The author(s) shown below used Federal funds provided by the U.S. Department of Justice and prepared the following final report:

Document Title: Evaluation of Friendly PEERsuasion

Author(s): Lisa Lunghofer, Ph.D., Weston Williams, Ph.D

Document No.: 250126

Date Received: July 2016

Award Number: 2011-JF-FX-0105

This report has not been published by the U.S. Department of Justice. To provide better customer service, NCJRS has made this federally funded grant report available electronically.

Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S.

Department of Justice.

# **Evaluation of Friendly PEERsuasion**

(OJJDP Award 2011-JF-FX-0105)

## Final Technical Report

June 2016

#### **Authors**

Lisa Lunghofer, Ph.D. Weston Williams, Ph.D.



Manila Consulting Group, Inc. Add Address?

## **Table of Contents**

Acknowledgments	v
Executive Summary	1
Study Overview	1
Description of Friendly PEERsuasion	1
Research Questions	1
Research Settings and Participants	1
Research Design and Methods	2
Findings	2
Process Evaluation	2
Outcome Evaluation	3
Lessons Learned and Recommendations	4
Project Overview	5
Research Questions	5
Project Objectives	5
Background	6
Girls' Risk Behavior and Delinquency	6
Description of Friendly PEERsuasion	6
Results of Prior Studies of Friendly PEERsuasion	7
Study Approach and Methods	8
Research Questions	8
Research Design	8
Project Objective 1: Training Girls Inc. Staff	8
Identifying and Orienting Liaisons	9
Recruitment of Research Subjects	9
Strategies to Retain Participants	10
Project Objective 2: Conduct Process Evaluation	11
Project Objective 3: Conduct Outcome Evaluation	11
Quantitative Analysis	12
Research Settings and Participants	14

Findings	15
Process Evaluation	15
Friendly PEERsuasion Program Implementation	15
Study Implementation	16
Outcome Evaluation	18
Data Cleaning and Exclusions	18
Retention in the Evaluation	19
Baseline Population Characteristics	20
Changes in Outcomes by Time Point	25
Paired Analyses	29
Summary of the Outcome Evaluation	31
Limitations	31
Lessons Learned and Recommendations	33
References	34
Appendix 1: Friendly PEERsuasion Evaluation Training Presentation	35
Appendix 2. Girls Inc. Friendly PEERsuasion® Refresher Webinar	42
Appendix 3. Friendly PEERsuasion Flyer	50
Appendix 4. Girls Inc. Friendly PEERsuasion Study_Implementation Plan	52
Appendix 5. Facilitator's Session Assessment Form: Friendly PEERsuasion	56
Appendix 6. Friendly PEERsuasion Survey	60
Appendix 7. Youth Assent and Parent Consent Forms	70
Appendix 8. Instructions for Survey Administration	76

# **List of Figures and Tables**

Table 1: Overview of Research Settings and Participants	14
Figure 1: Exclusions	18
Table 2: Retention in the Evaluation by Site and Overall	19
Table 3: Retention in the Evaluation by Control/Intervention and Any Exposure to Cigarettes, Alcohol, or Drugs at Baseline	19
Table 4: Demographic Characteristics at Baseline	20
Table 5: Baseline Exposure to alcohol, tobacco, and drugs	21
Table 6: Baseline Attitudes and Perceived Risk	24
Table 7: Description of Outcomes by Time Point	26
Table 8: Population Average Model Results	26
Table 9: Paired Analyses Results	30

## **Acknowledgments**

This project was supported by Grant 2011-JF-FX-0105, awarded by the Office of Juvenile Justice and Delinquency Prevention, Office of Justice Programs, U.S. Department of Justice. The opinions, findings, and conclusions or recommendations in this report are those of the project team and are not necessarily those of the Department of Justice. The authors would like to thank and acknowledge the hard work and dedication of the staff of Girls Inc. and their affiliates who participated in this study. We would also like to thank our Research Assistant Dunlea Bates who contributed to implementation of the study. Finally, we would like to acknowledge the contributions of previous members of the research team, including Dr. Susan Chibanll, Dr. Shauna Harps, and Megan Cummings.

## **Executive Summary**

### **Study Overview**

ANILA Consulting Group, Inc. partnered with Girls Inc. to test the effectiveness of their Friendly PEERsuasion program, a prevention program designed to help girls ages 11 to 14 acquire knowledge, skills, and support systems to avoid substance use. A previous evaluation showed promising short-term outcomes but did not address long-term effectiveness. Given that Friendly PEERsuasion is one of the most popular programs among Girls Inc.'s 93 affiliates, the evaluation represented a critical opportunity to determine the effectiveness of the program, which annually reaches approximately 10,000 girls.

## **Description of Friendly PEERsuasion**

Girls Inc.'s Friendly PEERsuasion is focused on individual and peer-related risk and protective factors related to substance use. The program is designed to help girls ages 11 to 14 acquire knowledge, skills, and support systems to avoid substance use, and consists of 15 hour-long sessions with a trained adult leader. Friendly PEERsuasion uses a combination of adult leadership and peer reinforcement to teach girls to respond critically to messages and social pressures that encourage substance use. Girls learn the short-term and long-term effects of substance abuse, how to recognize media and peer pressures, and skills for making responsible decisions about substance use.

### **Research Questions**

The goal of work conducted under this grant was to test the effectiveness of existing delinquency prevention, intervention, and intervention programs for girls. As such, this study addressed four key research questions related to the effectiveness of Friendly PEERsuasion: (1) Is Friendly PEERsuasion effective in delaying or reducing girls' use of alcohol, tobacco, and other drugs (ATOD)? (2) Is Friendly PEERsuasion effective in changing girls' attitudes toward ATOD use and their associations with peers who use substances? (3) Are demonstrated effects sustained for one year after program completion? and (4) What factors are critical to successful implementation of the program (and its evaluation)?

## **Research Settings and Participants**

A total of eight Girls Inc. affiliates participated in the study. Two of the original six affiliates and one of the affiliates that served as a replacement dropped out of the study due to challenges recruiting girls to participate. Three additional affiliates subsequently joined the study in order to increase the likelihood of attaining our target sample of 300 girls.

Consent and assent forms were collected from a total of 610 girls from these eight affiliates, and these girls were randomly assigned to either the intervention or control group. Fifty-five percent of these girls (N=343) completed a baseline and at least one follow-up survey and were included in the final data set.



### **Research Design and Methods**

The first three research questions comprise the outcome evaluation. To answer these questions, an experimental design was implemented in which girls were randomly assigned to either an intervention or a delayed-entry control group. In order to examine use of ATOD, attitudes toward use of ATOD, and association with peers who use substances over time, girls in the intervention and delayed-entry control groups were surveyed at three time points: (1) prior to the intervention group's participation in Friendly PEERsuasion, (2) immediately following the intervention group's participation in the program, and (3) one year following the intervention group's completion of the program.

The survey collected information on three outcomes that are tied directly to the Friendly PEERsuasion program: (1) age at first use and past 30 day use of ATOD, (2) attitudes and beliefs about ATOD, and (3) association with peers who use substances. Data collection instruments included two Center for Substance Abuse Prevention (CSAP) Government Performance and Results Act (GPRA) measures to assess the first two outcomes. The CSAP GPRA measure of ATOD use asks youth to report on lifetime and past 30 day use of ATOD, and the measure of attitudes asks youth to report on their perceptions of harm from using substances and their intentions regarding substance use. Questions from the Youth Risk Behavior Survey (YRBS) were used to assess the third outcome, association with peers who use substances. Demographic data and information on the number of program sessions girls attend was also collected.

Data were analyzed using a multivariate generalized estimating equation (GEE) in order to account for the correlation of outcomes within individuals (repeated measures over time) and any potential correlation within affiliate site. Logistic models were used to assess dichotomous outcomes, and multinomial (ordinal) models were used for categorical outcomes.

A process evaluation was conducted in order to answer the fourth research question. Process data was gathered from Session Assessment Forms, monthly conference calls with Girls Inc. staff, and ongoing conversations with program providers at each of the participating Girls Inc. affiliates. Content analysis was used to analyze these data.

## **Findings**

#### **Process Evaluation**

The process evaluation identified themes related to both program and study implementation. With respect to program implementation, Session Assessment Forms showed very little variability in program fidelity. Ten of the 11 sets of complete Session Assessment Forms (i.e., sets that included assessments of all 15 sessions) had all or almost all sessions rated as being implemented "very well," with an occasional rating of "okay." The only challenge to program implementation identified by the affiliates was attendance, particularly where the program was implemented in schools. Girls were required to complete 12 of the 15 sessions in order to be counted toward the affiliate's quota of 50 girls. In school-based settings, girls were sometimes kept out of the program because of poor grades in academic subjects or scheduling conflicts.



With respect to study implementation, key themes included challenges involving attrition and turnover, recruitment of schools, recruitment of girls, and follow up with girls.

- Attrition and Turnover: Attrition was experienced both among Girls Inc. affiliates and affiliates' staff. Two affiliates dropped out of the study at the outset of the project, and one of the replacement affiliates also subsequently dropped out due to an inability to recruit girls to participate in the study. Four affiliates were added during the course of the study. Moreover, of the original six affiliates, only one maintained the same Affiliate Liaison throughout the course of the study. Turnover resulted in additional resources being needed to train the new liaisons and challenges maintaining connections with girls enrolled in the study over the one-year follow-up period.
- **Recruitment of Schools:** Five of the eight affiliates reported significant challenges recruiting schools to participate, particularly schools in which Friendly PEERsuasion was already offered.
- Recruitment of Girls: In general, affiliates reported being able to generate interest among girls in participating in the Friendly PEERsuasion program and the associated study; however, obtaining signed consent and assent forms was very challenging. In most case cases, the Affiliate Liaison met only with the girls and relied on them to get the consent form signed by their parent and return it. With few exceptions, this resulted in a very low rate of return of signed forms.
- Follow up with Girls: One of the challenges of longitudinal research is maintaining contact with study participants. Unsurprisingly, Affiliate Liaisons had difficulties maintaining contact with girls enrolled in this study. Affiliate Liaisons who were most successful at securing one-year follow-up surveys shared some common characteristics, including willingness to search out individual girls, sometimes going to other schools to find them; good relationships with school counselors who could help contact girls; regular and fun "check-ins" with the girls (e.g., quarterly pizza parties); and a party or celebration at the one-year mark during which the girls completed surveys in a group setting.

#### **Outcome Evaluation**

#### **Final Sample**

- Fifty-five percent of study participants completed all three surveys, while another 35% completed the baseline and one of the two follow-up surveys.
- Most participants were 12-13 years old, black/African American, and more than 86% had made a commitment to be drug free at baseline.
- Age was significantly different when comparing participants in the intervention and control groups, so analyses were adjusted for age. In the control group, 35% of girls were 10-11 years old and 62% were 12-13 years old, compared to 23% ages 10-11 years and 62% ages 12-13 years in the intervention group. No differences with respect to race or ethnicity; grade; individuals with whom they live; exposure to ATOD; decisions or planned behavior regarding ATOD use; or attitudes and perceived risk were observed between the control and intervention groups at baseline.



#### **Study Findings**

- Of the 343 girls in the study, 12% used cigarettes, alcohol, or drugs: more than 4% had used cigarettes, 5% had used marijuana/hashish, and nearly 5% had used alcohol in the last 30 days.
- Both the intervention and control groups experienced an increase in use of cigarettes, alcohol, and/or drugs at the one-year follow up.
- No significant improvements in cigarettes, alcohol, or drug use, attitudes toward substance use, friends' drug use, or perceived risks associated with substance use were observed in the intervention group as compared to the control group at either follow-up time point.
- This study had limitations, including significant attrition, which may have influenced findings.

#### **Lessons Learned and Recommendations**

Although the outcome evaluation failed to find evidence that Friendly PEERsuasion was effective in delaying or reducing girls' use of ATOD or changing girls' attitudes toward ATOD use and their associations with peers who use substances, the process evaluation identified several important lessons learned regarding conducting research in community-based settings. First there was substantial variability in the affiliates' experience participating in research studies. As a result, it was important to follow up with Affiliate Liaisons frequently to ensure they understood study procedures and were equipped to carry them out. Second, it was important to check in with liaisons frequently near the end of program implementation cycles. Particularly when programs conclude around the end of the school year, it is essential that the study team has frequent contact with the liaison to ensure posttests are completed prior to study participants getting out of school for summer vacation. Third, it is important to screen community-based partners to ensure they have the capacity and capability to participate successfully in the study. This includes having time to devote to learning study procedures and implementing them. It is also critical to have the support of the partner's Executive Director. Finally, it is important for the study team to understand that community-based organizations and their staff face many competing priorities. Participation in a research study is an added burden. Moreover, it is a responsibility for which many community-based service providers are unprepared. It is essential that the study team be sensitive to this issue, never assume anything, and demonstrate a commitment to ongoing collaboration and communication.



## **Project Overview**

ANILA Consulting Group, Inc. partnered with Girls Inc. to test the effectiveness of their Friendly PEERsuasion program, a prevention program designed to help girls ages 11 to 14 acquire knowledge, skills, and support systems to avoid substance use. A previous evaluation showed promising short-term outcomes but did not address long-term effectiveness. Given that Friendly PEERsuasion is one of the most popular programs among Girls Inc.'s 93 affiliates, the evaluation represented a critical opportunity to determine the effectiveness of the program, which annually reaches approximately 10,000 girls. An experimental design was used to examine immediate outcomes and test the hypothesis that program effects are sustained for one year after program completion.

### **Research Questions**

- Is Friendly PEERsuasion effective in delaying or reducing girls' use of alcohol, tobacco, and other drugs (ATOD)?
- 2. Is Friendly PEERsuasion effective in changing girls' attitudes toward ATOD use and their associations with peers who use substances?
- 3. Are demonstrated effects sustained for one year after program completion?
- 4. What factors are critical to successful implementation of the program and its evaluation?

### **Project Objectives**

- 1. Successfully train staff at Girls Inc. to participate in the evaluation (i.e., obtain informed consent, collect survey data, track girls for follow up),
- 2. Conduct a process evaluation of Friendly PEERsuasion.
- 3. Conduct an outcome evaluation of Friendly PEERsuasion.



## **Background**

### Girls' Risk Behavior and Delinquency

As the number of girls entering the juvenile justice system has grown over the past two decades, it has become increasingly clear that more research is needed to understand the causes and correlates of girls' delinquency. Historically, delinquency research has focused on boys. Much remains to be learned about how risk and protective factors affect girls' pathways to delinquency. In an effort to address this knowledge gap and provide a foundation to guide the development and implementation of programs specifically designed to prevent girls' delinquency, OJJDP established the Girls Study Group, which was charged with conducting research activities to promote understanding of female juvenile offending and identifying effective strategies for preventing and reducing girls' delinquency.

The Girls Study Group identified factors for girls' delinquency in several domains, including individual-level factors and factors related to a girl's family, peer group, neighborhood, and school. Some of these factors were found to be important in both boys' and girls' pathways to delinquency. These factors included economic disadvantage, exposure to violence, physical and sexual maltreatment, and lack of family supervision. Other factors are more strongly related to girls' delinquency.

Peers are a particularly important factor in girls' risk of delinquency. One study (Epstein et al., 2009) found that, for girls, their friends' ambivalent or permissive attitudes toward smoking were associated with their own poly-drug use (i.e., using two or more of the following substances: tobacco, alcohol, and marijuana). Boys' poly-drug use was, instead, predicted by the extent to which they believed smoking to be prevalent among other boys their age. Analysis of data from the Study of Adolescent Health found that girls whose romantic partners participated in delinquent or risky behavior were more likely to report similar behavior (Haynie, 2003). Of particular relevance to this study, girls may use drugs or alcohol to win their partner's approval or fit in with peers (Giordano, Cernkovich, & Rossol, 2002).

Individual factors may buffer the effects of peers on girls. For example, girls may be less susceptible to peer pressure and less likely to engage in antisocial behavior with peers if they have strong prosocial and refusal skills (Hawkins & Weis, 1985). In fact, several studies of girls who had been adjudicated as delinquent offenders found that they reported greater levels of perceived peer pressure than other girls (Claes & Simard, 1992; Giordano, Cernkovich, & Pugh, 1986).

## **Description of Friendly PEERsuasion**

In order to be effective girls' delinquency prevention and intervention programs must target specific and often interrelated risk and protective factors. Girls Inc.'s Friendly PEERsuasion is an evidence-based program focused on individual and peer-related risk and protective factors related to substance use. The program is designed to help girls ages 11 to 14 acquire knowledge, skills, and support systems to avoid substance use, and consists of 15 hour-long sessions with a trained adult leader.

Friendly PEERsuasion uses a combination of adult leadership and peer reinforcement to teach girls to respond critically to messages and social pressures that encourage substance use. Girls learn the short-



term and long-term effects of substance abuse, how to recognize media and peer pressures, and skills for making responsible decisions about substance use. They then identify healthy alternatives and invite peers to join them in acting on their smarter choices. Finally, girls practice communication skills and healthy strategies to respond to stress.

### **Results of Prior Studies of Friendly PEERsuasion**

The Girls Study Group reviewed 61 girls' delinquency programs and found that most lacked sufficient evidence to make any conclusions about their effectiveness. Friendly PEERsuasion was one of the programs reviewed and rated as having inconclusive evidence of effectiveness, which according to the What Works Repository Methodological Criteria was defined as having an "adequately rigorous experimental or quasi-experimental research design that lacked sustained effects."

The original evaluation of Friendly PEERsuasion included an experimental design, and findings showed that participation in the program reduced the incidence of drinking among intervention group girls who reported having drunk prior to participation as well as the initiation of drinking alcohol among participants who had never drunk alcohol before. The estimated effect of program participation was a 14-percentage-point reduction in the likelihood of drinking during the study period (p=0.02). The study also found that intervention group participants were more likely to leave gatherings where people were drinking alcohol and to disengage from peers who smoked or took drugs. Despite these promising findings, follow-up data were not collected, so no assessment could be made of whether or not effects were sustained over time. The study conducted under this OJJDP grant addressed this shortcoming by including a one-year follow-up survey to examine the long-term effects of program participation.

## **Study Approach and Methods**

### **Research Questions**

The goal of work conducted under this grant was to test the effectiveness of existing delinquency prevention, intervention, and intervention programs for girls. As such, this study addressed four key research questions related to the effectiveness of Friendly PEERsuasion.

- 1. Is Friendly PEERsuasion effective in delaying or reducing girls' use of alcohol, tobacco, and other drugs (ATOD)?
- 2. Is Friendly PEERsuasion effective in changing girls' attitudes toward ATOD use and their associations with peers who use substances?
- 3. Are demonstrated effects sustained for one year after program completion?
- 4. What factors are critical to successful implementation of the program and its evaluation?

In order to answer these questions, the evaluation team identified three key objectives of work under this grant: (1) successfully train staff at Girls Inc. to participate in the evaluation (i.e., obtain informed consent, collect survey data, track girls for follow up), (2) conduct a process evaluation of Friendly PEERsuasion, and (3) conduct an outcome evaluation of Friendly PEERsuasion.

### **Research Design**

The first three research questions comprise the outcome evaluation. To answer these questions, an experimental design was implemented in which girls were randomly assigned to either a intervention or a delayed-entry control group. In order to answer the fourth research question, we conducted a process evaluation, which included collection of Session Assessment Forms, monthly conference calls with Girls Inc. staff, and ongoing conversations with program providers at each of the participating Girls Inc. affiliates.

Answering the research questions required investment of considerable time and effort into working with the Girls Inc. affiliates to ensure they were equipped to support implementation of the evaluation design, including recruiting subjects, providing the Friendly PEERsuasion program as intended, collecting and submitting data, and following up with participants to improve the chances of retaining them for the one-year follow-up survey. Below we describe our approach to each of the three project objectives.

## **Project Objective 1: Training Girls Inc. Staff**

Included in MANILA's proposal to OJJDP for work conducted under this grant were fully executed Memoranda of Understanding (MOUs) with the Girls Inc. National Office and six of their affiliates that agreed to participate in the evaluation of Friendly PEERsuasion. MOUs stipulated that each affiliate would contribute 50 girls to the study (25 intervention and 25 delayed-entry control) who would participate in all waves of data collection (i.e., pre-program, post-program, and one-year follow-up surveys). The Girls Inc. Director of Research had lengthy conversations with each affiliate about the



requirements of the study and screened out affiliates that were unable to meet study requirement. Affiliates agreed to oversample girls at baseline to ensure that they met study enrollment and retention goals.

#### Identifying and Orienting Liaisons

Upon grant award in October 2011, the Girls Inc. Director of Research worked with each affiliate to designate an Affiliate Liaison who served as the research team's primary point of contact. Each affiliate was assigned a Site Liaison who served as the primary contact with the study team. During the first two years of the study, the two Site Liaisons, each of whom was responsible for three affiliates, were in regular contact with their respective Affiliate Liaisons and other affiliate staff, as needed, to answer questions and encourage timely submission of data. Subsequently the Principal Investigator became the primary point of contact due to turnover in staff.

As soon as the Affiliate Liaisons were identified, the Site Liaisons scheduled individual kickoff calls with each affiliate. Participants included the Affiliate Liaison, the affiliate's Executive Director, and any other stakeholders the Affiliate Liaison identified. During the kickoff call, the Site Liaison explained roles and responsibilities, discussed steps to prepare for study implementation, answered questions, and obtained availability for a webinar, which was used to train Girls Inc. staff on study procedures. Topics covered during the webinar included the goal of the study, roles and responsibilities of Affiliate Liaisons, procedures for recruitment and obtaining informed consent, steps to ensure confidentiality of data, types of data to be collected, data collection procedures, and resources provided by the evaluation team. (See Appendix 1 for the PowerPoint presentation.)

In order to ensure that affiliates were well-equipped to implement Friendly PEERsuasion, program facilitators at each affiliate (most of whom were also the Affiliate Liaison) participated in an online refresher training on Friendly PEERsuasion prior to randomizing girls into the study (See Appendix 2 for the PowerPoint presentation). This ensured that affiliate staff was well- prepared to implement the program as intended.

#### Recruitment of Research Subjects

Each Affiliate Liaison was responsible for recruiting girls to participate in the study. Study participants were recruited primarily from the pool of girls currently participating in Girls Inc. activities at the affiliate and from middle schools with which the affiliates had established relationships. The evaluation team drafted a flyer describing the study that Affiliate Liaisons distributed to girls and their parents. (See Appendix 3 for the flyer.) At the request of the affiliates, the flyer was translated into Spanish.

Affiliate Liaisons were encouraged to schedule at least one informational meeting about the study, during which they described the study, eligibility requirements, the random assignment process, data to be collected, incentives, and the steps taken to ensure the confidentiality of all survey responses. Affiliate Liaisons were instructed to explain that girls who were assigned to the delayed-entry control group would not be able to participate in Friendly PEERsuasion for one year after the intervention group completes the program. Girls assigned to the control group were, however, welcome to participate in



other Girls Inc. activities and programs, and were able to participate in Friendly PEERsuasion one year later. Affiliate Liaisons were also coached to make clear that if a girl and her parent consented to participation in the study, the girl had an equal chance of being assigned to the intervention or delayedentry control group.

At the outset of the study, the study team anticipated that each Girls Inc. affiliate would require up to three implementation cycles of Friendly PEERsuasion in order to obtain a sample of at least 50 girls, divided equally between intervention and delayed-entry control conditions. At least one month prior to each implementation cycle, Affiliate Liaisons were asked to send their Site Liaison a list of all girls for whom consent to participate in the study had been obtained. Using a random number generator, girls were randomly assigned to either the intervention or delayed-entry control group. Each girl was assigned a unique identifier, and the Site Liaison forwarded the list of assignments and codes to the Affiliate Liaison who was instructed to keep the list in a secure (i.e., locked) location. The Affiliate Liaison then notified girls of the group to which they were assigned.

During the first six months of the project it became clear that affiliates were struggling to successfully recruit girls to participate in the study. As a result, the study team developed an Implementation Plan form that each affiliate was required to complete by June 15, 2012. Affiliates were asked to provide a detailed implementation plan that clearly specified how they would ensure that they had served or enrolled 80 percent of their sample (40 girls) by September 30, 2012. Topics included number of implementation cycles planned, site recruitment strategies, recruitment plans, strategies to obtain consent and assent, details of implementation (e.g., site at which the program would be implemented, frequency of program sessions, incentives), and tracking plans to ensure girls participated in the one-year follow-up survey. Affiliates were also required to provide detailed back-up plans, should their original plan not be feasible. The Implementation Plan form can be found in Appendix 4.

Despite these efforts, recruitment numbers remained low in 2012, and the study team recognized that the initial group of six affiliates was unlikely to meet the sample size goal of 300 girls. As a result, the Girls Inc. Director of Research worked diligently to screen and identify two additional affiliates to participate in the study.

### Strategies to Retain Participants

One of the key challenges to carrying out any experimental longitudinal study is retention of study participants. To address this, two important strategies were implemented in an effort to minimize attrition and attain the target sample of 300 girls. First, girls were provided incentives to participate in the evaluation. Girls in the control group received a \$15 gift card for each of the first two surveys they completed. All girls (i.e., both intervention and control) who completed the one-year follow-up survey received a larger incentive, a gift card for \$20. Second, each Affiliate Liaison was strongly encouraged on both individual calls and monthly conference calls to contact all girls in the study at least every other month to obtain up-to-date contact information. One month prior to the follow-up survey administration, the Affiliate Liaisons were encouraged by the study team to contact girls to remind them of the final data collection time point.



### **Project Objective 2: Conduct Process Evaluation**

The fourth research question regarding factors that are critical to the successful implementation of Friendly PEERsuasion was addressed by the process evaluation. The process evaluation included several components. First, to assess fidelity to the program model, program providers completed the facilitator's Session Assessment Form following each session. This form was developed specifically for the Friendly PEERsuasion program and is included with the curriculum. The form can be found in Appendix 5. Data gathered using the Session Assessment Form allowed documentation of the actual delivery of Friendly PEERsuasion and assessment of the extent to which it was implemented as intended.

Second, monthly conference calls that included all of the liaisons from each affiliate allowed for discussion of issues encountered with study and program implementation. Regular calls (bimonthly during the first year of the study) with individual Affiliate Liaisons also provided an opportunity to identify barriers to and facilitators of study and program implementation. Notes were taken during these calls and analyzed using content analysis to identify key themes, which are described below.

It should be noted that the study team originally proposed to do site visits following program implementation to conduct interviews with those involved with program delivery. As work with the affiliates progressed it became clear that there would not be much more to be learned from a site visit. The Affiliate Liaisons were implementing the program and regular telephone calls and email exchanges with them provided the information needed to understand barriers to and facilitators of program and study implementation. In fact, with only a few exceptions, there were rarely challenges to implementation of the Friendly PEERsuasion program. Implementation of the study, however, was much more challenging as we discuss in the Findings section below.

## **Project Objective 3: Conduct Outcome Evaluation**

The outcome evaluation used a survey to collect quantitative data to answer the first three research questions described above. These data were collected for girls in the intervention and delayed-entry control groups at three time points: (1) prior to the intervention group's participation in Friendly PEERsuasion, (2) immediately following the intervention group's participation in the program, and (3) one year following the intervention group's completion of the program.

The survey collected information on three outcomes that are tied directly to the Friendly PEERsuasion program: (1) age at first use and past 30 day use of ATOD, (2) attitudes and beliefs about ATOD, and (3) association with peers who use substances. Data collection instruments included two Center for Substance Abuse Prevention (CSAP) Government Performance and Results Act (GPRA) measures to assess the first two outcomes. The CSAP GPRA measure of ATOD use asks youth to report on lifetime and past 30 day use of ATOD, and the measure of attitudes asks youth to report on their perceptions of harm from using substances and their intentions regarding substance use. Both of these questionnaires were designed to gather outcome data on participants in CSAP-funded prevention programs. Questions from the Youth Risk Behavior Survey (YRBS) were used to assess the third outcome, association with peers who use substances. The Centers for Disease Control (CDC) has used this instrument for almost 20 years to monitor youth risk behavior. Demographic data and information on the number of sessions girls



attend was also collected. The survey, which took girls approximately 15-20 minutes to complete, can be found in Appendix 6.

The survey was submitted to the MANILA Institutional Review Board, along with consent and assent forms (Appendix 7), the study flyer described previously, and a script the Affiliate Liaison was instructed to read prior to survey administration (Appendix 8). Study recruitment began shortly after the study team received IRB approval. Prior to survey administration, the study team conducted a pilot test of the instruments with a convenience sample eight girls from Fairfax County, VA, all of whom reported being able to understand and answer the survey questions.

#### **Quantitative Analysis**

Prior to analysis, data cleaning was conducted to examine the dataset and to apply exclusions. Girls who did not provide baseline data or at least one follow-up survey were excluded. One girl was 18 years old at baseline and was also excluded (all other participants were between 10 and 15 years old at baseline).

Retention in the evaluation was described overall, by site, and by intervention/control group (overall and by baseline use of cigarettes, alcohol, or drugs). Differences in evaluation retention by intervention and control group were assessed using a Chi-square test or Fisher's exact test for analyses with small expected cell sizes. Demographic characteristics were described, including age, race/ethnicity, grade, living situation, friends' drug use/attributes at baseline, decisions/planned behavior, personal use of tobacco/alcohol/drugs, and baseline perceived risks and attitudes. Differences in baseline attributes by intervention and control group were assessed using Chi-square test or Fisher's exact test for analyses with small expected cell sizes.

Outcome variables included any substance use in the last 30 days (cigarettes, alcohol, drugs); use of cigarettes, alcohol, alcohol (drunk/high), marijuana, glue/aerosol/other, and/or any other illegal drug; attitudes toward substance use; friend attributes; perceived risk; and "how wrong" it is for someone to use substances. Substance use was examined as a dichotomous variable (any use/no use) and using survey categories describing the amount used. Outcomes by time point and intervention and control group were summarized using the percent for dichotomous variables and median categories for categorical variables.

Changes in outcomes were assessed using generalized estimating equations (GEE). Empirical (robust) standard errors/confidence intervals were applied. GEE models account for the lack of independence between repeated observations for individuals in the study (Zeger & Liang, 1986). Logistic models were used to assess dichotomous outcomes, and multinomial (ordinal) models were used for categorical outcomes. Because age group was significantly different between the intervention and control groups, models were adjusted for age group. The independent variables assessed included follow-up 1 and follow-up 2 compared to baseline, reflecting changes at each time point in the control group. Intervention was included in the model to adjust for baseline differences in each outcome between the intervention and control group. An interaction between each follow-up and the intervention were included in the model to assess differential change at follow-up in the intervention group as compared to the control group. All analyses were conducted using SAS 9.4 (Cary, NC).



In order to supplement the planned population average analyses, individual matched analyses were also conducted to separately compare individual changes in outcomes at each of follow-ups 1 and 2 compared to baseline. For dichotomous outcomes, McNemar's test was used and conditional odds ratios were generated. For categorical outcomes, Wilcoxon Signed Rank test was used and the number of girls who increased, stayed the same, and decreased was reported.

## **Research Settings and Participants**

total of eight affiliates participated in the study. Two affiliates, Chattanooga, Tennessee, and Hagerstown, Maryland, dropped out early in the project period. The Tennessee site had experienced a change in leadership between grant submission and award, and did not participate in the project kickoff calls. Tennessee was replaced by Girls Inc. of Owensboro-Daviess County, Kentucky. Girls Inc. of Hagerstown, Maryland, participated in initial project phone calls but subsequently withdrew from the study due to concerns about recruitment. The affiliate was replaced by Girls Inc. of Meriden, Connecticut. Due to the initial turnover of affiliates, an additional affiliate, Girls, Inc. of Sarasota, Florida, was add to the evaluation of Friendly PEERsuasion, increasing the anticipated total sample size of 350. Girls Inc. of Meriden, Connecticut, subsequently dropped out of the study and was replaced by two additional affiliates, Girls Inc. of Tarrant County, Texas, and Girls Inc. of Jackson County, Indiana.

Consent and assent forms were collected from a total of 610 girls from the eight affiliates that ultimately participated in the study. These 610 girls were randomly assigned to either the intervention or delayed-entry control group, though the final dataset, as described below, included 343 girls. Reasons for this attrition include having complete implementation cycles excluded because posttests were not completed before the end of the school year (two affiliates), implementation cycles being cancelled as a result of scheduling conflicts at the schools and centers, and girls changing their minds about participating in Friendly PEERsuasion or being removed by school administrators and placed in other classes (e.g., study hall). Table 1 provides an overview for each affiliate of the number of program cycles implemented, the number of girls enrolled, and the location in which the program was implemented.

Table 1: Overview of Research Settings and Participants

Affiliate	Number of Friendly PEER implementation cycles	Number of Girls Enrolled*	Implementation Site
Girls Inc. of the Berkshires (MA)	<ol><li>3 (One cycle thrown out because posttests were not completed)</li></ol>	68	Middle schools
Girls Inc. of Owensboro- Daviess County (KY)	3	58	Girls Inc. location
Girls Inc. of Greater Atlanta (GA)	posttests were not given prior to the		Middle school
Girls Inc. of Albany (GA)	3 (First cycle never undertaken)	99	Middle schools
Girls Inc. of the Greater Peninsula (VA)	2	123	Girls Inc. location
Girls Inc. of Sarasota (FL)	4	61	Middle schools
Girls Inc. of Jackson County (IN)	2	41	Middle school
Girls Inc. of Tarrant County (TX)	2	74	Girls Inc. location

<sup>\*</sup>The number of girls from whom signed consent and assent forms were received and who were randomly assigned to intervention or control groups



## **Findings**

#### **Process Evaluation**

### Friendly PEERsuasion Program Implementation

The process evaluation was originally intended to address the study's fourth research question: What factors are critical to successful implementation of the program? The Session Assessment Forms, which provided data to answer this question, showed very little variability in program fidelity. Ten of the 11 sets of complete Session Assessment Forms (i.e., sets that included assessments of all 15 sessions) had all or almost all sessions rated as being implemented "very well," with an occasional rating of "okay." Reasons for an "okay" rating from these 10 implementation cycles included having to change rooms during the session, which cut into session time; length of time between sessions necessitating review of the previous session; and girls "acting silly" and/or being "talkative." Facilitators' suggestions for improvement included "having more time" (most sessions were reported to be 1 hr or 50/55 minutes) and "condense drug types" so that sessions on specific types of drugs were shorter.

Only one of the affiliates rated an implementation cycle as has having fewer sessions that went "very well" than that were "okay" or went "poorly." That affiliate had six sessions that went "very well," six sessions that were "okay," and two sessions that went "poorly." The reasons the sessions went poorly or okay were that the girls were disruptive, disrespectful, and/or didn't work well together, or that they were bored. The facilitator's suggestions were consistent with the suggestions made by facilitators of the implementation cycles that were rated as going well (i.e., "more time" and not including so many types of drugs because it was hard to cover in one hour). Interestingly, the facilitator of this implementation cycle was the only one to include entries for "other relevant topics not covered by Friendly PEERsuasion." Suggestions included discussion of "e-cigarettes" and "changing marijuana laws throughout the country."

The other two sources of qualitative data that informed the process evaluation included monthly conference calls with all Affiliate Liaisons and individual telephone calls and emails with the Affiliate Liaisons and occasionally their Executive Directors. Although the calls were originally intended to focus on both program and evaluation implementation, it quickly became clear that the affiliates' primary concern was implementation of the study requirements. Friendly PEERsuasion is a very popular Girls Inc. program and all of the affiliates had experience providing it. The only challenge to program implementation identified by the affiliates was attendance, particularly where the program was implemented in schools. Girls were required to complete 12 of the 15 sessions in order to be counted toward the affiliate's quota of 50 girls. In school-based settings, girls were sometimes kept out of the program because of poor grades in academic subjects. For example, in one affiliate site, three girls in the intervention group had to drop out of the study because of low grades and their teacher's concern that the study was a distraction. Also at this site, girls did not attend all sessions because of other activities (e.g., study hall) that occurred during the time slot designated for Friendly PEERsuasion.



#### **Study Implementation**

A number of key themes related to study implementation were identified during monthly group calls with the Affiliate Liaisons, through one-on-one calls and emails with them, and through our work with the Girls Inc. Director of Research. Themes, which are described below, included challenges involving attrition and turnover, recruitment of schools, recruitment of girls, and follow-up with girls.

#### **Attrition and Turnover**

**Affiliates:** As discussed previously, two affiliates dropped out of the study at the outset of the project. One of the replacement affiliates also subsequently dropped out due to an inability to recruit girls to participate in the study. In early 2012 an additional Girls Inc. affiliate, Sarasota, Florida, was added to the study. Given the early attrition among the affiliates, an additional site provided a buffer if another affiliate dropped out or failed to meet their quota of girls. In 2013, two additional affiliates (Jackson County, Indiana, and Tarrant County, Texas) were added to the study due to recruitment challenges and difficulties obtaining the desired sample size.

**Affiliate Staff:** Of the original six affiliates, only one maintained the same Affiliate Liaison throughout the course of the study. Two of the affiliates had three different Affiliate Liaisons assigned.

*Implications of Turnover:* There were three important implications of the turnover experienced during the course of this study. First, the possibility of turnover required vigilance on the part of the study team to ensure we were aware when turnover was anticipated or had happened. Second, when liaisons left the affiliate, additional resources were required to train the new Affiliate Liaison on both the study methods and Friendly PEERsuasion. Finally, the new Affiliate Liaison did not have a relationship with the girls already enrolled in the study, making it more difficult for her to follow up regularly with them between the posttest and the one-year follow-up survey. This in turn made finding girls for the one-year follow up more challenging.

#### **Recruitment of Schools**

Five of the eight affiliates reported significant challenges recruiting schools to participate, particularly schools in which Friendly PEERsuasion was already offered. In fact, the Meriden, Connecticut, affiliate dropped out of the study as a result. One affiliate initially thought it would be easy to get into the schools but of the eight schools contacted none accepted the invitation to participate. Some principals cited the transient population they served, while others reported not being comfortable with random assignment of the girls. Another affiliate reported that some schools administrators had ethical concerns about denying some girls a program that could help them. Yet another affiliate encountered problems with school counselors not wanting to implement the program and study because of statewide testing.

One affiliate reported that she was already implementing Friendly PEERsuasion in schools in her metropolitan area so there was not much incentive for the schools to participate in the study. The same affiliate approached other counties with which she had worked previously and was informed that the school board would have to approve the additional programming, which would be time-consuming and ultimately unlikely. She noted that all of the counties were different and it was important to tailor her



approach to those differences. One of the charter schools she approached preferred not to have parents involved. When she first met with officials from that school, she explained plans for a parent orientation and the school declined to participate. Even the one affiliate that had a very good relationship with school administrators found it initially difficult to secure meetings with guidance counselors because of budget cuts and reductions in school staff hours.

#### **Recruitment of Girls: Interest versus Obtaining Signed Permission Slips**

In general, affiliates reported being able to generate interest among girls in participating in the Friendly PEERsuasion program and the associated study. Affiliates described a variety of recruitment strategies, including setting up a table in the lunch room complete with balloons and Girls Inc. swag, participating in Back-To-School Nights with parents, holding pizza parties, and sponsoring "meet-and-greets" at which girls and parents could learn more about the program.

Although generating interest among girls was relatively straightforward, obtaining signed consent and assent forms was very challenging. Affiliates tried to hold recruitment events that included parents, but this was often impossible for a variety of reasons (e.g., parents did not regularly attend school events, parents lacked transportation). In one of the more successful cases, an Affiliate Liaison who had sent consent forms to parents over the summer and had not received any signed forms participated in the first Middle School Open House of the school year, successfully obtaining signed consent forms from 50 parents.

In most case cases, however, the Affiliate Liaison met only with the girls and relied on them to get the consent form signed by their parent and to return it. With few exceptions, this resulted in a very low rate of return of signed forms. For example, an informational meeting about the study was held with girls from one middle school, and although 53 girls attended the meeting, only 12 girls returned signed consent and assent forms (36 girls signed an assent form but did not return a signed consent form from a parent or guardian). Another affiliate reported being "shocked by how many girls said they didn't see their parents." She was confident that she could have served more than twice as many girls if she had a more efficient way to get parental consent. She encouraged exploration of ways to use technology to replace the paper forms (e.g., offering an online option or gathering consent through cell phones).

Lack of signed consent forms for girls to participate in planned program implementation cycles did sometimes result in cancellation of the program. In other cases, the last-minute receipt of signed consent forms presented logistical problems in getting packets of materials (e.g., coded surveys, gift cards, name-code index) to the Affiliate Liaison in advance of the program start date.

Finally, although the girls were generally interested in the program, parents sometimes had concerns. One affiliate reported that parents were reluctant to acknowledge that their middle school-aged girls may be pressured to use substances. These parents refused to allow their children to participate because they did not believe the subject matter was relevant to them.



#### Follow-up with Girls

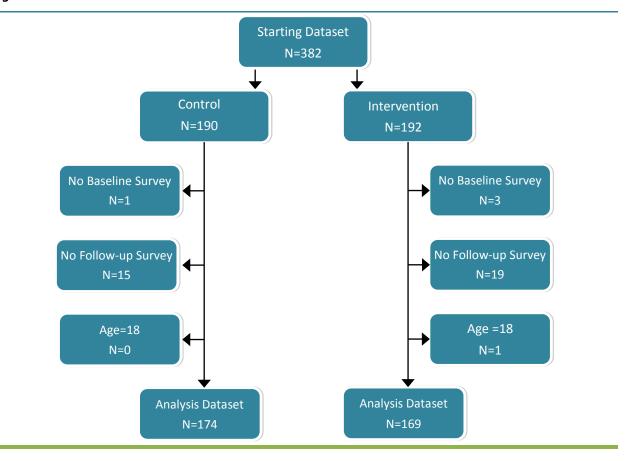
One of the challenges of longitudinal research is maintaining contact with study participants. Unsurprisingly, Affiliate Liaisons had difficulties maintaining contact with girls enrolled in this study. As we discuss in the Outcome Evaluation section below, slightly more than half of the girls completed surveys at all three time points. Affiliate Liaisons who were most successful at securing one-year follow-up surveys shared some common characteristics, including willingness to search out individual girls, sometimes going to several different schools to find them; good relationships with school counselors who could help contact girls; regular and fun "check-ins" with the girls (e.g., quarterly pizza parties); and a party or celebration at the one-year mark during which the girls completed surveys in a group setting.

#### **Outcome Evaluation**

#### Data Cleaning and Exclusions

Prior to analysis, four duplicate surveys (for the same individual and time point) were removed from the dataset. Exclusions applied prior to analysis are summarized in Figure 1. Four individuals did not provide a baseline survey, and 34 did not provide any follow-up surveys. One individual who was 18 years old at baseline was excluded (all other participants were 10 to 15 years old at baseline).

Figure 1: Exclusions



#### Retention in the Evaluation

Retention in the evaluation is reported in Tables 2 and 3. More than half of the girls completed all three surveys, more than a quarter completed the posttest survey (referred to as Follow-up 1) but not the one-year follow-up (referred to as Follow-up 2), and less than 10% completed the baseline and follow-up 2 but not follow-up 1. Nearly 9% only completed the baseline survey, and 1% were missing the baseline survey. Affiliate 2 reported the lowest retention with approximately 30% completing all three surveys. All girls completed all three surveys at Affiliate 6. Retention in the intervention was similar for the intervention and control groups overall and when stratified by use of cigarettes/alcohol/drugs at baseline (all p>.05).

Table 2: Retention in the Evaluation by Site and Overall\*

Affiliate	Missing baseline survey	Baseline survey only	Baseline and follow-up 1	Baseline and follow-up 2	Completed all three surveys
Affiliate 1	0	12 (20.0%)	0	0	48 (80.0%)
Affiliate 2	0	4 (9.3%)	25 (58.1%)	1 (2.3%)	13 (30.2%)
Affiliate 3	2 (12.5%)	0	0	0	14 (87.5%)
Affiliate 4	1 (1.3%)	14 (18.7%)	31 (41.3%)	2 (2.7%)	27 (36.0%)
Affiliate 5	0	3 (6.7%)	42 (93.3%)	0	0
Affiliate 6	0	0	0	0	42 (100.0%)
Affiliate 8	1 (2.9%)	0	0	0	33 (97.1%)
Affiliate 9	0	1 (1.5%)	0	33 (49.3%)	33 (49.3%)
Total	4 (1.0%)	34 (8.9%)	98 (25.7%)	36 (9.4%)	210 (55.0%)

Note: Affiliate 7 dropped out of the study.

Table 3: Retention in the Evaluation by Control/Intervention and Any Exposure to Cigarettes, Alcohol, or Drugs at Baseline

Surveys Completed			Any exposure to cigarettes, alcohol, or drugs at baseline		No exposure to cigarettes, alcohol, or drugs at baseline	
•	Control	Intervention	Control Intervention		Control	Intervention
Completed All Three Surveys	109(57.7%)	101(53.4%)	12(63.2%)	12(50.0%)	97(57.1%)	89(53.9%)
Baseline and Follow-up 1	46(24.3%)	52(27.5%)	4(21.1%)	5(20.8%)	42(24.7%)	47(28.5%)
Baseline and Follow-up 2	19(10.1%)	17(9.0%)	3(15.8%)	6(25.0%)	16(9.4%)	11(6.7%)
Baseline only	15(7.9%)	19(10.1%)	0(0.0%)	1(4.2%)	15(8.8%)	18(10.9%)

Differences in control/intervention groups tested using Chi-square and Exact tests (for small cell sizes). All p-values > .05

### Baseline Population Characteristics

Study population characteristics at baseline are described in Tables 4-6. More than half of the participants were 12-13 years old, but participants in the control group were significantly younger than those in the intervention group (p<.05). In the control group, 35% of girls were 10-11 years old and 62% were 12-13 years old, compared to 23% ages 10-11 years and 62% ages 12-13 years in the intervention group. No differences with respect to race or ethnicity; grade; individuals with whom they live; exposure to ATOD; decisions or planned behavior regarding ATOD use; or attitudes and perceived risk were observed between the control and intervention groups at baseline. More than half of the participants were in the sixth grade, 47% lived with their mom and dad, and 43% lived with their mom only. The most frequently reported race/ethnicity was black/African American, followed by white.

At baseline, friends' use of substances ranged between less than 3% using other illegal drugs (excluding marijuana) and more than 11% who had a friend who had tried alcohol. More than 86% reported that they were committed to be drug free and more than 90% had made a decision to stay away from marijuana. Just more than 1% decided to smoke cigarettes and 2% planned to get drunk in the next year. Marijuana was the most commonly reported substance used in the last 30 days (5%), followed by cigarettes and alcohol (both between 4 and 5%). Between 2% and 3% of participants reported that they had been drunk/high from alcohol in the past 30 days. Ketamines were the most commonly reported other illegal drug, with 1.5% reporting use in the last 30 days. More than 20% of the girls had alcohol in their lifetime, with the median age of first drink being 11 years old. Median age for the first cigarette smoked was 11.5 years old, for first using marijuana/hashish was 13 years old, and for first using other illegal drugs was 12 years old.

With respect to perceived risks, most girls reported that smoking a pack per day, smoking marijuana regularly, and having five or more drinks each weekend was a great risk. A lower percentage considered it a great risk to try marijuana once or twice (approximately 10%) or to have one or two drinks per day (approximately 44%). Most participants reported that it was very wrong for someone their age to drink beer/wine/hard liquor regularly, smoke cigarettes, smoke marijuana, or use LSD, cocaine, amphetamines, or other illegal drugs.

Table 4: Demographic Characteristics at Baseline

Characteristics	Total (N=343)	Intervention Group (N=169)	Control Group (N=174)	p-value
Age Group				
10-11	29.2	23.1	35.3	0.0217
12-13	55.0	62.1	48.0	
14-15	15.8	14.8	16.8	
Race/Ethnicity				
Hispanic	17.2	17.5	17.0	0.7624
Non-Hispanic:				
Black/African American	47.7	49.4	46.1	
White	35.1	33.1	37.0	

Characteristics	Total (N=343)	Intervention Group (N=169)	Control Group (N=174)	p-value
Grade <sup>†</sup>				
5	2.9	2.4	3.5	0.7730
6	51.8	50.9	52.6	
7	17.6	16.6	18.7	
8	22.4	25.4	19.3	
9	2.9	3.0	2.9	
10	2.4	1.8	2.9	
Living with				
Mom and Dad	46.9	49.7	44.3	0.3118
Dad only	4.4	3.6	5.2	0.4627
Mom only	43.4	42.0	44.8	0.5989
Grandparents	5.8	8.3	3.4	0.0560
Brother	13.4	11.2	15.5	0.2455
Sister	16.0	14.8	17.2	0.5367
Other relative <sup>†</sup>	2.9	3.0	2.9	1.0000
Other	5.2	4.1	6.3	0.3654

P-values calculated using Chi-squared; Groups with small numbers were excluded from analyses including 16-18 (n=1), race/ethnicity=multiple races (n=10) or other (n=5); <sup>†</sup>Fisher's Exact test used due to small predicted cell sizes in the frequency table.

Table 5: Baseline Exposure to alcohol, tobacco, and drugs

Characteristics	Total (N=343)	Intervention Group (N=169)	Control Group (N=174)	p-value
One or more of my Friends				
Smoked cigarettes	7.9	7.1	8.6	0.6124
Tried alcohol	11.4	11.3	11.5	0.9572
Used marijuana	7.6	8.3	6.9	0.6162
Used other illegal drugs <sup>†</sup>	2.6	1.8	3.4	0.5028
Made commitment to be drug free	78.4	76.8	79.9	0.4865
Sold drugs <sup>†</sup>	1.5	1.8	1.1	0.6803
Decisions/Planned Behavior				
Committed to drug free	86.3	85.8	86.8	0.7913
Decision to stay away from marijuana	90.1	88.2	91.9	0.2476
Decided to smoke cigarettes	1.2	1.2	1.2	0.9812
Plan to get drunk in next year	2.0	1.2	2.9	0.4486

Characteristics	Total (N=343)	Intervention Group (N=169)	Control Group (N=174)	p-value
Personal Exposure, last 30 days				
Any exposure to cigarettes, alcohol, or drugs	12.0	13.0	10.9	0.5493
Cigarettes smoked, frequency				
Smoked at all <sup>†</sup>	4.1	3.6	4.6	0.7865
How many (median category) <sup>†</sup>	<1/day	between 1- 5/day & <1/day	<1/day	0.7798
Cigarettes smoked per day				
Smoked at all <sup>†</sup>	4.7	3.6	5.7	0.4443
How many (median category) <sup>†</sup>	1-2/day	1-2/day	between 1- 2/day & <1/day	0.6535
Salvia smoked				
Smoked at all <sup>†</sup>	0.3	0	0.6	1.0000
How many (median category) <sup>†</sup>	1-2/week	N/A	1-2/week	1.0000
Occasions drinking alcohol				
Any occasions <sup>†</sup>	4.7	3.0	6.3	0.2001
How many (median category) <sup>†</sup>	between 3-5 & 1-2 times	3-5 times	1-2 times	0.0619
Occasions drunk/high from alcohol				
Any occasions <sup>†</sup>	2.6	2.4	2.9	1.0000
How many (median category) <sup>†</sup>	1-2 times	1-2 times	3-5 times	0.6814
Occasions used marijuana/hashish				
Any occasions <sup>†</sup>	5.0	5.3	4.6	0.8075
How many (median category) <sup>†</sup>	1-2 times	1-2 times	1-2 times	0.7837
Marijuana cigarettes per day in last month				
Any marijuana cigarettes <sup>†</sup>	5.0	4.7	5.2	1.0000
How many (median category) <sup>†</sup>	<1/day	<1/day	<1/day	0.9481
Occasions glue/aerosol/other				
Any occasions <sup>†</sup>	4.1	4.1	4.0	1.0000
How many (median category) <sup>†</sup>	1-2 times	1-2 times	1-2 times	0.8524
Occasions used LSD				
Any occasions <sup>†</sup>	0.3	0	0.6	1.0000
How many (median category) <sup>†</sup>	6-9	N/A	6-9	0.3237

Characteristics	Total (N=343)	Intervention Group (N=169)	Control Group (N=174)	p-value
Occasions used amphetamines				
Any occasions <sup>†</sup>	0.9	0.6	1.1	1.0000
How many (median category) <sup>†</sup>	1-2 times	1-2 times	1-2 times	1.0000
Occasions used crack cocaine				
Any occasions <sup>†</sup>	0.6	0.6	0.6	1.0000
How many (median category) <sup>†</sup>	1-2 times	1-2 times	1-2 times	1.0000
Occasions used non-crack cocaine				
Any occasions <sup>†</sup>	0.6	0.6	0.6	1.0000
How many (median category)	1-2 times	1-2 times	1-2 times	1.0000
Occasions used tranquilizers				
Any occasions <sup>†</sup>	0.6	0.6	0.6	1.0000
How many (median category) <sup>†</sup>	between 3-5 & 1-2 times	1-2 times	3-5 times	0.7449
Occasions used barbiturates				
Any occasions	0	0	0	NA
How many (median category)	NA	NA	NA	NA
Occasions smoke/inhale crystal meth				
Any occasions <sup>†</sup>	0.6	0.6	0.6	1.0000
How many (median category) <sup>†</sup>	1-2 times	1-2 times	1-2 times	1.0000
Occasions used Q40?? (says amphetamines again)				
Any occasions	0	0	0	NA
How many (median category)	NA	NA	NA	NA
Occasions used heroin				
Any occasions	0	0	0	NA
How many (median category)	NA	NA	NA	NA
Occasions used non-heroin narcotics				
Any occasions	0	0	0	NA
How many (median category)	NA	NA	NA	NA
Occasions used MDMA (ecstasy)				
Any occasions <sup>†</sup>	0.6	0.6	0.6	1.0000
How many (median category) †	1-2 times	1-2 times	1-2 times	1.0000
Occasions used Rohypnol (roofies)				
Any occasions <sup>†</sup>	0.6	0.6	0.6	1.0000
How many (median category) †	1-2 times	1-2 times	1-2 times	1.0000
Occasions used GHB		32		
Any occasions †	0.3	0.6	0	0.4927
How many (median category)	1-2 times	1-2 times	NA	0.4927

Characteristics	Total (N=343)	Intervention Group (N=169)	Control Group (N=174)	p-value
Occasions used Ketamine				
Any occasions <sup>†</sup>	1.5	1.8	1.1	0.6812
How many (median category) <sup>†</sup>	1-2 times	1-2 times	1-2 times	0.6812
Occasions had alcohol, lifetime				
Any occasions	20.1	20.7	19.5	0.7870
How many (median category)	1-2 times	3-5 times	1-2 times	0.5382
Age when first (median)				
Smoked part or all of a cigarette	11.5	11	12	0.2463
Had a drink of an alcoholic beverage	11	12	11	0.7403
Used marijuana or hashish	13	12.5	13	0.5328
Other illegal drugs	12	12	12.5	0.4072

Analyzed using Chi-Square; <sup>†</sup>Fisher's Exact test used due to small predicted cell sizes in the frequency table.

Table 6: Baseline Attitudes and Perceived Risk

Characteristics Total (N=343)		Intervention Group (N=169)	Control Group (N=174)	p-value
Perceived Risk				
Smoking a pack/day				
Can't say	3.2	3.6	2.9	0.4955
No risk	2.9	1.8	4.0	
Slight risk	4.1	5.4	2.9	
Moderate risk	11.4	10.1	12.6	
Great risk	78.4	79.2	77.6	
Trying marijuana once or twice				
Can't say	3.8	3.6	4.0	0.9972
No risk	6.7	6.5	6.9	
Slight risk	12.9	13.1	12.6	
Moderate risk	66.4	66.1	66.7	
Great risk	10.2	10.7	9.8	
Smoke marijuana regularly				
Can't say	2.7	2.4	2.9	0.8345
No risk	2.4	2.4	2.3	
Slight risk	5.9	5.4	6.4	
Moderate risk	6.8	5.4	8.2	
Great risk	82.3	84.5	80.1	

<sup>\*</sup>Missing values excluded from percentages; percentages may not add up due to rounding

Characteristics	Total (N=343)	Intervention Group (N=169)	Control Group (N=174)	p-value
1-2 drinks per day				
Can't say	2.4	2.4	2.3	0.7907
No risk	2.9	3.6	2.3	
Slight risk	12.6	10.8	14.5	
Moderate risk	38.2	40.1	36.4	
Great risk	43.8	43.1	44.5	
5+ drinks each weekend				
Can't say	2.3	2.4	2.3	0.6917
No risk	2.3	2.4	2.3	
Slight risk	5.9	4.2	7.5	
Moderate risk	37	35.7	38.2	
Great risk	52.5	55.4	49.7	
How wrong for someone your age to				
Drink beer, wine, or hard liquor regularly				
Not at all	0.3	0	0.6	0.3458
A little bit	6.2	5.9	6.4	
Wrong	7.3	9.5	5.2	
Very wrong	86.2	84.6	87.8	
Smoke cigarettes				
Not at all	0.3	0.6	0	0.0960
A little bit	3.2	5.3	1.1	
Wrong	8.5	8.3	8.6	
Very wrong	88.0	85.8	90.2	
Smoke Marijuana				
Not at all	0.3	0.6	0	0.5677
A little bit	6.4	7.7	5.2	
Wrong	4.4	4.7	4	
Very wrong	88.9	87	90.8	
Use LSD, cocaine, amphetamines or other illegal drug				
Not at all	0	0	0	0.3308
A little bit	0.6	1.2	0	
Wrong	3.2	3.6	2.9	
Very wrong	96.2	95.3	97.1	

### Changes in Outcomes by Time Point

Descriptive data on outcomes by time point are provided in Table 7, and the population average model results are provided in Table 8. Compared to baseline, any substance use at follow-up 1 was not changed in the control group, but it was significantly higher at follow-up 2 (OR=2.39, p<.01). Although the point estimates for the interaction terms were less than one (indicating a smaller increase in the



intervention group), neither parameter was statistically significant. Any use of alcohol was also significantly higher at follow-up 2 in the control group (OR=2.86, p<.05) but the interaction terms (both >1) were non-significant. Any use of other (not marijuana) illegal drugs was also significantly higher in the control group at follow-up 2 (OR=2.08, p<.05) with non-significant interaction terms both less than 1. The amount of alcohol (OR=2.79, p<.05) and marijuana (version 1, OR=2.52, p<.05) used was significantly higher at follow-up 2 compared to baseline.

Significantly fewer control group participants planned to get drunk in the next year at follow-up 1 (OR=0.72, p<.001), but the number was significantly higher at follow-up 2 (OR=1.45, p<.001). Intervention participants less frequently reported that they planned to get drunk in the next year at baseline (OR=0.35, p<.001), but the interactions terms indicate that increases were higher for intervention participants at follow-up 1 (OR=1.57, p<.001) and follow-up 2 (OR=3.67, p<.001). Significantly fewer control group participants reported that they were committed to be drug free (OR=0.38, p<.001) or that they made a decision to stay away from marijuana (OR=0.22, p<.001) at follow-up 2 as compared to baseline.

No significant interactions between intervention and changes in friend attributes, perceived risk, or "how wrong" it is to use substances were observed. In the control group, having friends who used cigarettes, alcohol, marijuana, or sold drugs were all significantly higher at follow-up 2 as compared to baseline, while having friends who made a commitment to be drug free was significantly lower. The perceived risk of smoking marijuana regularly was lower at follow-up 2 as compared to baseline, and how wrong it is for someone their age to drink beer, wine, or hard liquor regularly, smoke cigarettes, and use LSD, cocaine, amphetamines, or other illegal drugs was significantly lower at follow-up 2. How wrong it is for someone their age to smoke marijuana was significantly lower at both follow-ups in the control group.

Table 7: Description of Outcomes by Time Point

Outcome	Control Group (N=174)			Intervention Group (N=169)		
	Baseline	Follow-up 1	Follow-up 2	Baseline	Follow-up 1	Follow-up 2
Substance use in the last 30 days (any), percent						
Any exposure to cigarettes, alcohol, or drugs	10.9	9.2	22.0	13.0	9.4	24.6
Cigarettes <sup>†</sup>	5.7	2.6	7.1	3.6	1.3	9.3
Alcohol	6.3	5.8	16.5	3.0	5.3	19.5
Alcohol (drunk/high from alcohol)	2.9	5.2	5.6	2.4	2.0	12.7
Marijuana <sup>†</sup>	5.7	2.6	11.0	5.3	2.0	11.9
Glue/aerosol/other	4.0	3.2	5.5	4.1	2.6	5.9
Any other illegal drug(s)	8.6	6.5	17.3	11.2	6.0	17.9
Substance use in the last 30 days, amount/median category						

Outcome	Control Group (N=174)			Intervention Group (N=169)		
	Baseline	Follow-up	Follow-up 2	Baseline	Follow-up 1	Follow-up 2
Cigarettes (1)	<1/day	<1/day	<1/day	between 1-5 & <1/day	between 1 & ½ pack /day	<1/day
Cigarettes (2)	between 1-2 & <1/day	between 1-2 & <1/day	<1/day	1-2/day	3-7/day	<1/day
Alcohol	1-2 occasions	1-2 occasions	1-2 occasions	3-5 occasions	1-2 occasions	1-2 occasions
Alcohol (drunk/high from alcohol)	3-5 occasions	1-2 occasions	1-2 occasions	1-2 occasions	1-2 occasions	1-2 occasions
Marijuana (1)	1-2 occasions	3-5 occasions	between 3-5 & 1-2 occasions	1-2 occasions	1-2 occasions	1-2 occasions
Marijuana (2)	<1/day	1/day	<1/day	<1/day	<1/day	<1/day
Glue/aerosol/other	1-2 occasions	1-2 occasions	1-2 occasions	1-2 occasions	between 3-5 & 1-2 occasions	1-2 occasions
Attitudes toward substance abuse, %						
Committed to drug free	86.8	86.4	69.5	85.8	87.5	66.9
Decision to stay away from marijuana	91.9	90.9	72.7	88.2	85.4	70.3
Decided to smoke cigarettes	1.2	1.9	3.9	1.2	1.3	6.8
Plan to get drunk in next year	2.9	2.0	4.7	1.2	1.3	5.9
One or more of my Friends, %						
Smoked cigarettes	8.6	7.1	18.0	7.1	4.6	16.9
Tried alcohol	11.5	11.7	25.8	11.3	13.8	37.1
Used marijuana	6.9	5.2	23.6	8.3	8.6	25.4
Used other illegal drugs	3.4	2.0	5.5	1.8	1.3	6.0
Made commitment to be drug free	79.9	79.9	66.9	76.8	78.9	69.5
Sold drugs	1.1	2.6	9.4	1.8	1.3	8.5
Perceived Risk, median category						
Smoking a pack per day	Great risk	Great risk	Great risk	Great risk	Great risk	Great risk
Trying marijuana once or twice	Moderate risk	Moderate risk	Moderate risk	Moderate risk	Moderate risk	Moderate risk
Smoking marijuana regularly	Great risk	Great risk	Great risk	Great risk	Great risk	Great risk
1-2 drinks per day	Moderate risk	Moderate risk	Moderate risk	Moderate risk	Moderate risk	Moderate risk
5+ drinks each weekend	Moderate risk	Moderate risk	Great risk	Great risk	Great risk	Great risk
How wrong for someone your age to						
Drink beer, wine, hard liquor regularly	Very wrong	Very wrong	Very wrong	Very wrong	Very wrong	Very wrong

Outcome	Control Group (N=174)			Intervention Group (N=169)		
Outcome	Baseline	Follow-up 1	Follow-up 2	Baseline	Follow-up 1	Follow-up 2
Smoke cigarettes	Very	Very	Very	Very	Very	Very
	wrong	wrong	wrong	wrong	wrong	wrong
Smoke marijuana	Very	Very	Very	Very	Very	Very
	wrong	wrong	wrong	wrong	wrong	wrong
Use LSD, cocaine, amphetamines or other illegal drug	Very	Very	Very	Very	Very	Very
	wrong	wrong	wrong	wrong	wrong	wrong

<sup>†</sup>Including all who said that they used the substance for either of the two questions as using the substance; missing values excluded from percentages; percentages may not add up due to rounding

**Table 8: Population Average Model Results** 

Outcome	Follow-up 1 compared to baseline, (control group) Odds Ratio	Follow-up 2 compared to baseline, (control group) Odds Ratio	Intervention compared to control at baseline, Odds Ratio	Intervention* Follow-up 1 Odds Ratio	
Substance use in the last 30 days $\left(any\right)^{\dagger}$					
Any exposure to cigarettes, alcohol, or drugs	0.99	2.39**	1.20	0.77	0.87
Cigarettes <sup>^</sup>	0.57	1.22	0.66	0.75	2.43
Alcohol	1.01	2.86*	0.39	1.95	2.91
Alcohol (drunk/high from alcohol)	2.09	1.79	0.76	0.43	3.61
Marijuana <sup>^</sup>	0.47	1.86	0.86	0.84	1.28
Glue/aerosol/other	0.91	1.34	0.96	0.70	0.99
Any other illegal drug(s)	0.81	2.08*	1.27	0.70	0.79
Substance use in the last 30 days (amount) <sup>‡</sup>					
Cigarettes (1)	0.59	1.44	0.77	0.65	1.93
Cigarettes (2)	0.51	1.27	0.69	0.72	2.19
Alcohol	0.96	2.79*	0.41	1.91	2.79
Alcohol (drunk/high from alcohol)	1.91	1.41	0.75	0.46	4.18
Marijuana (1)	0.59	2.52*	1.12	0.62	0.87
Marijuana (2)	0.38	1.61	0.84	0.73	1.43
Glue/aerosol/other	0.84	1.25	0.97	0.76	1.11

Outcome	Follow-up 1 compared to baseline, (control group) Odds Ratio	Follow-up 2 compared to baseline, (control group) Odds Ratio	Intervention compared to control at baseline, Odds Ratio	Intervention* Follow-up 1 Odds Ratio	
Attitudes toward substance abuse †					
Committed to drug free	0.99	0.38***	0.98	1.14	0.90
Decision to stay away from marijuana	0.72	0.22***	0.66	1.02	1.32
Decided to smoke cigarettes	1.15	3.27	1.07	1.00	1.88
Plan to get drunk in next year	0.72***	1.45***	0.35***	1.57***	3.67***
One or more of my Friends <sup>†</sup>					
Smoked cigarettes	0.92	2.29**	0.73	0.77	1.2
Tried alcohol	1.12	2.37**	0.88	1.20	2.02
Used marijuana	0.84	4.11***	1.10	1.35	0.90
Used other illegal drugs	0.57	1.46	0.48	1.34	2.37
Made commitment to be drug free	0.96	0.56*	0.88	1.19	1.22
Sold drugs	2.69	8.39**	1.45	0.32	0.61
Perceived Risk <sup>‡</sup>					
Smoking a pack per day	1.00	0.66	1.12	1.15	1.3
Trying marijuana once or twice	1.05	0.72	1.05	1.18	1.58
Smoking marijuana regularly	0.85	0.37***	1.39	1.07	1.19
1-2 drinks per day	0.85	1	1.08	1.26	1.01
5+ drinks each weekend	0.92	1.51	1.34	1.15	0.68
How wrong for someone your age to ‡					
Drink beer, wine, hard liquor regularly	0.62	0.27***	0.89	1.30	0.87
Smoke cigarettes	0.81	0.26***	0.66	1.98	1.14
Smoke marijuana	0.54*	0.14***	0.74	1.44	1.99
Use LSD, cocaine, amphetamines or other illegal drug	0.43	0.28*	0.63	2.74	1.07

Covariates include age category; †Logistic GEE model; ‡Multinomial (ordinal) GEE model; ^Including all who said that they used the substance for either of the two questions as using the substance; \*p<.05; \*\*p<.01; \*\*\*p<.001

#### Paired Analyses

In order to assess potential changes at the individual level (as opposed to population average changes), paired analyses were also conducted separately to compare follow-up 1 to baseline, and follow-up 2 to baseline. In each analysis, individuals with missing data at either time point being compared were excluded. Results in Table 9 include conditional odds ratios for dichotomous outcomes, and girls who reported higher, the same, or lower values at follow-up are reported for categorical variables. The



conditional odds ratio compares the number of girls who did not report the outcome at baseline but did at follow-up to those who did report the outcome at baseline but not at follow-up. The only significant change observed at follow-up 1 was an increase in the intervention groups' perception of how wrong it is for someone their age to smoke cigarettes. Several outcomes increased significantly in both groups at follow-up 2, including any substance use, any alcohol use, amount of alcohol used, and having friends who smoked cigarettes, used marijuana, tried alcohol, or sold drugs. Significantly more girls were no longer committed to stay drug free or to staying away from marijuana at follow-up 2 in both groups. Variables regarding "how wrong" it is to use substances also significantly changed in both groups, being perceived as "less wrong" at follow-up 2.

In the intervention group, any and/or amount of cigarette use and any and/or amount of getting drunk or high from alcohol increased significantly, as did the number of girls who decided to smoke cigarettes. In the control group, significantly more girls started using other illegal drugs, fewer girls had friends who made a commitment to be drug free, and the perceived risk of smoking a pack of cigarettes a day or smoking marijuana regularly was lower, but the changes in the intervention group were not significant.

**Table 9: Paired Analyses Results** 

	Cor	ıtrol	Intervention		
Outcome	Baseline to follow-up 1	Baseline to follow-up 2	Baseline to follow-up 1	Baseline to follow-up 2	
Substance use in the last 30 days (any) <sup>†</sup>					
Any exposure to cigarettes, alcohol, or drugs	6/7=0.86	19/6=3.17**	7/9=0.78	16/5=3.20*	
Cigarettes	2/5=0.40	6/6=1.00	0/3=0.00	7/0=N/A**	
Alcohol	4/5=0.80	19/7=2.71*	5/2=2.50	19/0=N/A***	
Alcohol (drunk/high from alcohol)	4/1=4.00	6/4=1.50	2/3=0.67	13/1=13.00**	
Marijuana <sup>^</sup>	1/5=0.20	9/4=2.25	3/6=0.50	9/2=4.50*	
Glue/aerosol/other	3/3=1.00	6/3=2.00	2/5=0.40	6/5=1.20	
Any other illegal drug(s)	5/7=0.71	16/6=2.67*	5/9=0.56	11/6=1.83	
Substance use in the last 30 days (amount) <sup>‡</sup>					
Cigarettes (1)	2/149/3	7/114/6	1/147/3	7/110/1*	
Cigarettes (2)	2/148/5	7/113/7	0/146/5	8/109/1	
Alcohol	5/143/7	19/101/7*	5/142/4	20/96/2***	
Alcohol (drunk/high from alcohol)	4/148/2	6/116/5	2/145/4	14/103/1**	
Marijuana (1)	2/150/3	12/110/5	3/142/6	8/105/4	
Marijuana (2)	2/148/5	8/114/5	2/144/5	7/110/1	
Glue/aerosol/other	3/148/4	6/119/3	2/144/6	6/107/5	
Attitudes toward substance abuse †					
Committed to drug free	10/8=1.25	7/26=0.27***	13/9=1.44	4/25=0.16***	
Decision to stay away from marijuana	4/5=0.80	4/27=0.15***	7/11=0.64	4/26=0.15***	
Decided to smoke cigarettes	3/2=1.50	5/2=2.50	1/1=1.00	8/1=8.00*	
Plan to get drunk in next year	1/3=0.33	4/3=1.33	1/1=1.00	7/2=3.50	

	Control		Intervention	
Outcome	Baseline to follow-up 1	Baseline to follow-up 2	Baseline to follow-up 1	Baseline to follow-up 2
One or more of my Friends <sup>†</sup>				
Smoked cigarettes	4/8=0.50	16/4=4.00**	2/6=0.33	17/7=2.43*
Tried alcohol	9/11=0.82	22/7=3.14**	8/5=1.60	29/3=9.67***
Used marijuana	3/7=0.43	22/3=7.33***	4/4=1.00	23/7=3.29**
Used other illegal drugs	0/3=0.00	5/2=2.50	1/2=0.50	5/1=5.00
Made commitment to be drug free	16/17=0.94	14/27=0.52*	17/12=1.42	14/22=0.64
Sold drugs	3/1=3.00	11/0=N/A***	2/2=1.00	8/1=8.00*
Perceived Risk <sup>‡</sup>				
Smoking a pack per day	24/112/19	19/79/29*	20/117/14	18/77/22
Trying marijuana once or twice	19/119/16	29/61/37	21/113/16	32/55/29
Smoking marijuana regularly	17/119/16	12/68/44***	13/123/15	11/80/26
1-2 drinks per day	22/108/24	31/53/42	28/100/21	28/54/34
5+ drinks each weekend	28/95/30	33/62/31	25/107/19	19/64/34
How wrong for someone your age to <sup>‡</sup>				
Drink beer, wine, hard liquor regularly	12/126/15	8/85/33***	9/132/11	6/79/32***
Smoke cigarettes	8/140/7	10/84/33***	16/130/6*	10/79/28***
Smoke marijuana	7/134/14	3/82/42***	9/132/11	6/86/25***
Use LSD, cocaine, amphetamines or other illegal drug	2/145/8	4/111/13*	5/142/5	4/98/15**

Separate analyses were conducted for each intervention group at each of follow-up 1 and 2 to determine whether changes at follow-up as compared to baseline were statistically significant; †Counts for those who reported "No" at baseline & "Yes" at follow-up/"Yes" at baseline & "No" at follow-up, analyzed using McNemar's Test; ‡Counts for those whose follow-up was higher/same/lower, analyzed using Wilcoxon Signed Rank Test; \*p<.01; \*\*\*p<.001

### Summary of the Outcome Evaluation

#### **Final Sample**

- Fifty-five percent of study participants completed all three surveys, while another 35% completed the baseline and one of the two follow-up surveys.
- Most participants were 12-13 years old, black/African American, and more than 86% had made a commitment to be drug free at baseline.
- Age was significantly different when comparing participants in the intervention and control groups, so analyses were adjusted for age. In the control group, 35% of girls were 10-11 years old and 62% were 12-13 years old, compared to 23% ages 10-11 years and 62% ages 12-13 years in the intervention group. No differences with respect to race or ethnicity; grade; individuals with whom they live; exposure to ATOD; decisions or planned behavior regarding ATOD use; or attitudes and perceived risk were observed between the control and intervention groups at baseline.



#### **Study Findings**

- Of the 343 girls in the study, 12% used cigarettes, alcohol, or drugs: more than 4% had used cigarettes, 5% had used marijuana/hashish, and nearly 5% had used alcohol in the last 30 days.
- Both the intervention and control groups experienced an increase in use of cigarettes, alcohol, and/or drugs at the one-year follow up.
- No significant improvements in cigarettes, alcohol, or drug use, attitudes toward substance use, friends' drug use, or perceived risks associated with substance use were observed in the intervention group as compared to the control group at either follow-up time point.
- The odds of reporting plans to get drunk in the next year were significantly lower in the intervention group at baseline in the multivariable population-average model (OR=0.35, p<.001), but that group experienced a significantly higher increase at follow-up 1 (interaction OR=1.57, p<.001) and follow-up 2 (interaction OR=3.67, p<.001) as compared to the control group. All other outcomes were similar at baseline and interaction terms were not statistically significant.

#### Limitations

With respect to sample size, the study was powered to analyze changes in the target sample of 300 girls. Missing follow-up data therefore may have influenced findings. Thirty-five percent of girls missed one of the two follow-up surveys, and 8% missed both of them. Attrition was, however, similar when comparing the control and intervention groups overall and by baseline exposure to cigarettes, alcohol, or drugs. If being lost to follow-up was associated with lower risk behavior at follow-up in the intervention group but not in the control group, this could have biased findings toward the null hypothesis. Population-average analyses did not incorporate missing data imputation, resulting in the assumption that data were missing completely at random. The results of paired analyses assessing individual-level changes produced results that were similar to population-average models. No subgroup analyses were performed for girls who may have been at higher risk for ATOD use because the group of girls who had exposure to substances at baseline was too small (n=41) to analyze separately.



### **Lessons Learned and Recommendations**

Although the outcome evaluation failed to find evidence that Friendly PEERsuasion was effective in delaying or reducing girls' use of alcohol, tobacco, and other drugs (ATOD) or changing girls' attitudes toward ATOD use and their associations with peers who use substances, the process evaluation identified several important lessons learned regarding conducting research in community-based settings. First there was substantial variability in the affiliates' experience participating in research studies. As a result, it was important to follow up with Affiliate Liaisons frequently to ensure they understood study procedures and were equipped to carry them out. In particular there were challenges with respect to random assignment, including matching coded surveys with the "right" girls and affiliates sometimes wanting to switch girls from the intervention group to the control group or vice versa. It is important to anticipate the possibility of these issues and work through them.

Second, it was important to check in with liaisons frequently near the end of program implementation cycles. This is sometimes difficult because program end dates frequently change as a result of school scheduling changes, unanticipated testing, school holidays, and snow days. Particularly when programs conclude around the end of the school year, it is essential that the study team has frequent contact with the liaison to ensure posttests are completed prior to study participants getting out of school for summer vacation.

Next it is important to screen community-based partners to ensure they have the capacity and capability to participate successfully in the study. This includes having time to devote to learning study procedures and implementing them. It is also critical to have the support of the partner's Executive Director. He or she can be instrumental in ensuring that staff has the time and support needed to participate in the study.

Finally, it is important for the study team to understand that community-based organizations and their staff face many competing priorities, including delivering high-quality services, fundraising, and responding to increasing demands for their service. Participation in a random assignment study is an added burden. Moreover, it is a responsibility for which many community-based service providers are unprepared. It is essential that the study team be sensitive to this issue, never assume anything, and demonstrate a commitment to ongoing collaboration, communication, and support.

### References

- Claes, M., and Simard R. 1992. Friendship characteristics of delinquent adolescents. *International Journal of Adolescence and Youth* 3:287–301.
- Epstein, J., Botvin, G., and Doyle, M. 2009. Gender-specific effects of social influences and competence on lifetime poly-drug use among inner-city adolescents. *Journal of Child and Adolescent Substance Abuse* 18(3):243-256.
- Giordano, P.C., Cernkovich, S.A., and Pugh, M.D. 1986. Friendships and delinquency. *American Journal of Sociology* 91:1170–1202.
- Giordano, P.C., Cernkovich, S.A., and Rossol, J. 2002. Emotion, cognition, and crime. Paper presented at the annual meeting of the American Sociological Association, Chicago, IL.
- Hawkins, J. D. and Weis, J. G. 1985. The social development model: an integrated approach to delinquency prevention. *Journal of Primary Prevention* 6:73–97.
- Haynie, D.L. 2003. Contexts of risk? Explaining the link between girls' pubertal development and their delinquency involvement. *Social Forces* 82:355–397.
- Pan, W. 2001. Sample size and power calculations with correlated binary data. *Control Clin Trials* 22(3):211-27.
- Zahn, M. and Mahlic S. 2008. Girls Study Group. Paper presented at the Blueprints Conference, Denver,
- Zeger, S.L. and K.Y. Liang. 1986. Longitudinal data analysis for discrete and continuous outcomes. *Biometrics* 42(1):121-30.



**Appendix 1: Friendly PEERsuasion Evaluation Training Presentation** 

# Friendly PEERsuasion Evaluation Training

### The Study

- ▶ Background
- Dur research questions
- ▶ Study design

### Practical Issues

#### Location:

- ▶ Where will the program be held?
- Does your usual location suffice or do you need to expand to others

### Practical Issues

Recruiting activities: remember you are recruiting for the study and not the program.

- Will your usual recruiting strategies suffice or do you need to broaden or change them (e.g., reach out to new groups of girls)?
- Will you need new materials (e.g., flyers, posters)?
- Do you need new strategies for engaging parents?
- Will you provide incentives to participants? If so, what and how

### Practical Issues

#### Implementation activities:

- How many times (i.e., implementation cycles) will you need to implement the program to reach 50 girls?
- How will you ensure that control girls do not receive Friendly PEER for one year following implementation?
- How will you ensure that girls in the study do not receive the pregnancy prevention program during and for one year after their participation in Friendly PEER?

### Practical Issues

### Post program activities:

Tracking girls—how will you track girls for the 1-year follow up survey, especially those who may move from elementary to middle school during that period?

### Practical Issues

#### Logistics:

Are there permissions you need before you get started (e.g., school or center administrators, teachers)?

#### Recruitment and Retention

#### Why so important?

- Without 300 girls (and experimental and control groups) our analyses will not be possible.
  - This will severely limit our ability to draw conclusions about the effectiveness of the program.
  - It also severely limits our ability to generalize study results.

#### Recruitment and Retention

#### Recruitment issues to consider

- ▶ Girls 11–14 years of age
- Experimental and control group
- Parental consent, youth assent

#### Recruitment and Retention

#### Recruitment issues to consider

- Voluntary participation
- Control girls cannot receive Friendly PEER for one year following the program
- No girl in the study can receive the pregnancy prevention program for one year following Friendly PEER

#### Recruitment and Retention

#### Recruitment strategies to consider

- Flyers or other written materials provided by MANILA that clearly state the study requirements
- "Information night" or after-school sessions for parents and girls to clearly explain the study requirements

#### Recruitment and Retention

#### Recruitment strategies to consider

- Additional incentives—age appropriate and proportional to the effort required
  - Raffle prizes (e.g., movie tickets) for showing up to sessions and/or updating contact information every 3 months
  - Gift cards for girls in the experimental group
  - Pizza party when girls return a year later to complete survey:



### Recruitment and Retention

#### Retention strategies to consider

Collect personal information from participants (mother's maiden name, email addresses, cell phone numbers, birthdates), as well as contact information for two or three relatives or friends who are most likely to know the contact information of study participants at any given time

#### Recruitment and Retention

#### Tracking strategies to consider

- Send email (or postcard) reminders to participants throughout the 1-year time period and then immediately prior to the data collection
- Allow your AL to have a strong presence at the location where the program is run (study retention has been shown to be positively influenced by the presence of a familiar and trusted study representative)

### Data Collection

#### Overview: What do I need to collect?

- Consent and assent forms
- Surveys
- ▶ Attendance data
- Session Assessment Forms

#### Data Collection: Consent and Assent

- Consent is permission given by individuals 18 years of age or older. Because the girls are minors, permission must come from a parent or guardian
- Assent is informal consent given by individuals between the ages of 6 and 17; here, it will be obtained from girls in both the experimental and control groups
- Both must be in writing and obtained prior to randomizing girls into study groups

#### Data Collection: Consent and Assent

#### Two primary principles

- Voluntary participation—individual agrees to participate of their own free will
- Any form of coercion or undue influence is unacceptable
- 2. Informed consent—"informed" is the critical word
  - Individual is given all the information they need to understand the nature and scope of the study, as well as exactly what they are being saked to do
  - Information is given in a manner that they can understand (e.g., native language, appropriate reading level)

#### Data Collection: Assigning Girls to Groups

- At least 3 to 4 weeks prior to implementation, forward all consent and assent forms to MANILA
- MANILA will then:
  - Randomly assign girls to study groups
  - Send study packets to ALs to include group assignments (and name/code index), surveys, gift cards, fidelity instruments, and attendance forms, as well as return envelopes for study materials



#### Data Collection: Surveys

 Surveys will be administered to girls before the program begins, immediately after it ends, and then one year later

# Data Collection: 5 Steps to Administering the Survey

Step 1. Surveys are passed out to the girls. Be sure each girl gets the correct survey (i.e., the one with her specific code on it).

Step 2. Instructions are read slowly and clearly. Instructions will include information about how to complete the survey and what to do with it once it has been completed.

Step 3. Girls are told that the survey will take between 20 and 30 minutes, but if they need additional time, that is ok.

# Data Collection: 5 Steps to Administering the Survey

Step 4. Surveys are completed. Girls will be instructed to insert completed surveys into a large manila envelope at the front of the room.

Step 5. Surveys are submitted. Once all surveys are completed and submitted, seal the envelope containing the completed surveys and send to MANILA.

# Data Collection: Administering the Survey—Important Considerations

- Survey should be administered by program facilitator
- No one else should be in the room during survey administration except the individual administering the survey. If someone other than the facilitator is required to assist, the person should not be an authority figure (e.g., counselor, teacher, parents)

#### Data Collection: Administering the Survey—Important Considerations

- No one is allowed access to the completed surveys, not even the program facilitator.
- Completed surveys will be collected in a large envelope that will be sealed immediately after the last survey has been submitted and mailed to MANILA.
- To ensure confidentiality, girls are responsible for putting their completed survey into the envelope themselves.

# Data Collection: Administering the Survey—Important Considerations

Facilitators are permitted to answer questions if they will assist girls to complete the survey successfully.

- Question: "What is a tranquilizer?
- Acceptable answer: "It is a powerful drug prescribed by a doctor to make people feel more relaxed or pain-free."
- Unacceptable answer: "It's the kind of drug your mom took last year when she got out of the hospital. Do you temember that? She took drugs that made her very tired. Those were tranquilizers."



# Data Collection: Administering the Survey—Important Considerations

- Question: "I'm really not sure how to answer this question. Can you tell me what I'm supposed to put down? I don't understand."
- Acceptable answer: "Just read the item carefully and answer it as best as you can."
- Unacceptable answer: "Well, what do you think about the question? Have you done what it's asking about or not? You won't get into trouble if you say you have." OR "Well, just skip it if you don't understand."

#### Data Collection: Attendance Data

- MANILA will provide a form for collecting attendance data.
- Attendance data must be completed for each
- Attendance data should be submitted to MANILA immediately following program completion (for all 15 sessions)

#### Data Collection: Session Assessment Forms (SAF)

- Forms were designed to assess implementation. There should be 1 form completed for each session.
- Forms are to be completed after each session. Do not wait until the end. You will surely forget what happened in previous sessions, even if you think you won't!
- Forms should be submitted to MANILA immediately following program completion.

#### Responsibilities of the AL

The AL is ultimately responsible for ensuring the successful implementation of all study requirements...

...regardless of whether study requirements are being implemented by the AL or by someone other than the AL (e.g., program facilitators, teachers, counselors)

#### Responsibilities of the AL: Data Collection

### Ensure timely data collection and submission

- Surveys are given to the right gid (code = name) at the right time (before and after program; 1-year follow up)
- No one has access to completed surveys
- Session Assessment Forms and attendance data are collected for each session
- All data are submitted to MANILA within 3 days following program completion

#### Responsibilities of the AL: Recruitment and Retention

- Oversee recruitment of girls
- Ensure that participation is voluntary—no coercion or undue influence; no selection of participants
- Provide information sessions to girls and parents



#### Responsibilities of the AL: Recruitment and Retention

- Manage receipt of consent/assent forms and forward to MANILA at least 3 weeks prior to program implementation
- Notify girls of group assignments
- Maintain the confidentiality of the name/ code index

#### Responsibilities of the AL: Recruitment and Retention

- Maintain contact with girls following the program to ensure follow-up surveys can be completed
- Manage distribution of incentives (i.e., gift cards and any other incentives provided)
- Ensure 50 girls (25 treatment/25 control) complete surveys at all 3 time points

# Questions?

Appendix 2. Girls Inc. Friendly PEERsuasion® Refresher Webinar

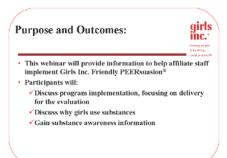












#### Friendly PEERsuasion® Overview



The Girls Inc. Friendly PEERsuasion® program:

- · Builds girls skills for resisting pressure to use harmful substances such as alcohol, tobacco, household chemicals, and
- Uses a peer teaching model to reinforce the skills, information, and motivation to help girls avoid substance use

#### Friendly PEERsuasion® Overview



- · Model Program, Office of Juvenile Justice and Delinquency Prevention, U.S. Department of Justice:
- Model Program, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services: 2005
- Effective program, Center for Substance Abuse Prevention, 2001 Exemplary Program Awards.

#### Friendly PEERsuasion®for Girls Ages 11-14



#### PEERsuaders learn

- Decision-making, assertiveness, and communication skills
- To recognize media and peer pressure
- Ways to recognize and manage stress.
- · The effects of substances on their bodies and minds
- How to conduct activities that help younger "PEERsuade-me's" stay and alcohol-free.

# Why Girls Use Substances



- What are girls like at this age?
- How are their bodies changing?
- · How do they think?
- What are common feelings or worries?
- · How do they relate to their parents?
- How do they relate to their peers?
- What are girls 11-14 interested in? What do they like to do?
- How are their brains developing?

#### Why Girls Use Substances (cont'd)



#### Basic Reasons that Girls Abuse Substances:

- · Peer Pressure
- Stress
- · Body Image
- Abuse
- · Media Pressure

#### Sex Role Socialization & Biological Differences



- Girls tend to have more body image issues.
- When girls use substances, they feel the effects differently due to differences (such as percentage of fat, general weight, etc.) in their body
- Girls many times use substances due to other issues in their lives such as abuse
- Many times society and the juvenile justice system is more lenient towards boys due to the gender stereotype that "boys will be boys"

- The type of behavior that goes with substance abuse is more acceptable and tolerated when exhibited by boys And don't forget... girls tend to try illegal drugs and experience more problems and pressure when with boys.

#### HIV, Substance Use & Risky Behaviors



- HIV is indirectly connected to substance use through the association with increased sexual risk behaviors.
- Some substance use often causes poor judgment and lowers inhibitions, thus people who use these substances are more likely to take risks than they would if they were sober.
- Estimates for the rate of infection for this type of exposure are harder to measure.

#### Did You Know?



In 2007, more than a quarter of diagnoses of HIV infection in the United States were among women and girls aged 13 years and older.

#### HIV, Substance Use & Risky Behaviors



- HIV has been directly connected to substance use through the increase of injectable drugs.
- According to the CDC, injection drug use has been the cause of at least 6% of infections for young people ages 13-24.

#### Did You Know?



In 2007, for female adults and adolescents, the rate of HIV/AIDS diagnoses for black females was nearly 20 times as high as the rate for white females and nearly 4 times as high as the rate for Hispanic/Latino females.

# What is the tobacco connection to HIV?



- Tobacco negatively impacts the immune
- system
   Changes mucous
- New research is starting to link smoking to increasing a chance of contracting HIV



#### Did You Know?



Every 35 minutes a woman tests positive for HIV in the United States.

# HIV and Girls Inc. Friendly PEERsuasion®



- HIV is addressed in sessions 6, 7 & 12 of Girls Inc. Friendly PEER stassions.
- There are also additional sessions and activities in which HIV can be incorporated
- For example, in Session 9.01- "Focus on Alcohol"- one of the Key
  - Drinking is dangerous-...feeling confused and being unable to make good decisions, or feeling silly and taking dangerous

    solve.
- A facilitator could take this a step further by emphasizing that not making good decisions or taking dangerous risks increases their chances for contracting HIV.

#### Summary



The Girls Inc. Friendly PEERsuasion® Program:

- · Approaches substance abuse prevention as a peer issue.
- Uses the positive influence of young people modeling a healthy behavior
- Engages girls as peer teachers to help reinforce information, skills, and program values.

#### Program Updates



- ✓ Revision Rationale
- ✓ Process
- ✓ Significant Changes
- ✓ Electronic Evaluations
- Any old curriculum guides are out of date and need to be thrown away



#### **New Materials**



- 10 tips for parents to provide Latino parents with guidance on talking to and monitoring their pre-teens to help prevent substance use
- Letter to parents to promote participation in PEER, recognizing that parent trust in Girls Inc. and concern about the issue are key to getting Latina girls into programs
- Community flyer to promote PEER in Latino communities as an effective and culturally sensitive strategy for preventing substance use by Latina girls
- Translation for updated curriculum

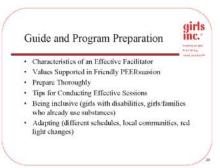






















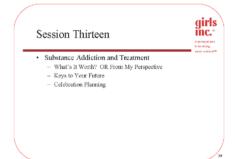


















# **Appendix 3. Friendly PEERsuasion Flyer**

#### Be Part of an Important National Evaluation of Friendly PEERsuasion

Girls Inc. of [your site] is pleased to announce that we are one of seven affiliates nationwide participating in an evaluation of the Friendly PEERsuasion program, a substance abuse prevention program for girls 11–14 years old.

The evaluation is being conducted by MANILA Consulting Group, Inc. under a grant from the Office of Juvenile Justice and Delinguency Prevention.

- ➤ The evaluation will test the effectiveness of Friendly PEERsuasion in helping girls to avoid substance use and related behaviors. It will also look to see if effects last for one year after the program ends.
- ➤ We are recruiting girls ages 11 to 14 who have never been in the Friendly PEERsuasion program to participate in the evaluation.
- ➤ Girls who want to take part in the evaluation must have a parent's (or guardian's) permission.
- ➤ Girls who take part will be assigned either to a group that gets the program or one that does not. Girls who are in the group that gets the program must agree to attend all 15 program sessions.
- ➤ All girls will complete a survey before the program begins, after the program ends, and 1 year later.
- Girls will get gift cards for participating.

This is an exciting opportunity for Girls Inc. to learn more about how our programs are working for the girls we serve.

To Learn More Please...
[Join Us for an Information Session, Time and Date]
[Contact 'specified person' at this number XXX-XXXX]



Appendix 4. Girls Inc. Friendly PEERsuasion Study Implementation Plan

#### Girls Inc. Friendly PEERsuasion Study

#### Implementation Plans through September 2012

This document is designed to help you work through your implementation plans for the Friendly PEER study. Please be thoughtful when completing this document. Your responses will serve as your *final implementation plan* and, as such, should be thorough and realistic. The plan must be implemented at your site, as stated here.

Please plan to complete this document and return it to your site liaison by June 15, 2012. Your site liaison can also be a resource to you as you work to complete the document. Please call or email them with questions or requests for assistance.

#### I. Requirements

To ensure a plan that meets the study timeline, you will need to:

- Have served or enrolled 80% of your sample (40 girls) by September 30, 2012— "Served" includes those girls who have already participated in the study in either the experimental or control group. "Enrolled" includes girls for whom you have signed consent and assent forms and who will participate in the next implementation session in either the experimental or control group. For the "enrolled" group, you must have signed consent and assent forms by September 30, 2012.
- Have served 50 girls by June 1, 2013—including 25 in each of the experimental and control groups<sup>1</sup>

#### II. Specific Implementation Plans

For each of the topic areas, please complete the questions or items as thoroughly as possible.

#### 1. Implementation sessions

- How many implementation cycles are you planning to implement to serve the required 50 girls?
- For each *planned* implementation cycle, please provide specific dates for when each cycle will occur.
- Will there be time to implement additional program cycles if the planned implementation cycles do not include the required 50 girls?
  - > If yes, when will those additional sessions occur? Please provide specific dates.

<sup>&</sup>lt;sup>1</sup> You have agreed to oversample by 10 girls, bringing the total number of girls you should *plan* to serve to 60, 30 in each of the experimental and control groups.



- If not, how will the required 50 girls be served?
- 2. Recruitment, including obtaining assent and consent

For each implementation cycle planned:

- From what sites (e.g., schools, organizations, and/or centers) will girls be recruited?
- From what other sites will girls be recruited, should those sites listed above decline to participate or fail to produce sufficient numbers of girls?
- How will girls be recruited into the study? Specifically, what recruitment activities will be implemented to recruit girls into the study?
- What other activities will be implemented should planned recruitment activities not generate interest among a sufficient number of girls?
- During what specific timeframe will these recruitment activities be implemented?
- How will assent be obtained from girls? Specifically, what activities will be implemented to obtain assent from girls?
- What specific follow up activities will be implemented to ensure the highest possible numbers of assent forms?
- How will parental consent be obtained? Specifically, what activities will be implemented to obtain parental consent?
- What specific follow up activities will be implemented to ensure the highest possible numbers of parental consent forms?
- During what specific timeframe will activities to obtain assent and consent be implemented?
- 3. Program specific factors

For each implementation cycle referenced in number 1, above:

- Where will each session take place? That is, at what specific location will each session be implemented?
- How often will program sessions be implemented (e.g., once per week, twice per week)?
- What activities will be implemented to ensure girls attend at least 12 of the 15 program sessions?



- ➤ Will incentives be provided to girls to increase attendance and decrease attrition rates? If yes, what incentives will be provided?
- What other activities will be implemented to ensure girls attend the required number of program sessions?

#### 4. Tracking girls over time

- How will girls be tracked over time? Specifically, what activities will be implemented to track girls to complete the 1-year follow up survey?
  - ➤ How often will each activity be implemented? For example, if email reminders will be sent to each girl, how often will these emails be sent? In addition, how will you maintain a current email list?
- How will you ensure you reach 50 girls to complete the 1-year follow up survey?
  - ➤ Will any additional incentives (i.e., incentives other than the gift cards MANILA will supply) be provided to girls to increase participation? If yes, what incentives will be provided?
  - > What other activities will be implemented to ensure 50 girls complete the 1- year

# **Appendix 5. Facilitator's Session Assessment Form: Friendly PEERsuasion**

#### Facilitator's Session Assessment Form: Friendly PEERsuasion

The following form is designed to provide information about how you are implementing the Friendly PEERsuasion curriculum. This information will be used as part of the evaluation for both program improvement and to provide a context for interpreting the pretest and posttest survey results.

You should complete one of these forms for each of the 15 Friendly PEERsuasion sessions. It is important that you complete the form as soon after each session as possible. Completing the form immediately after each session will help ensure that information about the session is still fresh in your mind. Please try to be as thorough and complete as possible when completing the form.

Please send the 15 completed forms (one for each session) to your MANILA Site Affiliate, along with your attendance records, and your surveys.

Thank you very much for taking the time to provide this important information.

In	Instructor's name:				
C	Community organization:				
Se	Session date:				
Se	ession number/name:				
N	umber of participants:				
_					
1.	How long did the session last?				
2.	Overall, I thought this session went (check one):				
	Very Well Okay Poorly				
	2a. If you checked "okay" or "poorly," please tell us why.				
3.	To what extent did you address each of the topics covered in this session? (check one)				
	Not at all SomewhatMostlyCompletely				
	3a. If you checked "somewhat" or "not at all," please tell us why.				
4.	Are there topics that you covered that are not part of the Friendly PEERsuasion curriculum?				
	If yes, please explain.				
5.	I felt the participants were fully engaged during the session				
	Not at all SomewhatMostlyCompletely				
	5a. If you checked "somewhat" or "not at all," please tell us why.				
6.	The most successful activity in this session was:				
	because				

7.	The	e least successful activity in this session was:	
		because	
8.	Nex	xt time, I will spend more time on (specific topics, activities, etc.):	
		and less time on	
9.	Oth	ner suggestions for improving this session in the future include:	
10.		ring this session, I made use of the following helpful resources not specifically recon riculum (check all that apply):	nmended in the
		films or filmstrips	
		DVDs or videos	
		charts	
		handouts	
		activities	
		role-play situations	
		speakers	
		other (please explain)	

# **Appendix 6. Friendly PEERsuasion Survey**



#### FRIENDLY PEERSUASION SURVEY

Please answer the following questions about yourself. ☐ Yes ☐ No 1. Are you Hispanic or Latina? (Pick one) 2. What is your race? (Select one or more) Alaska Native Black or African American Asian White Other (specify) American Indian Native Hawaiian or Other Pacific Islander 3. How old are you? \_ 4. What grade are you in at school? \_\_\_\_\_\_ 5. I live with the following (please circle all that apply) a. Mom and Dad f. Sister(s) b. Dad only g. Other relatives (aunt, uncle, cousin) c. Mom only h. Caregiver d. Grandparents i. Other, please specify e. Brother(s)

Please answer the next set of questions by circling the answer that best fits for you. Please answer questions honestly. Remember, your answers are private, which means that your name and responses will not be connected.



Think of your four best friends (the friends you feel closest to). In the past month, how many of your best friends have:

6.	smoked cigarettes?				
	None	1	2	3	4
7.	tried beer, wine parents didn't l	e or hard liquor (fo know about it?	or example, vodka	, whiskey, or gin)	when their
	None	1	2	3	4
8.	used marijuana?				
	None	1	2	3	4
9.	used LSD, coca	ine, amphetamine	s, or other illegal	drugs?	
	None	1	2	3	4
10.	made a commitment to stay drug-free?				
	None	1	2	3	4
11.	sold illegal drugs?				
	None	1	2	3	4



The next questions are about what you think and believe about the use of alcohol, tobacco, and other drugs. Please check the answer that best fits for you. For example, if the statement is true for you, check "true."

	•				
12.	It is clear to my friends that I am committed to living a drug-free life.	False Maybe True			
13.	I have made a final decision to stay away from marijuana.	False Maybe True			
14.	I have decided that I will smoke cigarettes.	False Maybe True			
15.	I plan to get drunk sometime in the next year.	False Maybe True			

WHAT DAY OF THE WEEK IS IT?	

For the next set of questions, please check the answer that describes how much risk you think is involved with each activity described. For example, if you think there is a lot of risk involved, check "great risk." If you're not sure, check "Can't say/Drug unfamiliar."

16.	How much do you think people risk harming themselves (physically or in other ways) if they smoke one or more packs of cigarettes per day?	No risk Slight risk Moderate risk Great risk Can't say/Drug unfamiliar
17.	How much do you think people harm themselves (physically or in other ways) if they try marijuana once or twice?	No risk Slight risk Moderate risk Great risk Can't say/Drug unfamiliar
18.	How much do you think people risk harming themselves (physically or in other ways) if they smoke marijuana regularly?	No risk Slight risk Moderate risk Great risk Can't say/Drug unfamiliar
19.	How much do you think people risk harming themselves (physically or in other ways) if they take one or two drinks nearly every day?	No risk Slight risk Moderate risk Great risk Can't say/Drug unfamiliar
20.	How much do you think people risk harming themselves (physically or in other ways) if they have five or more drinks once or twice each weekend?	No risk Slight risk Moderate risk Great risk Can't say/Drug unfamiliar



For the next set of questions, please check the answer that best describes how wrong you think each behavior is. For example, if you think something is really wrong, check "very wrong."



21.	How wrong do you think it is for someone your age to drink beer, wine, or hard liquor (for example, vodka, whiskey or gin) regularly?	Very wrong Wrong A little bit wrong Not wrong at all
22.	How wrong do you think it is for someone your age to smoke cigarettes?	Very wrong Wrong A little bit wrong Not wrong at all
23.	How wrong do you think it is for someone your age to smoke marijuana?	Very wrong Wrong A little bit wrong Not wrong at all
24.	How wrong do you think it is for someone your age to use LSD, cocaine, amphetamines or another illegal drug?	Very wrong Wrong A little bit wrong Not wrong at all

WHAT IS YOUR	FAVORITE SUBJECT IN SCHOOL?	

The next questions ask if you've used alcohol, tobacco, and other drugs, and if so, how often in the past 30 days. Please answer this set of questions by checking the answer that best fits for you. Please answer questions honestly. Remember, your answers are private, which means that your name and responses will not be connected.

25.	How frequently have you smoked cigarettes during the past 30 days? (Pick one)		
	Not at all Less than one cigarette per day One to five cigarettes per day About one-half pack per day	per day Two packs or more per day	
26.	To be more specific, during the past 30 darsmoked per day? (Pick one)	ys about how many cigarettes have you	
	None Less than 1 per day 1 to 2 3 to 7 8 to 12 13 to 17	18 to 22 23 to 27 28 to 32 33 to 37 38 or more	
27.	How frequently have you smoked Salvia du	uring the past 30 days? (Pick one)	
	Not at allOnce or twiceOnce or twice per week	Three to five times per week About once a day More than once a day	
28.	On how many occasions during the last 30 drink (more than just a few sips)? (Pick on	e) ´	
	0 occasions 1 to 2 occasions 3 to 5 occasions 6 to 9 occasions	10 to 19 occasions 20 to 39 occasions 40 or more occasions	
29.	On how many occasions during the last 30 high from drinking alcoholic beverages? (P	days (if any) have you been drunk or very ick one)	
	0 occasions 1 to 2 occasions 3 to 5 occasions 6 to 9 occasions	10 to 19 occasions 20 to 39 occasions 40 or more times	
30.	On how many occasions during the last 30 (grass, pot) or hashish (hash, hash oil)? (F	Pick one)	
	0 occasions 1 to 2 occasions 3 to 5 occasions 6 to 9 occasions	10 to 19 occasions 20 to 39 occasions 40 or more occasions	
31.	During the LAST MONTH, about how many the equivalent, did you smoke a day, on a	marijuana cigarettes (joints, reefers), or verage? (Pick one)	
	None Less than one a day 1 a day 2 to 3 a day	4 to 6 a day 7 to 10 a day 11 or more a day	



	*	
32.	On how many occasions during the last 30 breathed the contents of aerosol spray can get high? (Pick one)	
	0 occasions 1 to 2 occasions 3 to 5 occasions 6 to 9 occasions	10 to 19 occasions 20 to 39 occasions 40 or more occasions
33.	On how many occasions (if any) during the (Pick one)	e last 30 days have you taken LSD ("acid")?
	0 occasions 1 to 2 occasions 3 to 5 occasions 6 to 9 occasions	10 to 19 occasions 20 to 39 occasions 40 or more occasions
34.	On how many occasions (if any) during the amphetamines on your own that is, withou one)	
	0 occasions 1 to 2 occasions 3 to 5 occasions 6 to 9 occasions	10 to 19 occasions 20 to 39 occasions 40 or more occasions
35.	On how many occasions (if any) during the (cocaine in chunk or rock form)? (Pick one)	
	0 occasions 1 to 2 occasions 3 to 5 occasions 6 to 9 occasions	10 to 19 days 20 to 39 occasions 40 or more occasions
36.	On how many occasions (if any) during the any other from (like cocaine powder)? (Pict	
	0 occasions1 to 2 occasions3 to 5 occasions 6 to 9 occasions	10 to 19 occasions 20 to 39 occasions 40 or more occasions

HOW MANY BROTHERS AND SISTER DO YOU HAVE? \_



On how many occasions (if any) have you taken tranquilizers on your own that is without a doctor telling you to take themduring the last 30 days? (Pick one)		
	0 days 1 to 2 occasions 3 to 5 occasions 6 to 9 occasions	10 to 19 occasions 20 to 39 occasions 40 or more occasions
38.	On how many occasions (if any) have you without a doctor telling you to take them	taken barbiturates on your own that is, during the last 30 days? (Pick one)
	0 occasions 1 to 2 occasions 3 to 5 occasions 6 to 9 occasions	10 to 19 occasions 20 to 39 occasions 40 or more occasions
39.	On how many occasions (if any) have you meth (ice)during the last 30 days? (Pick	one)
	0 occasions 1 to 2 occasions 3 to 5 occasions 6 to 9 occasions	10 to 19 occasions 20 to 39 occasions 4 or more times per day
40.	On how many occasions (if any) have you without a doctor telling you to take them	during the last 30 days? (Pick one)
	0 occasions 1 to 2 occasions 3 to 5 occasions 6 to 9 occasions	10 to 19 occasions 20 to 39 occasions 40 or more occasions
41. <b>1</b>	one)	used heroinduring the last 30 days? (Pick
	6 to 9 occasions	10 to 19 occasions20 to 39 occasions40 or more occasions
12.	On how many occasions (if any) have you to own that is, without a doctor telling you to one)	taken narcotics other than heroin on your take themduring the last 30 days? (Pick
	0 occasions 1 to 2 occasions 3 to 5 occasions 6 to 9 occasions	10 to 19 occasions 20 to 39 occasions 40 or more occasions
43.	On how many occasions (if any) have you used MDMA (ecstacy) during the last 30 days? (Pick one)	
	0 occasions 1 to 2 occasions 3 to 5 occasions 6 to 9 occasions	10 to 19 occasions20 to 39 occasions40 or more occasions
	39.	without a doctor telling you to take them  0 days 1 to 2 occasions 6 to 9 occasions 6 to 9 occasions 7 to 2 occasions 88. Without a doctor telling you to take them  0 occasions 1 to 2 occasions 1 to 2 occasions 6 to 9 occasions 6 to 9 occasions 7 to 2 occasions 89. On how many occasions (if any) have you meth (ice)during the last 30 days? (Pick occasions 1 to 2 occasions 1 to 2 occasions 6 to 9 occasions 1 to 2 occasions

44.	On how many occasions (if any) have you last 30 days? (Pick one)	used Rohypnol (rophies, roofies) during the
	0 occasions 1 to 2 occasions 3 to 5 occasions 6 to 9 occasions	10 to 19 occasions 20 to 39 occasions 40 or more occasions
45.	During the last 30 days, on how many occ G, grievous bodily harm)? (Pick one)	casions (if any) have you used GHB (liquid
	0 occasions 1 to 2 occasions 3 to 5 occasions 6 to 9 occasions	10 to 19 occasions20 to 39 occasions40 or more occasions
46.	During the last 30 days, on how many occ (special K, super K)? (Pick one)	casions (if any) have you used Ketamine
	0 occasions 1 to 2 occasions 3 to 5 occasions 6 to 9 occasions	10 to 19 occasions 20 to 39 occasions 40 or more occasions
47.	On how many occasions (if any) in your li more than just a few sips? (Pick one)	fetime have you had an alcoholic beverage-
	Never 1 to 2 3 to 5 6 to 9	10 to 19 20 to 39 40 or more
	and the second and affirm the health	

Please answer the next set of questions by telling us how old you were the first time you engaged in the behavior described. If you have never engaged in the behavior, please tell us that by writing, "Never."

- 48. How old were you the first time you smoked part or all of a cigarette?
- 49. How old were you the first time you had a drink of an alcoholic beverage? (Please do not include any time when you had only a sip or two from a drink.)
- 50. How old were you the first time you used marijuana or hashish?



51. How old were you the first time you used any other illegal drugs?

Appendix 7. Youth Assent and Parent Consent Forms
Appendix 7. Youth Assent and Parent Consent Forms
Appendix 7. Youth Assent and Parent Consent Forms
Appendix 7. Youth Assent and Parent Consent Forms
Appendix 7. Youth Assent and Parent Consent Forms
Appendix 7. Youth Assent and Parent Consent Forms
Appendix 7. Youth Assent and Parent Consent Forms

# Evaluation of Friendly PEERsuasion Youth Assent Form

## Introduction

Girls Inc., in partnership with MANILA Consulting Group, Inc., has received a grant from the Office of Juvenile Justice and Delinquency Prevention (OJJDP) to conduct an evaluation of Friendly PEERsuasion (Friendly PEER), a prevention program designed to help girls your age avoid alcohol, tobacco and other drugs.

## What am I being asked to do?

You are being asked to take part in the evaluation of Friendly PEER. Your parent has already given their consent (which means they said it's ok) for you to take part, but that does not mean you have to participate. Your participation is totally voluntary, which means it is up to you to decide if you want to participate.

Please read this form carefully. Ask any questions you may have before you agree to take part in the evaluation.

## What is the evaluation about?

The evaluation will look at whether the Friendly PEER program changes girls' attitudes about and use of alcohol, tobacco, and other drugs. It will also look to see if effects last for one year after the program ends. We will do this by looking at survey results for girls who get the Friendly PEER program and those who do not.

## What will we ask you to do if you choose to take part in the evaluation?

If you agree to take part in the evaluation, we will include your name on a list with all of the other girls who agreed to take part in the evaluation. We will then use a process similar to flipping a coin to assign you and the other girls to either a group that gets the Friendly PEER program or one that does not. You have a 50-50 chance of being assigned to the group that gets the program or to the one that does not. If you are assigned to the group that does not get the program, you will not be able to get the program for one year. But, you will be able to take part in other Girls Inc. programs during the one year time period.

If you agree to participate, you (and all the other girls who agree to participate) will complete a survey at three time points: (1) before the Friendly PEER program begins, (2) immediately after the program ends, and (3) one year later. We will use the survey to collect information about girls' behaviors and thoughts around alcohol and drugs and hanging out with friends that may or may not use alcohol or drugs. The survey will take about 15-20 minutes to complete. Your name will not be on the survey. Instead you will be identified by a number that will be given to you at the beginning of the evaluation

Form approved by MANILA Consulting Group, Inc. IRB. Valid 2/19/14-2/18/15.



**Taking part is voluntary:** You can only take part in the evaluation if you agree to do so. This means that no one can make you take part in the evaluation. If you do not want to take part in the evaluation, it is ok. It won't change how you are treated at [name affiliate] or the activities you get to do there. You can also say yes and quit later if you change your mind, or say yes and skip some of the questions on the survey.

**Risks and benefits:** There are no major expected risks or benefits to you for taking part in the evaluation. Your name will not be included on your survey.

**Compensation:** If you are assigned to the group that **does not** get the Friendly PEER program, you will get a gift card for \$15 when you complete and submit the first survey and another \$15 gift card when you complete and submit the second survey. All girls (those who get the program and those who do not) will get a \$20 gift card when they submit the one-year follow up survey.

## How will my survey answers be kept private?

- In any type of report we write, we will not include anyone's name, including yours.
- We will keep surveys in a locked file cabinet at our office in McLean, VA and only the
  evaluation team will have a key to it. No one else but the team will see your survey
  answers.
- Surveys and other study materials will be shredded 3 years after the evaluation ends.

What if I have questions? Please ask any questions you have now. If you have questions later, you may contact XXX. If you have any questions or concerns about your rights as someone participating in this evaluation, you may contact XXX, MANILA Institutional Review Board (IRB) Chair, at XXX.

You will be given a copy of this form to keep for your records.

**Statement of Consent:** I have read and understand the information on this form. Also, all of my questions have been answered to my satisfaction. I agree to take part in the evaluation.

Your Signature	Date
Your Name (printed)	
Name of youth for whom permission to partic	cipate is granted:
	Date
This consent form will be kept by the research the evaluation and was approved by the IRB	cher for at least three years beyond the end of on December 19, 2011.

Form approved by MANILA Consulting Group, Inc. IRB. Valid 2/19/14-2/18/15.



## **Evaluation of Friendly PEERsuasion**

#### Parent/Guardian Consent Form

#### Introduction

Girls Inc., in partnership with MANILA Consulting Group, Inc., has received a grant from the Office of Juvenile Justice and Delinquency Prevention (OJJDP) to conduct an evaluation of Friendly PEERsuasion (Friendly PEER), a prevention program designed to help girls ages 11 to 14 avoid alcohol, tobacco and other drugs.

#### What am I being asked to do?

You are being asked to give consent for your daughter to take part in the evaluation. Participation is totally voluntary.

Please read this form carefully. Ask any questions you may have before you give consent for your daughter to take part in the evaluation. If you give consent for her to participate, we will ask her if she would like to take part as well. If she does, we will give her a form like this one to review and sign. The form will include all of the information below.

#### What is the evaluation about?

The evaluation will look at whether the Friendly PEER program changes girls' attitudes about and use of alcohol, tobacco, and other drugs. It will also look to see if effects last for one year after the program ends. We will do this by looking at survey results for girls who get the Friendly PEER program and those who do not.

#### What will we ask your daughter to do?

If you give consent for your daughter to participate, we will ask her if she would like to take part as well. If she does, we will give her a form like this one to review and sign. After she does that, we will include her name with all of the other girls who will take part in the evaluation. We will then use a process similar to flipping a coin to assign girls to either a group that gets the Friendly PEER program or one that does not. Each girl (including your daughter) has a 50-50 chance of being assigned to the group that gets the program or to the one that does not. The girls who are assigned to the group that does not get the program will not be able to get the program for one year. But, they will be able to take part in other Girls Inc. programs during the one year time period.

Girls in both groups will complete a survey at three time points: (1) before the Friendly PEER program begins, (2) immediately after the program ends, and (3) one year later. We will use the survey to collect information about girls' behaviors and thoughts around alcohol and drugs and

1



hanging out with friends that may or may not use alcohol or drugs. The survey will take about 15-20 minutes to complete. Your daughter's name will not be on the survey. Instead she will be identified by a number given to her at the beginning of the evaluation.

Taking part is voluntary: Your daughter can only take part in the evaluation if you give consent and she chooses to participate. This means that no one can make you or your daughter take part in the evaluation. If you do not give consent or you do but your daughter does not want to be in the evaluation, it is ok. It won't change how you or your daughter is treated at [name affiliate] or the activities she gets to do there. Your daughter can also say yes and quit later if she changes her mind, or say yes and skip some of the questions on the survey.

**Risks and benefits:** There are no major expected risks or benefits to you or your daughter. Your daughter's name will not be included on the survey she completes.

**Compensation:** Girls who do not get the Friendly PEER program will get a gift card for \$15 when they submit the first survey and another \$15 gift card when they submit the second survey. All girls (i.e., those who get the program and those who do not) will get a \$20 gift card when they submit the one-year follow up survey.

#### How will my daughter's survey results be kept private?

- In any type of report we write, we will not include anyone's name, including your daughter's
- We will keep surveys in a locked file cabinet at our office in McLean, VA and only the
  evaluation team will have a key to it. No one else but the team will see anyone's survey
  answers.
- Surveys and other study materials will be shredded 3 years after the evaluation ends.

<u>What if I have questions?</u> Please ask any questions you have now. If you have questions later, you may contact XXX at XXX. If you have any questions or concerns about your daughter's rights as someone participating in this evaluation, you may contact XXX, MANILA Institutional Review Board (IRB) member, at XXX.

You will be given a copy of this form to keep for your records.

<u>Statement of Consent:</u> I have read and understand the information on this form. Also, all of my questions have been answered to my satisfaction. I give consent for my daughter (or child in my care) to take part in the evaluation, as long as she agrees to participate.

Your Signature	_ Date
Your Name (printed)	

2



Name of youth for whom permission to participate is grante	d:
	_ Date
This consent form will be kept by the researcher for at least evaluation and was approved by the IRB on December 19,	, ,

3

Appendix 8. Instructions for Survey Administration

## **Instructions for Survey Administration**

## Thank you for being a part of the Friendly PEERsusaion evaluation

Before you begin, please keep in mind a few important considerations related to survey administration:

- 1. Please be sure each girl has the correct survey. Each survey has been coded with a number that has already been matched to a specific girl. Please be sure that each girl receives the survey that is coded with her assigned number.
- 2. Instructions are included in the pages that follow (Introductory Script for Survey Administration). Please read the instructions verbatim, and do so slowly and clearly. Instructions can be repeated, if necessary.
- 3. Once surveys are completed, please make sure that each girl inserts her survey into the manila envelope sent for this purpose. Do not allow girls to hand their surveys to you. They must insert them into the envelope themselves.
- 4. Once all the surveys have been completed and inserted into the envelope, seal the envelope and send it to MANILA. Please do not review the surveys or take them out of the envelope for any reason.



## **Introductory Script for Survey Administration**

- 1. Girls Inc. of [affiliate name] is participating in a national evaluation of the Friendly PEERsuasion program.
- 2. The evaluation is being conducted by MANILA Consulting Group, Inc. under a grant from the Office of Juvenile Justice and Delinquency Prevention.
- The evaluation will tell us if Friendly PEERsuasion helps girls like you to avoid using alcohol, tobacco and other drugs. The survey you fill out today will help answer important questions about how well the program works.
- 4. The survey asks questions about your and your friends' attitudes about and use of alcohol, tobacco, and other drugs.
- 5. This is not a test. There are no right or wrong answers and you will not be timed. The survey should take about 20 to 25 minutes, but if you need more time, that's ok.
- 6. The answers you give are very important. Please read each question or statement carefully and answer it based on what you really know or do. Always answer the questions truthfully and as best as you can. Don't pick a response just because you think it's what someone wants you to pick. Make sure your response is based on what *you* think.
- 7. Your answers are private. As you can see, there is a number on your survey instead of your name. This is to protect your privacy by making sure your answers are not connected with your name. Do not put your name anywhere on the survey. No one other than the research team at MANILA will be able to connect you with your answers. No one here at [center or school name] will ever see your answers.
- 8. Completing the survey is voluntary. You are here because your parents (or guardians) gave their permission for you to take part, but you don't have to take the survey or complete any questions that you do not want to answer. If there are questions that you do not want to answer, simply skip them and go onto the other questions. However, remember that your answers are private. No one here at [center or school name] will ever see your answers.

## Anyone who does not wish to participate should tell me now.2

9. For all questions, read the instructions for each section and then mark your answers right on the survey.

MANILA

<sup>&</sup>lt;sup>2</sup> If there are girls who do not wish to participate, they will need to leave the room at this point.

10. Now you can read the directions on the first page and go to question number 1. When you have completed the entire survey, put your survey in this envelope (*hold up the envelope*). Do not hand your survey to me. To make sure your answers stay private, you need to put your survey in the envelope yourself. When everyone is done and all the surveys are in the envelope, I will seal it and mail it to the research team.

If you have any questions, please raise your hand. I may not be able to answer all of your questions, but I'll try to help you if I can.

Thank you. Please begin.