1
I felt I could trust my group leaders.	5	4	3	2	1
The group leaders were able to get everyone to talk.	5	4	3	2	1

*Below is a list of activities you did during the program; please mark one answer describing how much you liked or did not like the activity.*

Activity	Liked Very Much	Liked Somewhat	Neutral	Liked A Little	Did NOT Like At All
Sister Circles	5	4	3	2	1
Penn State Saturday Institute	5	4	3	2	1
Community Service Day	5	4	3	2	1
January Identity Retreat	5	4	3	2	1

*For the same list of activities, please mark one answer if you did or did not learn something new from the program.*

Activity	Learned a Lot of New Things	Learned Some New Things	Learned Nothing New
Sister Circles	3	2	1
Penn State Saturday Institute	3	2	1
Community Service Day	3	2	1
January Identity Retreat	3	2	1

*Please tell us any additional thoughts you have about how to make the BFLDI program better.*

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***THANK YOU!!!***

**APPENDIX B: PRE/POST SURVEY FREQUENCY TABLES**

Urban League of Greater Pittsburgh , BFLDI

Collection Dates:

Pre Survey January 15<sup>th</sup>,  
2016  
Post Survey May 28<sup>th</sup>,  
2016

Number of Survey Respondents:

Pre n= 36; Post n=22

<b>Demographics</b>		
	<b>% (n) Pre-Survey</b>	<b>% (n) Post-Survey</b>
<b><i>Your age:</i></b>		
≤ 12	5.6 (2)	4.5 (1)
13-15	66.7 (24)	59.1 (13)
16-18	27.8 (10)	36.3 (8)
<b><i>Your grade:</i></b>		
6-8	25.0 (9)	22.7 (5)
9-10	50.0 (18)	50 (11)
11-12	25.0 (9)	27.2 (6)

<b>Self-efficacy</b>		
	<b>% (n) Pre-Survey</b>	<b>% (n) Post-Survey</b>
<b><i>On the whole, I am satisfied with myself.</i></b>		
Strongly Agree	52.8 (19)	59.1 (13)
Agree	38.9 (14)	40.9 (9)
Disagree	8.3 (3)	0.0 (0)

Strongly Disagree	0.0 (0)	0.0 (0)
<b><i>At times, I think I am no good at all.</i></b>		
Strongly Agree	11.1 (4)	9.1 (2)
Agree	30.6 (11)	27.3 (6)
Disagree	33.4 (12)	18.2 (4)
Strongly Disagree	25.0 (9)	45.5 (1)
<b><i>I feel that I have a number of good qualities.</i></b>		
Strongly Agree	50.0 (18)	63.6 (14)
Agree	41.7 (15)	31.8 (7)
Disagree	5.7 (2)	4.5 (1)
Strongly Disagree	0.0 (0)	0.0 (0)
<b><i>I am able to do things as well as most other people.</i></b>		
Strongly Agree	44.4 (16)	54.5 (12)
Agree	38.9 (14)	36.4 (8)
Disagree	13.9 (5)	9.1 (2)
Strongly Disagree	0.0 (0)	0.0 (0)
<b><i>I feel I do not have much to be proud of.</i></b>		
Strongly Agree	2.8 (1)	4.5 (1)
Agree	16.7 (6)	4.5 (1)
Disagree	36.1 (13)	22.7 (5)
Strongly Disagree	36.1 (13)	68.2 (15)
<b><i>I certainly feel useless at times.</i></b>		
Strongly Agree	5.6 (2)	4.5 (1)
Agree	25.0 (9)	13.6 (3)
Disagree	41.7 (15)	50.0 (11)
Strongly Disagree	25.0 (9)	31.8 (7)
<b><i>I feel that I'm a person of worth, at least on an equal plane with others.</i></b>		
Strongly Agree	44.4 (16)	45.5 (10)
Agree	36.1 (13)	50.0 (11)
Disagree	13.9 (5)	0.0 (0)
Strongly Disagree	0.0 (0)	4.5 (1)
<b><i>I wish I could have more respect for myself.</i></b>		
Strongly Agree	16.7 (6)	13.6 (3)
Agree	25.0 (9)	22.7 (5)
Disagree	33.3 (12)	13.6 (3)
Strongly Disagree	19.4 (7)	45.5 (10)
<b><i>All in all, I am inclined to feel that I am a failure.</i></b>		
Strongly Agree	2.8 (1)	0 (0)
Agree	13.9 (5)	4.5 (1)
Disagree	19.44 (7)	31.8 (7)
Strongly Disagree	55.6 (20)	63.6 (14)

<b><i>I take a positive attitude toward myself.</i></b>		
Strongly Agree	41.7 (15)	63.6 (14)
Agree	33.3 (12)	36.4 (8)
Disagree	19.4 (7)	0.0 (0)
Strongly Disagree	2.8 (1)	0.0 (0)
<b><i>I am proud of my racial/ethnic identity.</i></b>		
Strongly Agree	75.0 (27)	86.4 (19)
Agree	16.7 (6)	13.6 (3)
Disagree	5.6 (2)	0.0 (0)
Strongly Disagree	0.0 (0)	0.0 (0)

<b>Self-Image</b>		
	<b>% (n) Pre-Survey</b>	<b>% (n) Post-Survey</b>
<b><i>If I could change my natural hair texture I would.</i></b>		
Strongly Agree	2.8 (1)	0.0 (0)
Agree	19.4 (7)	27.3 (6)
Disagree	27.8 (10)	18.2 (4)
Strongly Disagree	47.2 (17)	54.5 (12)
<b><i>Getting the latest hairstyle is more important than letting my hair grow naturally.</i></b>		
Strongly Agree	0.0 (0)	0.0 (0)
Agree	11.1 (4)	4.5 (1)
Disagree	27.8 (10)	31.8 (7)
Strongly Disagree	52.8 (19)	63.6 (14)
<b><i>Nail extensions look better than natural nails.</i></b>		
Strongly Agree	2.8 (1)	9.1 (2)
Agree	27.8 (10)	22.7 (5)
Disagree	19.4 (7)	36.4 (8)
Strongly Disagree	36.1 (13)	31.8 (7)
<b><i>I think guys prefer girls who have lighter skin.</i></b>		
Strongly Agree	2.8 (1)	4.5 (1)
Agree	16.7 (6)	18.2
Disagree	33.3 (12)	27.3 (6)
Strongly Disagree	44.4 (16)	45.5 (10)
<b><i>I think guys prefer girls with straight hair.</i></b>		
Strongly Agree	2.8 (1)	4.5 (1)
Agree	11.1 (4)	4.5 (1)
Disagree	38.9 (14)	27.3 (6)
Strongly Disagree	44.4 (16)	54.5 (12)
<b><i>Straightened hair looks better than natural hair.</i></b>		

Strongly Agree	0.0 (0)	0.0 (0)
Agree	8.3 (3)	4.5 (1)
Disagree	36.1 (13)	36.4 (8)
Strongly Disagree	52.8 (19)	54.5 (12)
<b><i>Having long hair gives you a better appearance.</i></b>		
Strongly Agree	0.0 (0)	0.0 (0)
Agree	11.1 (4)	13.6 (3)
Disagree	36.1 (13)	31.8 (7)
Strongly Disagree	47.2 (17)	45.5 (10)
<b><i>I think guys prefer girls who are small (thin).</i></b>		
Strongly Agree	8.3 (3)	9.1 (2)
Agree	8.3 (3)	13.6 (3)
Disagree	33.3 (12)	31.8 (7)
Strongly Disagree	47.2 (17)	40.9 (9)

Gender Norms		
	% (n)	
<b><i>Swearing is worse for a girl than for a boy.</i></b>		
Strongly Agree	2.8 (1)	0.0 (0)
Agree	13.9 (5)	31.8 (7)
Disagree	16.7 (6)	27.3 (6)
Strongly Disagree	58.3 (21)	40.9 (9)
<b><i>On a date, the boy should be expected to pay all expenses.</i></b>		
Strongly Agree	2.8 (1)	4.5 (1)
Agree	25.0 (9)	18.2 (4)
Disagree	38.9 (14)	45.5 (10)
Strongly Disagree	27.8 (10)	31.8 (7)
<b><i>On average, girls are as smart as boys.</i></b>		
Strongly Agree	50.0 (18)	45.5 (10)
Agree	22.2 (8)	31.8 (7)
Disagree	11.1 (4)	9.1 (2)
Strongly Disagree	13.9 (5)	4.5 (1)
<b><i>It is alright for a girl to want to play rough sports like football.</i></b>		
Strongly Agree	77.8 (28)	59.1 (13)
Agree	16.7 (6)	36.4 (8)
Disagree	0.0 (0)	0.0 (0)



Strongly Disagree	2.8 (1)	4.5 (1)
<b><i>In general, the father should have greater authority than the mother in making family decisions.</i></b>		
Strongly Agree	0.0 (0)	4.5 (1)
Agree	11.1 (4)	4.5 (1)
Disagree	36.1 (13)	36.4 (8)
Strongly Disagree	41.7 (15)	45.5 (10)
<b><i>It is alright for a girl to ask a boy out on a date.</i></b>		
Strongly Agree	58.3 (21)	54.5 (12)
Agree	27.8 (10)	31.8 (7)
Disagree	2.8 (1)	9.1 (2)
Strongly Disagree	0.0 (0)	4.5 (1)
<b><i>If both husband and wife have jobs, the husband should do a share of the household work such as washing dishes or doing the laundry.</i></b>		
Strongly Agree	80.6 (29)	68.2 (15)
Agree	8.3 (3)	13.6 (3)
Disagree	2.8 (1)	9.1 (2)
Strongly Disagree	0.0 (0)	4.5 (1)
<b><i>Girls should be more concerned with becoming good wives and mothers than desiring a professional or business career.</i></b>		
Strongly Agree	0.0 (0)	0.0 (0)
Agree	11.1 (4)	9.1 (2)
Disagree	16.7 (6)	36.4 (8)
Strongly Disagree	63.9 (23)	50.0 (11)

<b>Contraception Attitudes</b>		
	<b>% (n) Pre-Survey</b>	<b>% (n) Post-Survey</b>
<b><i>I feel confident in my ability to discuss condom use with any partner I might have.</i></b>		
Strongly Agree	55.6 (20)	59.1 (13)
Agree	13.9 (5)	13.6 (3)
Neutral	13.9 (5)	13.6 (3)
Disagree	5.6 (2)	4.5 (1)
Strongly Disagree	5.6 (2)	0.0 (0)
<b><i>I feel confident in my ability to suggest using condoms with a new partner.</i></b>		
Strongly Agree	61.1 (22)	54.5 (12)

Agree	11.1 (4)	13.6 (3)
Neutral	13.9 (5)	18.2 (4)
Disagree	0.0 (0)	0.0 (0)
Strongly Disagree	2.8 (1)	0.0 (0)
<b><i>If I were to ask my partner to use a condom, I would be afraid that my partner would be upset with me.</i></b>		
Strongly Agree	2.8 (1)	9.1 (2)
Agree	0.0 (0)	4.5 (1)
Neutral	8.3 (3)	13.6 (3)
Disagree	16.7 (6)	0.0 (0)
Strongly Disagree	66.7 (24)	59.1 (13)
<b><i>If I were unsure of my partner's feelings about using condoms, I would not ask my partner to use one.</i></b>		
Strongly Agree	5.6 (2)	4.5 (1)
Agree	0.0 (0)	4.5 (1)
Neutral	0.0 (0)	13.6 (3)
Disagree	22.2 (8)	4.5 (1)
Strongly Disagree	63.9 (23)	59.1 (13)
<b><i>If my partner didn't want to use a condom during sex, I feel confident in my ability to refuse to have sex.</i></b>		
Strongly Agree	63.9 (23)	50.0 (11)
Agree	16.7 (6)	13.6 (3)
Neutral	8.3 (3)	22.7 (5)
Disagree	2.8 (1)	0.0 (0)
Strongly Disagree	0.0 (0)	0.0 (0)
<b><i>Using birth control keeps your partner from worrying about getting pregnant.</i></b>		
Strongly Agree	13.9 (5)	9.1 (2)
Agree	11.1 (4)	18.2 (4)
Neutral	41.7 (15)	45.5 (10)
Disagree	11.1 (4)	0.0 (0)
Strongly Disagree	13.9 (5)	9.1 (2)
<b><i>Using birth control gives you a sense of control.</i></b>		
Strongly Agree	11.1 (4)	18.2 (4)
Agree	16.7 (6)	27.3 (6)
Neutral	50.0 (18)	31.8 (7)
Disagree	5.6 (2)	4.5 (1)
Strongly Disagree	5.6 (2)	0.0 (0)
<b><i>Using birth control is too much trouble or too much of a hassle to use.</i></b>		
Strongly Agree	5.6 (2)	4.5 (1)
Agree	8.3 (3)	4.5 (1)
Neutral	25.0 (9)	22.7 (5)

Disagree	13.9 (5)	18.2 (4)
Strongly Disagree	38.9 (14)	31.8 (7)
<b><i>Using birth control lets you have sex without worrying about getting your partner pregnant.</i></b>		
Strongly Agree	8.3 (3)	4.5 (1)
Agree	19.4 (7)	22.7 (5)
Neutral	30.6 (11)	27.3 (6)
Disagree	16.7 (6)	9.1 (2)
Strongly Disagree	13.9 (5)	18.2 (4)
<b><i>Using birth control makes sex feel unnatural.</i></b>		
Strongly Agree	0.0 (0)	4.5 (1)
Agree	0.0 (0)	4.5 (1)
Neutral	27.8 (10)	22.7 (5)
Disagree	22.2 (8)	27.3 (6)
Strongly Disagree	36.1 (13)	13.6 (3)
<b><i>Using birth control makes sex less exciting.</i></b>		
Strongly Agree	0.0 (0)	4.5 (1)
Agree	0.0 (0)	0.0 (0)
Neutral	27.8 (10)	31.8 (7)
Disagree	16.7 (6)	18.2 (4)
Strongly Disagree	41.7 (15)	18.2 (4)
<b><i>It does not matter whether you use birth control or not; when it's your time to get pregnant, it will happen.</i></b>		
Strongly Agree	13.9 (5)	9.1 (2)
Agree	5.6 (2)	13.6 (3)
Neutral	33.3 (12)	31.8 (7)
Disagree	11.1 (4)	4.5 (1)
Strongly Disagree	22.2 (8)	18.2 (4)
<b><i>It is mainly a girl or woman's responsibility to make decisions about birth control.</i></b>		
Strongly Agree	22.2 (8)	40.9 (9)
Agree	27.8 (10)	18.2 (4)
Neutral	25.0 (9)	22.7 (5)
Disagree	2.8 (1)	0.0 (0)
Strongly Disagree	8.3 (3)	4.5 (1)
<b><i>I am in favor of my partner and me using birth control.</i></b>		
Strongly Agree	22.2 (8)	36.4 (8)
Agree	11.1 (4)	13.6 (3)
Neutral	41.7 (15)	36.4 (8)
Disagree	8.3 (3)	0.0 (0)
Strongly Disagree	5.6 (2)	0.0 (0)

<b>Adolescent Relationship Abuse</b>		
	<b>% (n)</b>	
<b><i>Name calling or insulting them. (ex. Calling them a cuss word)</i></b>		
Extremely Abusive	13.9 (5)	9.1 (2)
Very Abusive	16.7 (6)	9.1 (2)
Somewhat Abusive	36.1 (13)	31.8 (7)
A Little Abusive	16.7 (6)	36.4 (8)
Not Abusive	13.9 (5)	4.5 (1)
<b><i>Telling them which friends they can and can't see or talk to.</i></b>		
Extremely Abusive	27.8 (10)	13.6 (3)
Very Abusive	27.8 (10)	22.7 (5)
Somewhat Abusive	22.2 (8)	36.4 (8)
A Little Abusive	11.1 (4)	4.5 (1)
Not Abusive	8.3 (3)	9.1 (2)
<b><i>Pressuring them not to break up with them.</i></b>		
Extremely Abusive	27.8 (10)	27.3 (6)
Very Abusive	22.2 (8)	9.1 (2)
Somewhat Abusive	16.7 (6)	36.4 (8)
A Little Abusive	11.1 (4)	4.5 (1)
Not Abusive	19.4 (7)	9.1 (2)
<b><i>Not listening to what they have to say.</i></b>		
Extremely Abusive	16.7 (6)	4.5 (1)
Very Abusive	11.1 (4)	18.2 (4)
Somewhat Abusive	30.6 (11)	27.3 (6)
A Little Abusive	16.7 (6)	18.2 (4)
Not Abusive	16.7 (6)	18.2 (4)
<b><i>Trying to convince them to have sex.</i></b>		
Extremely Abusive	38.9 (14)	45.5 (10)
Very Abusive	13.9 (5)	13.6 (3)
Somewhat Abusive	25.0 (9)	13.6 (3)
A Little Abusive	13.9 (5)	9.1 (2)
Not Abusive	5.6 (2)	4.5 (1)
<b><i>Preventing them from leaving a room.</i></b>		

Extremely Abusive	44.4 (16)	36.4 (8)
Very Abusive	22.2 (8)	18.2 (4)
Somewhat Abusive	19.4 (7)	18.2 (4)
A Little Abusive	5.6 (2)	13.6 (3)
Not Abusive	5.6 (2)	0.0 (0)
<b><i>Threatening to hit them.</i></b>		
Extremely Abusive	63.9 (23)	54.5 (12)
Very Abusive	16.7 (6)	9.1 (2)
Somewhat Abusive	11.1 (4)	18.2 (4)
A Little Abusive	5.6 (2)	4.5 (1)
Not Abusive	0.0 (0)	0.0 (0)
<b><i>Forcing them to have sex.</i></b>		
Extremely Abusive	77.8 (28)	68.2 (15)
Very Abusive	8.3 (3)	9.1 (2)
Somewhat Abusive	5.6 (2)	0.0 (0)
A Little Abusive	2.8 (1)	4.5 (1)
Not Abusive	2.8 (1)	4.5 (1)

<b>Reproductive Sexual Health Knowledge</b>		
<i>Was the response correct?</i>	% (n)	
<b><i>It is okay to use the same condom more than once.</i></b>		
Correct	97.2 (35)	72.7 (16)
Incorrect	0.0 (0)	4.5 (1)
<b><i>Condoms have an expiration date.</i></b>		
Correct	86.1 (31)	77.3 (17)
Incorrect	2.8 (1)	0.0 (0)
<b><i>When putting on a condom, it is important to leave space at the tip.</i></b>		
Correct	63.9 (23)	59.1 (13)
Incorrect	16.7 (6)	18.2 (4)
<b><i>Wearing two latex condoms will provide extra protection.</i></b>		
Correct	63.9 (23)	59.1 (13)
Incorrect	22.2 (8)	18.2 (4)
<b><i>Birth control pills are effective even if a woman misses taking them for two or three days in a row.</i></b>		
Correct	69.4 (25)	50.0 (11)

Incorrect	19.4 (7)	18.4 (4)
<b><i>If a woman is having side effects with one kind of pill, switching to another type or brand might help.</i></b>		
Correct	66.7 (24)	45.5 (10)
Incorrect	27.8 (10)	27.3 (6)
<b><i>Birth control pills reduce the chances that women will get certain types of cancer.</i></b>		
Correct	16.7 (6)	9.1 (2)
Incorrect	72.2 (26)	50.0 (11)
<b><i>After a woman stops taking birth control pills, she is unable to get pregnant for at least two months.</i></b>		
Correct	55.6 (20)	45.5 (10)
Incorrect	33.3 (12)	13.6 (3)
<b><i>In order to get the birth control pill, a woman must have a pelvic exam.</i></b>		
Correct	30.6 (11)	27.3 (6)
Incorrect	50.0 (18)	31.8 (7)
<b><i>An intrauterine device (IUD) is a small contraceptive device that is inserted into a woman's uterus.</i></b>		
Correct	72.2 (26)	40.9 (9)
Incorrect	11.1 (4)	13.6 (3)
<b><i>Even if a woman is late getting her birth control shot, she is still protected from pregnancy for at least three more months.</i></b>		
Correct	72.2 (26)	45.5 (10)
Incorrect	19.4 (7)	13.6 (3)
<b><i>Negative effects that a woman has from depo-provera can last for the rest of her life.</i></b>		
Correct	44.4 (16)	27.3 (6)
Incorrect	41.7 (15)	27.3 (6)
<b><i>Long-acting methods like the implant or IUD cannot be removed early, even if a woman changes her mind about wanting to get pregnant.</i></b>		
Correct	50.0 (18)	18.2 (4)
Incorrect	33.3 (12)	40.9 (9)
<b><i>All chlamydia and gonorrhea infections have symptoms.</i></b>		
Correct	41.7 (15)	36.4 (8)
Incorrect	41.7 (15)	27.3 (6)
<b><i>Being in a committed relationship means I am not at risk for any sexually transmitted infections.</i></b>		

Correct	69.4 (25)	50.0 (11)
Incorrect	22.2 (8)	18.2 (4)
<b><i>Only people who are gay/lesbian have to worry about getting HIV/AIDS.</i></b>		
Correct	83.3 (30)	62.6 (14)
Incorrect	8.3 (3)	4.5 (1)

Satisfaction	
	% (n) Post-Survey
<b><i>How satisfied were you with the BFLDI sessions</i></b>	
Very Satisfied	45.5 (10)
Satisfied	36.4 (8)
Unsatisfied	4.5 (1)
Very Unsatisfied	0.0 (0)
<b><i>Would you encourage a friend to join the BFLDI program</i></b>	
Definitely Yes	59.1 (13)
Probably Yes	22.7 (5)
Probably No	4.5 (1)
Definitely No	0.0 (0)
<b><i>How much do you feel you learned from the BFLDI sessions?</i></b>	
A Lot	63.6 (14)
Some	9.1 (2)
A Little	13.6 (3)
None	0.0 (0)

Groups Evaluation	
	% (n) Post-Survey
<b><i>I felt comfortable sharing personal things in front of the group.</i></b>	
Strongly Agree	18.2 (4)
Agree	18.2 (4)
Neutral	22.7 (5)
Disagree	22.7 (5)
Strongly Disagree	0.0 (0)
<b><i>I felt like the other teens in BFLDI were similar to me.</i></b>	
Strongly Agree	18.2 (4)
Agree	36.4 (8)
Neutral	27.3 (6)

Disagree	4.5 (1)
Strongly Disagree	0.0 (0)
<b><i>I felt included in these sessions.</i></b>	
Strongly Agree	22.7 (5)
Agree	9.1 (2)
Neutral	27.3 (6)
Disagree	4.5 (1)
Strongly Disagree	0.0 (0)
<b><i>I wish there were more of these sessions I could go to.</i></b>	
Strongly Agree	27.3 (6)
Agree	13.6 (3)
Neutral	31.8 (7)
Disagree	9.1 (2)
Strongly Disagree	0.0 (0)
<b><i>I liked the group leaders of these sessions.</i></b>	
Strongly Agree	36.4 (8)
Agree	36.4 (8)
Neutral	9.1 (2)
Disagree	0.0 (0)
Strongly Disagree	0.0 (0)
<b><i>I felt I could trust my group leaders.</i></b>	
Strongly Agree	40.9 (9)
Agree	27.3 (6)
Neutral	9.1 (2)
Disagree	4.5 (1)
Strongly Disagree	0.0 (0)
<b><i>The group leaders were able to get everyone to talk.</i></b>	
Strongly Agree	36.4 (8)
Agree	36.4 (8)
Neutral	9.1 (2)
Disagree	0.0 (0)
Strongly Disagree	0.0 (0)

Below is a list of activities you did during the program; please mark one answer describing how much you liked or did not like the activity.

<b>Satisfaction: Like &amp; Learn</b>	
	<b>% (n) Post-Survey</b>
<b><i>Sister Circles</i></b>	



Liked very much	63.6 (14)
Like somewhat	4.5 (1)
Neutral	4.5 (1)
Liked a little	4.5 (1)
Did NOT like at all	4.5 (1)
<b><i>Penn State Saturday institutes</i></b>	
Liked very much	18.2 (4)
Like somewhat	31.8 (7)
Neutral	13.6 (3)
Liked a little	9.1 (2)
Did NOT like at all	9.1 (2)
<b><i>Community Service Day</i></b>	
Liked very much	27.3 (6)
Like somewhat	9.1 (2)
Neutral	13.6 (3)
Liked a little	18.2 (4)
Did NOT like at all	0.0 (0)
<b><i>January Identity Retreat</i></b>	
Liked very much	45.5 (10)
Like somewhat	22.67 (5)
Neutral	4.5 (1)
Liked a little	0.0 (0)
Did NOT like at all	0.0 (0)
<b><i>Sister Circles</i></b>	
Learned a lot of new things	50.0 (11)
Learned some new things	31.8 (7)
Learned nothing new	0.0 (0)
<b><i>Penn State Saturday institutes</i></b>	
Learned a lot of new things	45.5 (10)
Learned some new things	36.4 (8)
Learned nothing new	0.0 (0)
<b><i>Community Service Day</i></b>	
Learned a lot of new things	22.7 (5)
Learned some new things	27.3 (6)
Learned nothing new	18.2 (4)
<b><i>January Identity Retreat</i></b>	
Learned a lot of new things	54.5 (12)
Learned some new things	18.2 (4)
Learned nothing new	0.0 (0)

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