



Report
February 2015

**Evaluation of
Iowa's Personal
Responsibility
Education
Program (PREP):
Findings from
2013-2014**

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Contents

Background	4
<i>Teen Outreach Program (TOP)</i>	4
<i>Wise Guys</i>	4
Methods	4
Results: TOP program.	5
<i>Pre-test results</i>	5
Results: TOP program.	11
<i>Post-test results</i>	11
Results: TOP program.	16
<i>Pre-post comparisons</i>	16
Results: Wise Guys program	19
<i>Pre-test results</i>	19
Results: Wise Guys program	25
<i>Post-test results</i>	25
Results: Wise Guys program	30
<i>Pre-post comparisons</i>	30
Results: TOP and Wise Guys programs	33
<i>Pre-test results</i>	33
Results: TOP and Wise Guys programs	39
<i>Post-test results</i>	39
Results: TOP and Wise Guys programs	45
<i>Pre-post comparisons.</i>	45
Discussion	49
<i>Network size and density</i>	49
<i>Communication patterns</i>	49
<i>Other sources of information about birth control and STI's</i>	49

Introduction

Background

The influence of a person's social network on health has been well-documented. Previous studies with adolescent populations demonstrate the influence of relationships with both peers and family members on behavior. Family and peers can influence adolescents' behavior through communication of attitudes or through modeling behavior. Parental attitudes about sex (Metzler et al., 1994; Miller, Forehand, & Kotchik, 1999; Thornton & Camburn, 1987; Small & Luster, 1994), for instance, are related to adolescent sexual behavior. Peer-to-peer attitudes have a similar relationship with adolescent behavior. Peer pressure, a way in which peers share their attitudes about certain behaviors, significantly influences behavioral outcomes across a variety of contexts including alcohol and tobacco consumption, theft, and sexual attitudes (Santor, Messervey, & Kusumakar, 2000).

The study outlined in this report examines the relationship between network characteristics (i.e. density, total network size, and network composition) and communication patterns on a diverse range of topics including friendships, romantic relationships, and abstinence, as well as birth control and sex. The findings for this study come from pre- and post-test assessments conducted with adolescents before and after they took part in one of two adolescent pregnancy prevention programs: Teen Outreach Program (TOP) or Wise Guys.

Teen Outreach Program (TOP)

The Teen Outreach Program® is a comprehensive, evidence-based youth development curriculum that promotes the positive development of adolescents, ages 12–18 years, through a combination of group discussion and community service learning. Core activities across the curriculum include values clarification, healthy relationships, communication, goal-setting, decision-making, development, and sexual health. The most unique aspect of TOP® is the community service learning component, where youth engage in 20 hours of service over the nine-month implementation period. The service projects have included making dog toys for animal shelters, helping to organize a community-wide AIDS walk, and working on a bullying awareness project.

Wise Guys

The Wise Guys® model is a 12-week curriculum designed to prevent adolescent pregnancy by helping 11–17-year-old males make better, wiser decisions about sexuality. The evidence-based program is committed to empowering young men with the knowledge they need to make effective decisions, encouraging them to respect themselves and others, helping them to understand the importance of male responsibility, and improving their communication with parents, educators, peers, and others. In an area where adolescent males are the forgotten gender, this curriculum allows them to be at the table discussing sexual health issues.

Methods

Note these results only represent the participants we have both pre and posttest data from. Due to illness and students dropping out of the program, not all participants in the evaluation completed pre and posttest data collections. Participants were asked to draw their social networks by writing their name at the center of a poster board and then adding labels of important people in their lives ("alters") around their name. Participants drew lines connecting individuals who personally knew each other. Interviewers asked the participants questions about nine topics: friendships, romantic partners, masculinity/femininity, sex,

abstinence, birth control, sexually transmitted diseases, and recognizing the signs of suicide and depression. The topics were based on subjects covered in the pregnancy prevention programs. For each topic, adolescents were asked to indicate individuals they have talked to, would talk to, and would not talk to, respectively, by placing a unique sticker next to the names of people in their network. The questions were all structured similarly (ex., “Sometimes people have questions or concerns about their relationship with friends or their friendships. Have you talked with someone about friendships? Who?”). For each topic, subjects were probed about why they would or would not talk to a person in their network. They were also asked about the content of the communication.

Results: TOP program

Pre-test results

Table 1. Descriptive statistics of respondent characteristics in TOP program

Variable	Mean	Standard Deviation	Minimum	Maximum	n
Age	16.03	2.66	11	23	60
Grade	10.17	1.81	6	12	60
Gender (1=Female)	68.0%	0.47	0	1	60

Variable	Mean percent	n
Race/Ethnicity		
White	78.0%	58
Black	2.00%	60
Other	20.0%	60
Biracial	3.00%	61
In a romantic relationship	44.0%	57
Family Structure		
Two-parent	37.0%	57
Single-parent	29.0%	57
Step-parent	16.0%	57
Grandparent	5.00%	57
Other	12.0%	57

The average age of respondents in the TOP program was 16 years old, with a minimum of 11 years and a maximum of 23 years. The majority of respondents were female (almost 70%) and white (almost 80%). Forty-four percent of respondents reported that they were in a relationship. Most respondents came either from a two-parent (37%) or a single-parent (29%) household.

Tables 2-5. Network characteristics (pre-test) for respondents in TOP program, n=61

Variable	Mean	Percentage	Standard Deviation	Minimum	Maximum
Network size	7.77	---	2.73	1	16
Network density	0.44		0.30	0	1

Variable	Percentage	Interpretation
The percent of respondents that included these types of alters:		
Family	100.0%	100% of respondents had at least one family member in their network.
Friend	46.0%	46% of respondents had at least one friend in their network.
Best friend	62.0%	62% of respondents had at least one best friend in their network.
Other peers	14.0%	14% of respondents had at least one other peer in their network.
Romantic partners	41.0%	41% of respondents had at least one romantic partner in their network.
Other professionals	25.0%	25% of respondents had at least one other professional in their network.
Media	3.0%	3% of respondents had at least one media alter in their network.
Teachers	31.0%	31% of respondents had at least one teacher in their network.
IDPH representatives	7.0%	7% of respondents had at least one IDPH representative in their network.
Coaches	10.0%	10% of respondents had at least one coach in their network.
Others related to job	6.0%	6% of respondents had at least one alter related to their job in their network.
Religious leaders	2.0%	2% of respondents had at least one religious leader in their network.
Other adults	11.0%	11% of respondents had at least one other adult in their network.
Other alter type	10.0%	10% of respondents had at least one other alter type in their network.

Variable	Mean	Interpretation
Average number of the type of alters in the network		
Family	4.23	The average respondent put 4.23 family members in his or her network.
Friend	0.84	The average respondent put .84 friends in his or her network.
Best friend	0.85	The average respondent put .85 best friends in his or her network.
Other peers	0.20	The average respondent put .20 other peers in his or her network.
Romantic partners	0.43	The average respondent put .43 romantic partners in his or her network.

Other professionals	0.30	The average respondent put .30 other professionals in his or her network.
Media	0.05	The average respondent put .05 media alters in his or her network.
Teachers	0.40	The average respondent put .40 teachers in his or her network.
IDPH representatives	0.07	The average respondent put .07 IDPH representatives in his or her network.
Coaches	0.10	The average respondent put .10 coaches in his or her network.
Others related to job	0.07	The average respondent put .07 alters related to a job in his or her network.
Religious leaders	0.02	The average respondent put .02 religious leaders in his or her network.
Other adults	0.11	The average respondent put .11 other adults in his or her network.
Other alter type	0.15	The average respondent put .15 other alter types in his or her network.

Variable	Mean	Percentage	Interpretation
Average percent of type of alters in network			
Family	0.54	54.0%	For the average respondent, family made up 54% of his or her network.
Friend	0.11	11.0%	For the average respondent, friends made up 11% of his or her network.
Best friend	0.11	11.0%	For the average respondent, best friends made up 11% of his or her network.
Other peers	0.02	2.0%	For the average respondent, other peers made up 2% of his or her network.
Romantic partners	0.06	6.0%	For the average respondent, romantic partners made up 6% of his or her network.
Other professionals	0.04	4.0%	For the average respondent, other professionals made up 4% of his or her network.
Media	0.01	1.0%	For the average respondent, media made up 1% of his or her network.
Teachers	0.05	5.0%	For the average respondent, teachers made up 5% of his or her network.
IDPH representatives	0.01	1.0%	For the average respondent, IDPH representatives made up 1% of his or her network.
Coaches	0.01	1.0%	For the average respondent, coaches made up 1% of his or her network.
Others related to job	0.01	1.0%	For the average respondent, other alters related to a job made up 1% of his or her network.
Religious leaders	0.00	0.0%	For the average respondent, religious leaders made up 0% of his or her network.
Other adults	0.01	1.0%	For the average respondent, other adults made up 1% of his or her network.
Other alter type	0.01	1.0%	For the average respondent, other alter types made up 1% of his or her network.

Participants in TOP began the program with an average of almost 8 individuals in their social networks, with a range between 1 alter and 16 alters. On average, family members comprised over 50% of the alters in the respondents' social networks. The average network density was .44, indicating that on average 44% of alters in respondents' networks knew each other.

Table 6. Communication characteristics by topic area (pre-test) for respondents in the TOP program, n=61

Variable	Mean	Standard Deviation	Minimum	Maximum
Average number of alters who R has talked to about:				
Friendships	3.79	2.02	0	9
Romantic relationships	3.00	1.65	0	7
Decision making	4.28	2.35	0	10
Masculinity/Femininity	1.97	1.70	0	7
Sex	2.97	1.93	0	9
Abstinence	1.36	1.46	0	6
Birth control	2.49	1.65	0	6
STI	1.80	1.62	0	6
Suicide	2.21	1.92	0	7
Average number of alters who R would talk to about:				
Friendships	3.13	1.97	0	10
Romantic relationships	2.77	1.65	0	8
Decision making	3.56	2.31	0	9
Masculinity/Femininity	2.15	1.76	0	8
Sex	2.28	1.52	0	6
Abstinence	1.70	1.43	0	5
Birth control	2.07	1.57	0	7
STI	2.11	1.63	0	6
Suicide	2.93	2.20	0	10
Average number of alters who R would not talk to about:				
Friendships	1.39	1.27	0	6
Romantic relationships	1.92	1.54	0	6
Decision making	1.31	1.53	0	6
Masculinity/Femininity	1.87	1.69	0	7
Sex	2.48	1.59	0	8
Abstinence	1.89	2.12	0	9
Birth control	1.72	1.57	0	8
STI	2.00	1.84	0	8
Suicide	1.18	1.63	0	6

Respondents in the TOP program reported that they **have talked** and **would talk** about topics related to friendships and decision-making with the most alters in their social networks. The topics that respondents had discussed with the least number of alters in their networks were abstinence (1.36 alters), birth control (1.49 alters), and STIs (1.80 alters). Respondents would **not** talk to the most amount of alters about sex (2.48 alters) and STIs (2 alters).

Table 7. Communication characteristics by type of alter (pre-test) for respondents in the TOP program, n=61

Variable	Mean	Standard Deviation	Minimum	Maximum
Average total network members R has talked to	6.21	2.13	1	12
Average total network members R would talk to	5.87	2.40	1	11
Average total network members R would not talk to	4.62	2.09	1	9
Type of alter R has talked to most:				
Family	0.89	0.32	0	1
Friend	0.10	0.30	0	1
Best friend	0.15	0.36	0	1
Other peers	0.00	0.00	0	0
Romantic partners	0.05	0.22	0	1
Other professionals	0.02	0.13	0	1
Media	0.00	0.00	0	0
Teachers	0.05	0.22	0	1
IDPH representatives	0.00	0.00	0	0
Coaches	0.00	0.00	0	0
Others related to job	0.00	0.00	0	0
Religious leaders	0.00	0.00	0	0
Other adults	0.00	0.00	0	0
Other alter type	0.02	0.13	0	1
Type of alter R would talk to most:				
Family	0.89	0.32	0	1
Friend	0.11	0.32	0	1
Best friend	0.18	0.39	0	1
Other peers	0.00	0.00	0	0
Romantic partners	0.08	0.28	0	1
Other professionals	0.03	0.22	0	1
Media	0.00	0.00	0	0
Teachers	0.07	0.25	0	1
IDPH representatives	0.00	0.00	0	0
Coaches	0.00	0.00	0	0
Others related to job	0.02	0.13	0	1
Religious leaders	0.00	0.00	0	0
Other adults	0.00	0.00	0	0
Other alter type	0.02	0.13	0	1
Type of alter R would not talk to most:				
Family	0.87	0.34	0	1
Friend	0.10	0.30	0	1
Best friend	0.07	0.25	0	1
Other peers	0.03	0.18	0	1
Romantic partners	0.10	0.30	0	1
Other professionals	0.05	0.22	0	1
Media	0.00	0.00	0	0
Teachers	0.02	0.13	0	1

IDPH representatives	0.00	0.00	0	0
Coaches	0.03	0.18	0	1
Others related to job	0.02	0.13	0	1
Religious leaders	0.00	0.00	0	0
Other adults	0.00	0.00	0	0
Other alter type	0.00	0.00	0	0

Before starting the program, respondents in TOP reported that they **have** talked or **would** talk to more people on average than they would **not** talk to across all topic areas. Respondents reported that they **have** talked or **would** talk to family and friends most often. Respondents reported low levels of communication about these topics with other groups, like IDPH representatives, coaches, religious leaders, and other adults. Family members were also the group that respondents would **not** talk to the most across all topics.

Table 8. Other sources of information (pre-test) for respondents in the TOP program, n=61

Variable	Mean	Standard Deviation	Minimum	Maximum
Other Sources of Information				
<i>Birth Control</i>				
None	0.20	0.40	0	1
Class/School	0.18	0.39	0	1
Technology	0.15	0.48	0	3
Professionals	0.26	0.48	0	2
IDPH representatives	0.05	0.22	0	1
Paper resources	0.00	0.00	0	0
Community centers	0.15	0.36	0	1
Peers	0.03	0.18	0	1
Family	0.02	0.13	0	1
Other	0.02	0.13	0	1
<i>STI</i>				
None	0.16	0.37	0	1
Class/School	0.23	0.42	0	1
Technology	0.13	0.39	0	2
Professionals	0.23	0.46	0	2
IDPH representatives	0.05	0.22	0	1
Paper resources	0.02	0.13	0	1
Community centers	0.15	0.36	0	1
Peers	0.00	0.00	0	0
Family	0.00	0.00	0	0
Other	0.07	0.25	0	1

Before the start of the TOP program, respondents most commonly reported using class/school as a source for information about birth control and STIs, followed by healthcare professionals and technology. A high proportion of respondents reported no other sources of information about birth control (.20) and STIs (.16).

Results: TOP program

Post-test results

Tables 9-12. Network characteristics (post-test) for respondents in the TOP program, n=29

Variable	Mean	Percentage	Standard Deviation	Minimum	Maximum
Network size	7.20	---	1.86	5	13
Network density	0.54	---	0.32	0	1

Variable	Percentage	Interpretation
The percent of respondents that included these types of alters:		
Family	100.0%	100% of respondents had at least one family member in their network.
Friend	62.0%	62% of respondents had at least one friend in their network.
Best friend	55.0%	55% of respondents had at least one best friend in their network.
Other peers	10.0%	10% of respondents had at least one other peer in their network.
Romantic partners	34.0%	34% of respondents had at least one romantic partner in their network.
Other professionals	17.0%	17% of respondents had at least one other professional in their network.
Media	00.0%	0% of respondents had at least one media alter in their network.
Teachers	17.0%	17% of respondents had at least one teacher in their network.
IDPH representatives	14.0%	14% of respondents had at least one IDPH representative in their network.
Coaches	14.0%	14% of respondents had at least one coach in their network.
Others related to job	00.0%	0% of respondents had at least one alter related to their job in their network.
Religious leaders	00.0%	0% of respondents had at least one religious leader in their network.
Other adults	10.0%	10% of respondents had at least one other adult in their network.
Other alter type	7.0%	7% of respondents had at least one other alter type in their network.

Variable	Mean	Interpretation
Average number of the type of alters in the network		
Family	3.76	The average respondent put 3.76 family members in his or her network.
Friend	1.34	The average respondent put 1.34 friends in his or her network.
Best friend	0.66	The average respondent put .66 best friends in his or her network.
Other peers	0.14	The average respondent put .14 other peers in his or her network.

Romantic partners	0.38	The average respondent put .38 romantic partners in his or her network.
Other professionals	0.21	The average respondent put .21 other professionals in his or her network.
Media	0.00	The average respondent put 0 media alters in his or her network.
Teachers	0.17	The average respondent put .17 teachers in his or her network.
IDPH representatives	0.17	The average respondent put .17 IDPH representatives in his or her network.
Coaches	0.14	The average respondent put .14 coaches in his or her network.
Others related to job	0.00	The average respondent put 0 alters related to a job in his or her network.
Religious leaders	0.00	The average respondent put 0 religious leaders in his or her network.
Other adults	0.14	The average respondent put .14 other adults in his or her network.
Other alter type	0.07	The average respondent put .07 other alter types in his or her network.

Variable	Mean	Percentage	Interpretation
Average percent of type of alters in network			
Family	0.52	52.0%	For the average respondent, family made up 52% of his or her network.
Friend	0.18	18.0%	For the average respondent, friends made up 18% of his or her network.
Best friend	0.09	9.0%	For the average respondent, best friends made up 9% of his or her network.
Other peers	0.02	2.0%	For the average respondent, other peers made up 2% of his or her network.
Romantic partners	0.06	6.0%	For the average respondent, romantic partners made up 6% of his or her network.
Other professionals	0.03	3.0%	For the average respondent, other professionals made up 3% of his or her network.
Media	0.00	0.0%	For the average respondent, media made up 0% of his or her network.
Teachers	0.02	2.0%	For the average respondent, teachers made up 2% of his or her network.
IDPH representatives	0.02	2.0%	For the average respondent, IDPH representatives made up 2% of his or her network.
Coaches	0.02	2.0%	For the average respondent, coaches made up 2% of his or her network.
Others related to job	0.00	0.0%	For the average respondent, other alters related to a job made up 0% of his or her network.
Religious leaders	0.00	0.0%	For the average respondent, religious leaders made up 0% of his or her network.

Other adults	0.01	1.0%	For the average respondent, other adults made up 1% of his or her network.
Other alter type	0.01	1.0%	For the average respondent, other alter types made up 1% of his or her network.

Participants in TOP completed the program with an average of 7.20 individuals in their social networks, with a range between 5 and 13 alters. Family members again represented the largest proportion of types of alters, with friends and best friends coming in next, followed by romantic partners. On average, family members comprised more than half (52%) of alters in the respondents' social networks. The average network density was .54, indicating that on average 54% of alters in respondents' social networks knew each other.

Table 13. Communication characteristics by topic area (post-test) for respondents in the TOP program, n=29

Variable	Mean	Standard Deviation	Minimum	Maximum
Average number of alters who R has talked to about:				
Friendships	3.93	2.15	0	9
Romantic relationships	3.48	2.25	0	9
Decision making	4.10	2.23	0	8
Masculinity/Femininity	1.20	1.35	0	4
Sex	2.17	1.54	0	5
Abstinence	1.00	1.17	0	5
Birth control	2.03	2.03	0	5
STI	1.28	1.28	0	5
Suicide	1.35	1.34	0	6
Average number of alters who R would talk to about:				
Friendships	3.97	2.18	0	10
Romantic relationships	3.52	1.48	0	7
Decision making	4.31	2.48	0	10
Masculinity/Femininity	2.14	1.35	0	6
Sex	2.38	1.37	0	5
Abstinence	2.00	1.41	0	5
Birth control	2.55	1.72	0	6
STI	2.28	2.09	0	7
Suicide	3.38	2.38	0	8
Average number of alters who R would not talk to about:				
Friendships	1.00	1.65	0	8
Romantic relationships	1.62	1.91	0	9
Decision making	0.86	1.36	0	6
Masculinity/Femininity	2.20	1.88	0	8
Sex	2.03	2.09	0	10
Abstinence	1.48	1.56	0	5
Birth control	1.17	1.23	0	4
STI	1.66	1.70	0	6
Suicide	0.52	1.05	0	4

After completion of the TOP program, respondents reported that they **have talked** and **would talk** about topics related to decision-making, friendships, and

romantic relationships with the most alters in their social networks. The topics that respondents **had** discussed with the least number of alters in their networks were abstinence (average of 1 alter), masculinity/femininity, (1.20 alters), and STIs (1.28 alters). Respondents would **not** talk to the most number of alters about masculinity/femininity (2.20 alters) and sex (2.03 alters).

Table 14. Communication characteristics by type of alter (post-test) for respondents in the TOP program, n=29

Variable	Mean	Standard Deviation	Minimum	Maximum
Average total network members R has talked to	6.00	1.63	3	9
Average total network members R would talk to	6.31	1.58	3	10
Average total network members R would not talk to	4.10	2.64	0	13
Type of alter R has talked to most:				
Family	0.86	0.35	0	1
Friend	0.27	0.45	0	1
Best friend	0.00	0.00	0	0
Other peers	0.00	0.00	0	0
Romantic partners	0.03	0.19	0	1
Other professionals	0.00	0.00	0	0
Media	0.00	0.00	0	0
Teachers	0.00	0.00	0	0
IDPH representatives	0.00	0.00	0	0
Coaches	0.00	0.00	0	0
Others related to job	0.00	0.00	0	0
Religious leaders	0.00	0.00	0	0
Other adults	0.00	0.00	0	0
Other alter type	0.00	0.00	0	0
Type of alter R would talk to most:				
Family	0.86	0.35	0	1
Friend	0.24	0.44	0	1
Best friend	0.03	0.19	0	1
Other peers	0.00	0.00	0	0
Romantic partners	0.03	0.19	0	1
Other professionals	0.03	0.19	0	1
Media	0.00	0.00	0	0
Teachers	0.00	0.00	0	0
IDPH representatives	0.00	0.00	0	0
Coaches	0.00	0.00	0	0
Others related to job	0.00	0.00	0	0
Religious leaders	0.00	0.00	0	0
Other adults	0.00	0.00	0	0
Other alter type	0.00	0.00	0	0
Type of alter R would not talk to most:				
Family	0.93	0.26	0	1
Friend	0.21	0.41	0	1
Best friend	0.10	0.31	0	1
Other peers	0.10	0.31	0	1

Romantic partners	0.14	0.35	0	1
Other professionals	0.17	0.38	0	1
Media	0.07	0.26	0	1
Teachers	0.14	0.35	0	1
IDPH representatives	0.07	0.26	0	1
Coaches	0.14	0.35	0	1
Others related to job	0.07	0.26	0	1
Religious leaders	0.07	0.26	0	1
Other adults	0.07	0.26	0	1
Other alter type	0.07	0.26	0	1

After completing the program, respondents in TOP reported that they **have** talked or **would** talk to more people on average than they would **not** talk to across all topic areas. Respondents reported that they **have** talked or **would** talk to family and friends most often. Respondents reported increased levels of communication about these topics with other groups, like IDPH representatives, coaches, religious leaders, and other adults. Family members were also the group that respondents would **not** talk to the most across all topics.

Table 15. Other sources of information (post-test) for respondents in the TOP program, n=29

Variable	Mean	Standard Deviation	Minimum	Maximum
Other Sources of Information				
Birth Control				
None	0.00	0.00	0	0
Class/School	0.31	0.47	0	1
Technology	0.17	0.38	0	1
Professionals	0.24	0.44	0	1
IDPH representatives	0.21	0.41	0	1
Paper resources	0.00	0.00	0	0
Community centers	0.07	0.26	0	1
Peers	0.03	0.19	0	1
Family	0.03	0.19	0	1
Other	0.03	0.19	0	1
STI				
None	0.00	0.00	0	0
Class/School	0.45	0.51	0	1
Technology	0.10	0.31	0	1
Professionals	0.10	0.31	0	1
IDPH representatives	0.21	0.41	0	1
Paper resources	0.00	0.00	0	0
Community centers	0.17	0.38	0	1
Peers	0.03	0.19	0	1
Family	0.07	0.26	0	1
Other	0.00	0.00	0	0

After the conclusion of the TOP program, respondents most commonly reported using school/class as a source for information about birth control and STIs, followed by IDPH representatives.

Results: TOP program

Pre-post comparisons

Table 16. T-test comparisons between pre-test and post-test means and proportions for network characteristics for respondents in TOP

Variable	Pre-test mean	Post-test mean
Network size	7.77	7.20
Network density	0.44	0.54
Type of alters		
Family	4.23	3.76
Friend	0.84	1.34
Best friend	0.85	0.66
Other peers	0.20	0.14
Romantic partners	0.43	0.38
Other professionals	0.30	0.21
Media	0.05	0.00
Teachers	0.40	0.17
IDPH representatives	0.07	0.17
Coaches	0.10	0.14
Others related to job	0.07	0.00
Religious leaders	0.02	0.00
Other adults	0.11	0.14
Other alter type	0.15	0.07

*p<0.05, **p<0.01, ***p<0.001, indicates significant difference in means

Averages for network size for respondents in the TOP program decreased from pre-test to post-test social networks, while average network density increased from pre- to post-test. The average number of alters in the social networks who were family members decreased from 4.23 alters to 3.76 alters, while the number of alters who were friends increased from 0.84 to 1.34. The number of alters who were IDPH representatives increased from 0.07 to 0.17.

Table 17. T-test comparisons between pre-test and post-test means for communication characteristics by topic area for respondents in TOP

Variable	Pre-test mean	Post-test mean
Average total network members R has talked to	6.21	6.00
Average total network members R would talk to	5.87	6.31
Average total network members R would not talk to	4.62	4.10
Average number of alters who R has talked to about:		
Friendships	3.79	3.93
Romantic relationships	3.00	3.48
Decision making	4.28	4.10
Masculinity/Femininity	1.97	1.20
Sex	2.97	2.17
Abstinence	1.36	1.00
Birth control	1.49	2.03
STI	1.80	1.28

Suicide	2.23	1.35
Average number of alters who R would talk to about:		
Friendships	3.13	3.97
Romantic relationships	2.75	3.52
Decision making	3.56	4.31
Masculinity/Femininity	2.15	2.14
Sex	2.28	2.38
Abstinence	1.70	2.00
Birth control	2.07	2.55
STI	2.11	2.28
Suicide	2.93	3.38
Average number of alters who R would not talk to about:		
Friendships	1.39	1.00
Romantic relationships	1.90	1.62
Decision making	1.31	0.86
Masculinity/Femininity	1.87	2.20
Sex	2.48	2.03
Abstinence	1.89	1.48
Birth control	1.72	1.17
STI	2.00	1.66
Suicide	1.18	0.52

*p<0.05, **p<0.01, ***p<0.001, indicates significant difference in means

The average number of total network members respondents in the TOP program have talked to and would not talk to decreased from pre- to post-test, while the average number of network members whom respondents *would* talk to increased. The average number of alters with whom respondents would *not* discuss sex, abstinence, birth control, STIs, and suicide all decreased, while the number of alters with whom respondents *would* discuss these same topics increased from pre- to post-test.

Table 18. T-test comparisons between pre-test and post-test proportions for communication characteristics by alter type for respondents in TOP

Variable	Pre-test Proportion	Post-test Proportion
Proportion of the type of alter R has talked to most:		
Family	0.89	0.86
Friend	0.10	0.27
Best friend	0.15	0.00
Other peers	0.00	0.00
Romantic partners	0.05	0.03
Other professionals	0.02	0.00
Media	0.00	0.00
Teachers	0.05	0.00
IDPH representatives	0.00	0.00
Coaches	0.00	0.00
Others related to job	0.00	0.00
Religious leaders	0.00	0.00
Other adults	0.00	0.00
Other alter type	0.02	0.00

Proportion of the type of alter R would talk to most:		
Family	0.89	0.86
Friend	0.11	0.24
Best friend	0.18	0.03
Other peers	0.00	0.00
Romantic partners	0.08	0.03
Other professionals	0.05	0.03
Media	0.00	0.00
Teachers	0.00	0.00
IDPH representatives	0.00	0.00
Coaches	0.00	0.00
Others related to job	0.00	0.00
Religious leaders	0.00	0.00
Other adults	0.00	0.00
Other alter type	0.00	0.00
Proportion of the type of alter R would not talk to most:		
Family	0.87	0.93
Friend	0.10	0.21
Best friend	0.07	0.10
Other peers	0.03	0.10
Romantic partners	0.10	0.14
Other professionals	0.05	0.17
Media	0.00	0.07
Teachers	0.02	0.14
IDPH representatives	0.00	0.07
Coaches	0.03	0.14
Others related to job	0.02	0.07
Religious leaders	0.00	0.07
Other adults	0.00	0.07
Other alter type	0.00	0.07

*p<0.05, **p<0.01, ***p<0.001, indicates significant difference in means

Table 19. T-test comparisons between pre-test and post-test proportions for other sources of information for respondents in the TOP program

Variable	Pretest Mean	Posttest Mean
Birth Control		
None	0.20	0.00**
Class/School	0.18	0.31
Technology	0.15	0.17
Professionals	0.26	0.24
IDPH representatives	0.05	0.21
Paper resources	0.00	0.00
Community centers	0.15	0.07
Peers	0.03	0.03
Family	0.02	0.03
Other	0.02	0.03
STI		

None	0.16	0.00
Class/School	0.23	0.45
Technology	0.13	0.10
Professionals	0.23	0.10
IDPH representatives	0.05	0.21
Paper resources	0.02	0.00
Community centers	0.15	0.17
Peers	0.00	0.03
Family	0.00	0.07
Other	0.07	0.00

*p<0.05, **p<0.01, ***p<0.001, indicates significant difference in means

The proportion of respondents in the TOP program who reported using no other sources of information for birth control and STIs decreased from .20 (birth control) and .16 (STI) to zero for both topics. This change was significant at the p<0.01 level for sources of information for birth control.

Results: Wise Guys program

Pre-test results

Table 20. Descriptive statistics of respondent characteristics in Wise Guys program

Variable	Mean	Standard Deviation	Minimum	Maximum	n
Age	14.06	1.96	11	19	68
Grade	8.62	1.71	6	12	69
Male gender	99.0%	0.12	0	1	69

Variable	Mean percent	n
Race/Ethnicity		
White	74.0%	61
Black	14.0%	65
Other	9.00%	64
Biracial	8.00%	66
In a romantic relationship	16.0%	67
Family Structure		
Two-parent	43.0%	67
Single-parent	30.0%	67
Step-parent	18.0%	67
Grandparent	6.00%	67
Other	3.00%	67

The average age of respondents in the Wise Guys program was 14 years old, with a minimum of 11 years and a maximum of 19 years. The average grade level of respondents in Wise Guys was between the 8th and 9th grades, with the youngest respondents in the 6th grade and the oldest in 12th grade. One respondent reported female gender. The majority of respondents (74%) were white. Sixteen percent of respondents reported that they were in a relationship. Most respondents came either from a two-parent (43%) or a single-parent (30%) household.

Tables 21-24. Network characteristics (pre-test) for respondents in the Wise Guys program, n=69

Variable	Mean	Percentage	Standard Deviation	Minimum	Maximum
Network size	8.81	---	3.36	3	22
Network density	0.34	---	0.27	0	1

Variable	Percentage	Interpretation
The percent of respondents that included these types of alters:		
Family	100.0%	100% of respondents had at least one family member in their network.
Friend	65.0%	65% of respondents had at least one friend in their network.
Best friend	39.0%	39% of respondents had at least one best friend in their network.
Other peers	19.0%	19% of respondents had at least one other peer in their network.
Romantic partners	10.0%	10% of respondents had at least one romantic partner in their network.
Other professionals	10.0%	10% of respondents had at least one other professional in their network.
Media	1.0%	1% of respondents had at least one media alter in their network.
Teachers	28.0%	28% of respondents had at least one teacher in their network.
IDPH representatives	6.0%	6% of respondents had at least one IDPH representative in their network.
Coaches	14.0%	14% of respondents had at least one coach in their network.
Others related to job	1.0%	1% of respondents had at least one alter related to their job in their network.
Religious leaders	3.0%	3% of respondents had at least one religious leader in their network.
Other adults	7.0%	7% of respondents had at least one other adult in their network.
Other alter type	13.0%	13% of respondents had at least one other alter type in their network.

Variable	Mean	Interpretation
Average number of the type of alters in the network		
Family	5.72	The average respondent put 5.72 family members in his or her network.
Friend	1.25	The average respondent put 1.25 friends in his or her network.
Best friend	0.45	The average respondent put .45 best friends in his or her network.
Other peers	0.28	The average respondent put .28 other peers in his or her network.

Romantic partners	0.10	The average respondent put .10 romantic partners in his or her network.
Other professionals	0.12	The average respondent put .12 other professionals in his or her network.
Media	0.01	The average respondent put .01 media alters in his or her network.
Teachers	0.30	The average respondent put .30 teachers in his or her network.
IDPH representatives	0.06	The average respondent put .06 IDPH representatives in his or her network.
Coaches	0.20	The average respondent put .20 coaches in his or her network.
Others related to job	0.01	The average respondent put .01 alters related to a job in his or her network.
Religious leaders	0.04	The average respondent put .04 religious leaders in his or her network.
Other adults	0.10	The average respondent put .10 other adults in his or her network.
Other alter type	0.16	The average respondent put .16 other alter types in his or her network.

Variable	Mean	Percentage	Interpretation
Average percent of type of alters in network			
Family	0.64	64.0%	For the average respondent, family made up 64% of his or her network.
Friend	0.15	15.0%	For the average respondent, friends made up 15% of his or her network.
Best friend	0.06	6.0%	For the average respondent, best friends made up 6% of his or her network.
Other peers	0.03	3.0%	For the average respondent, other peers made up 3% of his or her network.
Romantic partners	0.01	1.0%	For the average respondent, romantic partners made up 1% of his or her network.
Other professionals	0.01	1.0%	For the average respondent, other professionals made up 1% of his or her network.
Media	0.00	0.0%	For the average respondent, media made up 0% of his or her network.
Teachers	0.03	3.0%	For the average respondent, teachers made up 3% of his or her network.
IDPH representatives	0.01	1.0%	For the average respondent, IDPH representatives made up 1% of his or her network.
Coaches	0.02	2.0%	For the average respondent, coaches made up 2% of his or her network.

Others related to job	0.00	0.0%	For the average respondent, other alters related to a job made up 0% of his or her network.
Religious leaders	0.00	0.0%	For the average respondent, religious leaders made up 0% of his or her network.
Other adults	0.01	1.0%	For the average respondent, other adults made up 1% of his or her network.
Other alter type	0.02	2.0%	For the average respondent, other alter types made up 2% of his or her network.

Participants in the Wise Guys began the program with an average of almost 9 individuals in their social networks, with a range between 3 alters and 22 alters. Family members represented the largest proportion of types of alters, with friends and best friends coming in next. The average social network had 5.72 family members and 1.25 friends listed among alters. On average, family members comprised 64% of alters in the respondents' social networks. The average network density was .34, indicating that on average 34% of alters in respondents' social networks knew each other.

Table 25. Communication characteristics by topic area (pre-test) for respondents in the Wise Guys program, n=69

Variable	Mean	Standard Deviation	Minimum	Maximum
Average number of alters who R has talked to about:				
Friendships	3.55	2.92	0	14
Romantic relationships	2.51	1.92	0	10
Decision making	4.12	2.69	0	13
Masculinity/Femininity	1.54	1.60	0	6
Sex	2.33	2.25	0	11
Abstinence	1.20	1.45	0	5
Birth control	1.67	1.51	0	5
STI	1.99	2.16	0	10
Suicide	1.71	1.77	0	8
Average number of alters who R would talk to about:				
Friendships	3.12	2.42	0	14
Romantic relationships	2.55	2.05	0	11
Decision making	3.20	2.21	0	11
Masculinity/Femininity	2.01	1.67	0	11
Sex	2.26	1.55	0	8
Abstinence	1.57	1.51	0	8
Birth control	1.94	1.68	0	6
STI	2.04	1.72	0	11
Suicide	2.54	2.53	0	14
Average number of alters who R would not talk to about:				
Friendships	1.48	1.49	0	7
Romantic relationships	2.12	2.26	0	14
Decision making	1.26	1.84	0	11
Masculinity/Femininity	1.84	1.81	0	6
Sex	2.52	2.32	0	12

Abstinence	1.96	2.52	0	11
Birth control	2.28	2.47	0	10
STI	1.74	2.32	0	13
Suicide	1.55	2.42	0	13

Before starting the program, respondents in the Wise Guys program reported that they **have talked** and **would talk** about topics related to decision-making, friendships, and romantic relationships with the most alters in their social networks (4.12 alters, 3.55 alters, and 2.51 alters respectively). The topics that respondents had discussed with the least number of alters in their networks were abstinence (1.20 alters), masculinity/femininity (1.54 alters), and birth control (1.67 alters). Respondents would **not** talk to the most amount of alters about sex (2.52 alters) and birth control (2.28 alters).

Table 26. Communication characteristics (pre-test) by type of alter for respondents in the Wise Guys program, n=69

Variable	Mean	Standard Deviation	Minimum	Maximum
Average total network members R has talked to	6.41	2.87	1	15
Average total network members R would talk to	6.41	2.56	2	15
Average total network members R would not talk to	5.14	2.95	0	11
Type of alter R has talked to most:				
Family	0.86	0.35	0	1
Friend	0.17	0.38	0	1
Best friend	0.04	0.21	0	1
Other peers	0.03	0.17	0	1
Romantic partners	0.00	0.00	0	0
Other professionals	0.00	0.00	0	0
Media	0.00	0.00	0	0
Teachers	0.01	0.12	0	1
IDPH representatives	0.00	0.00	0	0
Coaches	0.00	0.00	0	0
Others related to job	0.00	0.00	0	0
Religious leaders	0.00	0.00	0	0
Other adults	0.00	0.00	0	0
Other alter type	0.01	0.12	0	1
Type of alter R would talk to most:				
Family	0.94	0.24	0	1
Friend	0.13	0.34	0	1
Best friend	0.00	0.00	0	0
Other peers	0.00	0.00	0	0
Romantic partners	0.00	0.00	0	0
Other professionals	0.00	0.00	0	0
Media	0.00	0.00	0	0
Teachers	0.00	0.00	0	0
IDPH representatives	0.00	0.00	0	0
Coaches	0.01	0.12	0	1
Others related to job	0.00	0.00	0	0
Religious leaders	0.01	0.12	0	1

Other adults	0.01	0.12	0	1
Other alter type	0.01	0.12	0	1
Type of alter R would not talk to most:				
Family	0.88	0.32	0	1
Friend	0.14	0.35	0	1
Best friend	0.06	0.24	0	1
Other peers	0.07	0.26	0	1
Romantic partners	0.07	0.26	0	1
Other professionals	0.06	0.24	0	1
Media	0.04	0.21	0	1
Teachers	0.07	0.26	0	1
IDPH representatives	0.04	0.21	0	1
Coaches	0.10	0.30	0	1
Others related to job	0.04	0.21	0	1
Religious leaders	0.07	0.26	0	1
Other adults	0.06	0.24	0	1
Other alter type	0.06	0.24	0	1

Before starting the program, respondents in Wise Guys reported that they **have** talked or **would** talk to more people on average than they would **not** talk to across all topic areas. Respondents reported that they **have** talked or **would** talk to family and friends most often. Respondents reported lower levels of communication about these topics with other groups, like IDPH representatives, coaches, religious leaders, and other adults. Family members were also the group that respondents would **not** talk to the most across all topics.

Table 27. Other sources of information (pre-test) for respondents in the Wise Guys program, n=69

Variable	Mean	Standard Deviation	Minimum	Maximum
Other Sources of Information				
Birth Control				
None	0.41	0.49	0	1
Class/School	0.09	0.28	0	1
Technology	0.25	0.47	0	2
Professionals	0.14	0.35	0	1
IDPH representatives	0.03	0.17	0	1
Paper resources	0.01	0.12	0	1
Community centers	0.00	0.00	0	0
Peers	0.01	0.12	0	1
Family	0.09	0.37	0	2
Other	0.04	0.21	0	1
STI				
None	0.39	0.49	0	1
Class/School	0.16	0.37	0	1
Technology	0.20	0.44	0	2
Professionals	0.09	0.28	0	1
IDPH representatives	0.01	0.12	0	1
Paper resources	0.04	0.21	0	1
Community centers	0.01	0.12	0	1
Peers	0.04	0.27	0	2

Family	0.01	0.12	0	1
Other	0.01	0.12	0	1

Before the start of the Wise Guys program, respondents most commonly reported using technology as a source for information about birth control and STIs. For information about birth control, respondents also used healthcare professionals (.14), class/school (.09), and family members (.09). For STIs, respondents used class/school (.16) and healthcare professionals (.09) as sources of information about this topic in addition to technology. A high proportion of respondents reported no other sources of information about birth control (.41) and STIs (.39).

Results: Wise Guys program

Post-test results

Tables 28-31. Network characteristics (post-test) for respondents in Wise Guys program, n=50

Variable	Mean	Percentage	Standard Deviation	Minimum	Maximum
Network size	7.84	---	3.04	0	22
Network density	0.49	---	2.88	0	1

Variable	Percentage	Interpretation
The percent of respondents that included these types of alters:		
Family	100.0%	100% of respondents had at least one family member in their network.
Friend	60.0%	60% of respondents had at least one friend in their network.
Best friend	36.0%	36% of respondents had at least one best friend in their network.
Other peers	8.0%	8% of respondents had at least one other peer in their network.
Romantic partners	8.0%	8% of respondents had at least one romantic partner in their network.
Other professionals	8.0%	8% of respondents had at least one other professional in their network.
Media	8.0%	8% of respondents had at least one media alter in their network.
Teachers	28.0%	28% of respondents had at least one teacher in their network.
IDPH representatives	8.0%	8% of respondents had at least one IDPH representative in their network.
Coaches	12.0%	12% of respondents had at least one coach in their network.
Others related to job	0.0%	0% of respondents had at least one alter related to their job in their network.
Religious leaders	4.0%	4% of respondents had at least one religious leader in their network.
Other adults	10.0%	10% of respondents had at least one other adult in their network.
Other alter type	10.0%	10% of respondents had at least one other alter type in their network.

Variable	Mean	Interpretation
Average number of the type of alters in the network		
Family	4.86	The average respondent put 4.86 family members in his or her network.
Friend	1.04	The average respondent put 1.04 friends in his or her network.
Best friend	0.48	The average respondent put .48 best friends in his or her network.
Other peers	0.10	The average respondent put .10 other peers in his or her network.
Romantic partners	0.08	The average respondent put .08 romantic partners in his or her network.
Other professionals	0.08	The average respondent put .08 other professionals in his or her network.
Media	0.06	The average respondent put .06 media alters in his or her network.
Teachers	0.30	The average respondent put .30 teachers in his or her network.
IDPH representatives	0.08	The average respondent put .08 IDPH representatives in his or her network.
Coaches	0.16	The average respondent put .16 coaches in his or her network.
Others related to job	0.00	The average respondent put .00 alters related to a job in his or her network.
Religious leaders	0.06	The average respondent put .06 religious leaders in his or her network.
Other adults	0.16	The average respondent put .16 other adults in his or her network.
Other alter type	0.16	The average respondent put .16 other alter types in his or her network.

Variable	Mean	Percentage	Interpretation
Average percent of type of alters in network			
Family	0.63	63.0%	For the average respondent, family made up 63% of his or her network.
Friend	0.14	14.0%	For the average respondent, friends made up 14% of his or her network.
Best friend	0.07	7.0%	For the average respondent, best friends made up 7% of his or her network.
Other peers	0.01	1.0%	For the average respondent, other peers made up 1% of his or her network.
Romantic partners	0.01	1.0%	For the average respondent, romantic partners made up 1% of his or her network.
Other professionals	0.01	1.0%	For the average respondent, other professionals made up 1% of his or her network.

Media	0.01	1.0%	For the average respondent, media made up 1% of his or her network.
Teachers	0.04	4.0%	For the average respondent, teachers made up 4% of his or her network.
IDPH representatives	0.01	1.0%	For the average respondent, IDPH representatives made up 1% of his or her network.
Coaches	0.01	1.0%	For the average respondent, coaches made up 1% of his or her network.
Others related to job	0.00	0.0%	For the average respondent, other alters related to a job made up 0% of his or her network.
Religious leaders	0.01	1.0%	For the average respondent, religious leaders made up 1% of his or her network.
Other adults	0.02	2.0%	For the average respondent, other adults made up 2% of his or her network.
Other alter type	0.02	2.0%	For the average respondent, other alter types made up 2% of his or her network.

After completion of the program, respondents in Wise Guys reported an average of 7.84 individuals in their social networks, with a range between 0 and 22 alters. Family members again represented the largest proportion of types of alters, with friends and best friends coming in next, followed by teachers. On average, family members comprised 63% of alters in the respondents' social networks. The average network density was .49, indicating that on average almost half (49%) of alters in respondents' social networks knew each other.

Table 32. Communication characteristics by topic area (post-test) for respondents in the Wise Guys program, n=50

Variable	Mean	Standard Deviation	Minimum	Maximum
Average number of alters who R has talked to about:				
Friendships	2.62	2.12	0	7
Romantic relationships	1.90	1.63	0	6
Decision making	3.02	2.23	0	8
Masculinity/Femininity	1.14	1.41	0	6
Sex	1.44	1.68	0	6
Abstinence	0.74	1.38	0	7
Birth control	1.24	1.71	0	7
STI	1.04	1.41	0	8
Suicide	1.06	1.54	0	7
Average number of alters who R would talk to about:				
Friendships	3.44	2.23	0	9
Romantic relationships	2.66	1.44	0	5
Decision making	3.26	2.36	0	9
Masculinity/Femininity	1.98	1.75	0	7
Sex	2.42	1.68	0	8
Abstinence	1.94	1.67	0	8
Birth control	2.20	1.72	0	8

STI	2.10	1.43	0	8
Suicide	3.48	2.43	0	9
Average number of alters who R would not talk to about:				
Friendships	1.14	1.20	0	4
Romantic relationships	2.00	1.68	0	8
Decision making	0.90	1.31	0	5
Masculinity/Femininity	1.82	1.92	0	8
Sex	2.34	2.19	0	10
Abstinence	2.00	2.22	0	9
Birth control	2.20	2.29	0	10
STI	1.86	2.09	0	10
Suicide	1.30	1.69	0	7

After completion of the Wise Guys program, respondents reported that they **have talked** and **would talk** about topics related to decision-making, friendships, and romantic relationships with the most alters in their social networks. The topics that respondents had discussed with the least number of alters in their networks were abstinence (0.74 alters), STIs, (1.04 alters), and suicide (1.06 alters). Respondents would **not** talk to the most amount of alters about sex (2.34 alters) and birth control (2.20 alters).

Table 33. Communication characteristics (post-test) by type of alter for respondents in the Wise Guys program, n=50

Variable	Mean	Standard Deviation	Minimum	Maximum
Average total network members R has talked to	5.06	2.18	0	9
Average total network members R would talk to	5.72	2.29	2	10
Average total network members R would not talk to	4.56	2.56	0	11
Type of alter R has talked to most:				
Family	0.92	0.27	0	1
Friend	0.18	0.39	0	1
Best friend	0.06	0.24	0	1
Other peers	0.04	0.20	0	1
Romantic partners	0.02	0.14	0	1
Other professionals	0.02	0.14	0	1
Media	0.02	0.14	0	1
Teachers	0.04	0.20	0	1
IDPH representatives	0.02	0.14	0	1
Coaches	0.04	0.20	0	1
Others related to job	0.02	0.14	0	1
Religious leaders	0.02	0.14	0	1
Other adults	0.02	0.14	0	1
Other alter type	0.04	0.20	0	1
Type of alter R would talk to most:				
Family	0.98	0.14	0	1
Friend	0.08	0.27	0	1
Best friend	0.06	0.24	0	1
Other peers	0.02	0.14	0	1

Romantic partners	0.00	0.00	0	0
Other professionals	0.00	0.00	0	0
Media	0.00	0.00	0	0
Teachers	0.04	0.20	0	1
IDPH representatives	0.00	0.00	0	0
Coaches	0.02	0.14	0	1
Others related to job	0.00	0.00	0	0
Religious leaders	0.00	0.00	0	0
Other adults	0.00	0.00	0	0
Other alter type	0.00	0.00	0	0
Type of alter R would not talk to most:				
Family	0.86	0.35	0	1
Friend	0.18	0.39	0	1
Best friend	0.10	0.30	0	1
Other peers	0.06	0.24	0	1
Romantic partners	0.04	0.20	0	1
Other professionals	0.04	0.20	0	1
Media	0.04	0.20	0	1
Teachers	0.08	0.27	0	1
IDPH representatives	0.04	0.20	0	1
Coaches	0.10	0.30	0	1
Others related to job	0.04	0.20	0	1
Religious leaders	0.04	0.20	0	1
Other adults	0.06	0.24	0	1
Other alter type	0.06	0.24	0	1

After completing the program, respondents in Wise Guys reported that they **have** talked or **would** talk to more people on average than they would **not** talk to across all topic areas. Respondents reported that they **have** talked or **would** talk to family and friends most often. Nearly all respondents **have** talked or **would** talk to family. Respondents reported lower levels of communication about these topics with other groups, like IDPH representatives, coaches, religious leaders, and other adults. Family members were also the group that respondents would **not** talk to the most across all topics.

Table 34. Other sources of information (post-test) for respondents in the Wise Guys program, n=50

Variable	Mean	Standard Deviation	Minimum	Maximum
Other Sources of Information				
Birth Control				
None	0.00	0.00	0	0
Class/School	0.14	0.35	0	1
Technology	0.20	0.40	0	1
Professionals	0.04	0.20	0	1
IDPH representatives	0.18	0.39	0	1
Paper resources	0.02	0.14	0	1
Community centers	0.02	0.14	0	1
Peers	0.00	0.00	0	0
Family	0.02	0.14	0	1
Other	0.00	0.00	0	0

STI				
None	0.00	0.00	0	0
Class/School	0.22	0.42	0	1
Technology	0.20	0.45	0	2
Professionals	0.02	0.14	0	1
IDPH representatives	0.18	0.39	0	1
Paper resources	0.00	0.00	0	0
Community centers	0.02	0.14	0	1
Peers	0.00	0.00	0	0
Family	0.02	0.14	0	1
Other	0.00	0.00	0	0

After the conclusion of the Wise Guys program, respondents most commonly reported using technology and class/school as a source for information about birth control and STIs. Respondents also reported that IDPH representatives were a source of information about both birth control and STIs (.18).

Results: Wise Guys program

Pre-post comparisons

Table 35. T-test comparisons between pre-test and post-test means and proportions for network characteristics for respondents in the Wise Guys program

Variable	Pre-test mean	Post-test mean
Network size	8.81	7.84**
Network density	0.34	0.49***
Type of alters		
Family	5.72	4.86**
Friend	1.25	1.04
Best friend	0.45	0.48
Other peers	0.28	0.10
Romantic partners	0.10	0.08
Other professionals	0.12	0.08
Media	0.01	0.06
Teachers	0.30	0.30
IDPH representatives	0.06	0.08
Coaches	0.20	0.16
Others related to job	0.01	0.00
Religious leaders	0.04	0.06
Other adults	0.10	0.16
Other alter type	0.16	0.16

*p<0.05, **p<0.01, ***p<0.001, indicates significant difference in means

Average network size for respondents in the Wise Guys program decreased significantly from pre-test to post-test social networks (p<0.01), from an average of 8.81 alters to 7.84 alters. The average network density increased from .34 to .49 from pre- to post-test (p<0.001). The average number of alters in the social networks who were family members also decreased significantly, from 5.72 to 4.86 (p<0.001).

Table 36. T-test comparisons between pre-test and post-test means for communication characteristics by topic area for respondents in the Wise Guys program

Variable	Pre-test mean	Post-test mean
Average total network members R has talked to	6.41	5.06**
Average total network members R would talk to	6.41	5.72
Average total network members R would not talk to	5.14	4.56
Average number of alters who R has talked to about:		
Friendships	3.55	2.62*
Romantic relationships	2.51	1.90
Decision making	4.12	3.02
Masculinity/Femininity	1.54	1.14
Sex	2.33	1.44
Abstinence	1.20	0.74
Birth control	1.67	1.24
STI	1.99	1.04
Suicide	1.71	1.06
Average number of alters who R would talk to about:		
Friendships	3.12	3.44
Romantic relationships	2.55	2.66
Decision making	3.20	3.26
Masculinity/Femininity	2.01	1.98
Sex	2.26	2.42
Abstinence	1.57	1.94
Birth control	1.94	2.20
STI	2.04	2.10
Suicide	2.54	3.48
Average number of alters who R would not talk to about:		
Friendships	1.48	1.14
Romantic relationships	2.12	2.00
Decision making	1.26	0.90
Masculinity/Femininity	1.84	1.82
Sex	2.52	2.34
Abstinence	1.96	2.00
Birth control	2.28	2.20
STI	1.74	1.86
Suicide	1.55	1.30

*p<0.05, **p<0.01, ***p<0.001, indicates significant difference in means

The average number of total network members respondents in the Wise Guys program have talked to, would talk to, and would not talk to each decreased from pre- to post-test. In addition, the average number of alters who respondents have talked to about friendships decreased significantly from 3.55 alters to 2.62 alters (p<0.05).

Table 37. T-test comparisons between pre-test and post-test proportions for communication characteristics by alter type for respondents in the Wise Guys program

Variable	Pre-test Proportion	Post-test Proportion
Proportion of the type of alter R has talked to most:		
Family	0.86	0.92
Friend	0.17	0.18
Best friend	0.04	0.06
Other peers	0.03	0.04
Romantic partners	0.00	0.02
Other professionals	0.00	0.02
Media	0.00	0.02
Teachers	0.01	0.04
IDPH representatives	0.00	0.02
Coaches	0.00	0.04
Others related to job	0.00	0.02
Religious leaders	0.00	0.02
Other adults	0.00	0.02
Other alter type	0.01	0.04
Proportion of the type of alter R would talk to most:		
Family	0.94	0.98
Friend	0.13	0.08
Best friend	0.00	0.06
Other peers	0.00	0.02
Romantic partners	0.00	0.00
Other professionals	0.00	0.00
Media	0.00	0.00
Teachers	0.00	0.04
IDPH representatives	0.00	0.00
Coaches	0.01	0.02
Others related to job	0.00	0.00
Religious leaders	0.01	0.00
Other adults	0.01	0.00
Other alter type	0.01	0.00
Proportion of the type of alter R would not talk to most:		
Family	0.88	0.86
Friend	0.14	0.18
Best friend	0.06	0.10
Other peers	0.07	0.06
Romantic partners	0.07	0.04
Other professionals	0.06	0.04
Media	0.04	0.04
Teachers	0.07	0.08
IDPH representatives	0.04	0.04
Coaches	0.10	0.10
Others related to job	0.04	0.04
Religious leaders	0.07	0.04
Other adults	0.06	0.06

Other alter type	0.06	0.06
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*p<0.05, **p<0.01, ***p<0.001, indicates significant difference in means

The proportion of family members who respondents **have** talked to across all topic areas increased from pre- to post-test. The proportion of all other alter types who respondents **have** talked to most also increased from pre- to post-test for all alter types.

Table 38. T-test comparisons between pre-test and post-test proportions for other sources of information for respondents in the Wise Guys program

Variable	Pretest Mean	Posttest Mean
Birth Control		
None	0.41	0.00***
Class/School	0.09	0.14
Technology	0.25	0.20
Professionals	0.14	0.04
IDPH representatives	0.03	0.18
Paper resources	0.01	0.02
Community centers	0.00	0.02
Peers	0.01	0.00
Family	0.09	0.02
Other	0.04	0.00
STI		
None	0.39	0.00
Class/School	0.16	0.22
Technology	0.20	0.20
Professionals	0.09	0.02
IDPH representatives	0.01	0.18
Paper resources	0.04	0.00
Community centers	0.01	0.02
Peers	0.04	0.00
Family	0.01	0.02
Other	0.01	0.00

*p<0.05, **p<0.01, ***p<0.001, indicates significant difference in means

The proportion of respondents in the Wise Guys program who reported using no other sources of information for birth control and STIs decreased from .41 (birth control) and .39 (STI) to zero for both topic areas. This change was significant at the p<0.001 level for sources of information about birth control.

Results: TOP and Wise Guys programs

Pre-test results

Table 39. Descriptive statistics (pre-test) of respondent characteristics in TOP and Wise Guys programs

Variable	Mean	Standard Deviation	Minimum	Maximum	n
Age	14.98	2.51	11	23	128
Grade	10.70	11.12	6	12	129
Gender (1=Female)	33.0%	0.47	0	1	130

Race/Ethnicity					
White	76.0%	0.43	0	1	119
Black	8.00%	0.27	0	1	125
Other	15.0%	0.35	0	1	124
Biracial	6.00%	0.23	0	1	127
In a romantic relationship	30.0%	0.46	0	1	128
Family Structure					
Two-parent	40.0%	0.49	0	1	124
Single-parent	30.0%	0.46	0	1	124
Step-parent	17.0%	0.38	0	1	124
Grandparent	6.00%	0.23	0	1	124
Other	7.00%	0.26	0	1	124

The average age of respondents in the two programs combined was approximately 15 years old, with a minimum of 11 years and a maximum of 23 years. The majority of respondents were male (67%) and white (76%). One-third of respondents reported that they were in a relationship. Most respondents came either from a two-parent (40%) or a single-parent (30%) household.

Tables 40-43. Network characteristics (pre-test) for respondents in the TOP and Wise Guys programs, n=130

Variable	Mean	Percentage	Standard Deviation	Minimum	Maximum
Network size	8.32	---	3.11	1	22
Network density	0.38	---	0.29	0	1

Variable	Mean	Percentage	Interpretation
The percent of respondents that included these types of alters:			
Family	1.00	100.0%	100% of respondents had at least one family member in their network.
Friend	0.56	56.0%	56% of respondents had at least one friend in their network.
Best friend	0.50	50.0%	50% of respondents had at least one best friend in their network.
Other peers	0.17	17.0%	17% of respondents had at least one other peer in their network.
Romantic partners	0.25	25.0%	25% of respondents had at least one romantic partner in their network.
Other professionals	0.17	17.0%	17% of respondents had at least one other professional in their network.
Media	0.02	2.0%	2% of respondents had at least one media alter in their network.
Teachers	0.29	29.0%	29% of respondents had at least one teacher in their network.
IDPH representatives	0.06	6.0%	6% of respondents had at least one IDPH representative in their network.
Coaches	0.12	12.0%	12% of respondents had at least one coach in their network.

Others related to job	0.04	4.0%	4% of respondents had at least one alter related to their job in their network.
Religious leaders	0.02	2.0%	2% of respondents had at least one religious leader in their network.
Other adults	0.09	9.0%	9% of respondents had at least one other adult in their network.
Other alter type	0.12	12.0%	12% of respondents had at least one other alter type in their network.

Variable	Mean	Percentage	Interpretation
Average number of the type of alters in the network			
Family	5.02	---	The average respondent put 5.02 family members in his or her network.
Friend	1.05	---	The average respondent put 1.05 friends in his or her network.
Best friend	0.64	---	The average respondent put .64 best friends in his or her network.
Other peers	0.24	---	The average respondent put .24 other peers in his or her network.
Romantic partners	0.25	---	The average respondent put .25 romantic partners in his or her network.
Other professionals	0.20	---	The average respondent put .20 other professionals in his or her network.
Media	0.03	---	The average respondent put .03 media alters in his or her network.
Teachers	0.33	---	The average respondent put .33 teachers in his or her network.
IDPH representatives	0.06	---	The average respondent put .06 IDPH representatives in his or her network.
Coaches	0.15	---	The average respondent put .15 coaches in his or her network.
Others related to job	0.04	---	The average respondent put .04 alters related to a job in his or her network.
Religious leaders	0.03	---	The average respondent put .03 religious leaders in his or her network.
Other adults	0.11	---	The average respondent put .11 other adults in his or her network.
Other alter type	0.15	---	The average respondent put .15 other alter types in his or her network.

Variable	Mean	Percentage	Interpretation
Average percent of type of alters in network			
Family	0.59	59.0%	For the average respondent, family made up 59% of his or her network.

Friend	0.13	13.0%	For the average respondent, friends made up 13% of his or her network.
Best friend	0.08	8.0%	For the average respondent, best friends made up 8% of his or her network.
Other peers	0.03	3.0%	For the average respondent, other peers made up 3% of his or her network.
Romantic partners	0.04	4.0%	For the average respondent, romantic partners made up 4% of his or her network.
Other professionals	0.03	3.0%	For the average respondent, other professionals made up 3% of his or her network.
Media	0.00	0.0%	For the average respondent, media made up 0% of his or her network.
Teachers	0.04	4.0%	For the average respondent, teachers made up 4% of his or her network.
IDPH representatives	0.01	1.0%	For the average respondent, IDPH representatives made up 1% of his or her network.
Coaches	0.02	2.0%	For the average respondent, coaches made up 2% of his or her network.
Others related to job	0.01	1.0%	For the average respondent, other alters related to a job made up 1% of his or her network.
Religious leaders	0.00	0.0%	For the average respondent, religious leaders made up 0% of his or her network.
Other adults	0.01	1.0%	For the average respondent, other adults made up 1% of his or her network.
Other alter type	0.02	2.0%	For the average respondent, other alter types made up 2% of his or her network.

Participants across both the TOP and Wise Guys programs reported a pre-test average of 8.32 individuals in their social networks, with a range between 1 alter and 22 alters. Family members represented the largest proportion of types of alters; all social networks included at least one family member. On average, family members comprised almost 60% of the alters in the respondents' social networks. Friends and best friends also represented large proportions of the pre-test social networks. The average network density was .38, indicating that on average 38% of alters in respondents' social networks knew each other.

Table 44. Communication characteristics by topic area (pre-test) for respondents in the TOP and Wise Guys programs, n=130

Variable	Mean	Standard Deviation	Minimum	Maximum
Average number of alters who R has talked to about:				
Friendships	3.66	2.53	0	14
Romantic relationships	2.74	1.81	0	10
Decision making	4.19	2.53	0	13
Masculinity/Femininity	1.74	1.66	0	7
Sex	2.63	2.12	0	11
Abstinence	1.28	1.45	0	6

Birth control	2.05	1.62	0	6
STI	1.90	1.92	0	10
Suicide	1.95	1.85	0	8
Average number of alters who R would talk to about:				
Friendships	3.12	2.21	0	14
Romantic relationships	2.65	1.87	0	11
Decision making	3.37	2.26	0	11
Masculinity/Femininity	2.08	1.71	0	11
Sex	2.27	1.53	0	8
Abstinence	1.63	1.47	0	8
Birth control	2.00	1.62	0	7
STI	2.08	1.67	0	11
Suicide	2.72	2.38	0	14
Average number of alters who R would not talk to about:				
Friendships	1.44	1.39	0	7
Romantic relationships	2.02	1.95	0	14
Decision making	1.28	1.69	0	11
Masculinity/Femininity	1.85	1.75	0	7
Sex	2.50	2.00	0	12
Abstinence	1.92	2.33	0	11
Birth control	2.02	2.11	0	10
STI	1.86	2.10	0	13
Suicide	1.38	2.08	0	13

Respondents in the TOP and Wise Guys programs reported that they **have** talked and **would** talk about topics related to friendships and decision-making with the most alters in their social networks (3.66 alters and 3.12 alters, respectively). The topics that respondents had discussed with the least number of alters in their networks were abstinence (1.28 alters), masculinity/femininity (1.74 alters), and STIs (1.90 alters). Respondents would **not** talk to the most amount of alters about sex (2.50 alters), birth control (2.02 alters) and romantic relationships (2 alters).

Table 45. Communication characteristics (pre-test) by type of alter for respondents in the TOP and Wise Guys programs, n=130

Variable	Mean	Standard Deviation	Minimum	Maximum
Average total network members R has talked to	6.32	2.54	1	15
Average total network members R would talk to	6.15	2.49	1	15
Average total network members R would not talk to	4.90	2.59	1	14
Type of alter R has talked to most:				
Family	0.87	0.34	0	1
Friend	0.14	0.35	0	1
Best friend	0.09	0.29	0	1
Other peers	0.02	0.12	0	1
Romantic partners	0.02	0.15	0	1
Other professionals	0.01	0.09	0	1
Media	0.00	0.00	0	0

Teachers	0.03	0.17	0	1
IDPH representatives	0.00	0.00	0	0
Coaches	0.00	0.00	0	0
Others related to job	0.00	0.00	0	0
Religious leaders	0.00	0.00	0	0
Other adults	0.00	0.00	0	0
Other alter type	0.02	0.12	0	1
Type of alter R would talk to most:				
Family	0.92	0.28	0	1
Friend	0.12	0.33	0	1
Best friend	0.08	0.28	0	1
Other peers	0.00	0.00	0	0
Romantic partners	0.04	0.19	0	1
Other professionals	0.02	0.15	0	1
Media	0.00	0.00	0	0
Teachers	0.03	0.17	0	1
IDPH representatives	0.00	0.00	0	0
Coaches	0.01	0.09	0	1
Others related to job	0.01	0.09	0	1
Religious leaders	0.01	0.09	0	1
Other adults	0.01	0.09	0	1
Other alter type	0.02	0.12	0	1
Type of alter R would not talk to most:				
Family	0.88	0.33	0	1
Friend	0.12	0.33	0	1
Best friend	0.06	0.24	0	1
Other peers	0.05	0.23	0	1
Romantic partners	0.08	0.28	0	1
Other professionals	0.05	0.23	0	1
Media	0.02	0.15	0	1
Teachers	0.05	0.21	0	1
IDPH representatives	0.02	0.15	0	1
Coaches	0.07	0.25	0	1
Others related to job	0.03	0.17	0	1
Religious leaders	0.04	0.19	0	1
Other adults	0.03	0.17	0	1
Other alter type	0.03	0.17	0	1

Before starting the program, respondents in the TOP and Wise Guys programs reported that they **have** talked or **would** talk to more people on average than they would **not** talk to across all topic areas. Respondents reported that they **have** talked or **would** talk to family and friends most often. Respondents reported low levels of communication about these topics with other groups, like IDPH representatives, coaches, religious leaders, and other adults. Family members were also the group that respondents would **not** talk to the most across all topics.

Table 46. Other sources of information (pre-test) for respondents in the TOP and Wise Guys programs, n=130

Variable	Mean	Standard Deviation	Minimum	Maximum
Other Sources of Information				
Birth Control				
None	0.31	0.46	0	1
Class/School	0.13	0.34	0	1
Technology	0.20	0.47	0	3
Professionals	0.20	0.42	0	2
IDPH representatives	0.04	0.19	0	1
Paper resources	0.01	0.09	0	1
Community centers	0.07	0.25	0	1
Peers	0.02	0.15	0	1
Family	0.05	0.29	0	2
Other	0.03	0.17	0	1
STI				
None	0.28	0.45	0	1
Class/School	0.19	0.40	0	1
Technology	0.17	0.42	0	2
Professionals	0.15	0.38	0	2
IDPH representatives	0.03	0.17	0	1
Paper resources	0.03	0.17	0	1
Community centers	0.08	0.27	0	1
Peers	0.02	0.20	0	2
Family	0.01	0.09	0	1
Other	0.04	0.19	0	1

Before the start of the TOP and Wise Guys programs, respondents most commonly reported using technology, healthcare professionals, and class/school as sources of information about birth control and STIs. A high proportion of respondents reported no other sources of information about birth control (.31) and STIs (.28).

Results: TOP and Wise Guys programs

Post-test results

Table 47-50. Network characteristics (post-test) for respondents in the TOP and Wise Guys programs, n=79

Variable	Mean	Percentage	Standard Deviation	Minimum	Maximum
Network size	7.60	---	2.67	3	22
Network density	0.50	---	0.30	0	1

Variable	Mean	Percentage	Interpretation
The percent of respondents that included these types of alters:			
Family	1.00	100.0%	100% of respondents had at least one family member in their network.
Friend	0.61	61.0%	61% of respondents had at least one friend in their network.
Best friend	0.43	43.0%	43% of respondents had at least one best friend in their network.
Other peers	0.09	9.0%	9% of respondents had at least one other peer in their network.
Romantic partners	0.18	18.0%	18% of respondents had at least one romantic partner in their network.
Other professionals	0.11	11.0%	11% of respondents had at least one other professional in their network.
Media	0.05	5.0%	5% of respondents had at least one media alter in their network.
Teachers	0.24	24.0%	24% of respondents had at least one teacher in their network.
IDPH representatives	0.10	10.0%	10% of respondents had at least one IDPH representative in their network.
Coaches	0.13	13.0%	13% of respondents had at least one coach in their network.
Others related to job	0.00	0.0%	0% of respondents had at least one alter related to their job in their network.
Religious leaders	0.02	2.0%	2% of respondents had at least one religious leader in their network.
Other adults	0.10	10.0%	10% of respondents had at least one other adult in their network.
Other alter type	0.09	9.0%	9% of respondents had at least one other alter type in their network.

Variable	Mean	Percentage	Interpretation
Average number of the type of alters in the network			
Family	4.46	---	The average respondent put 4.46 family members in his or her network.
Friend	1.51	---	The average respondent put 1.51 friends in his or her network.
Best friend	0.54	---	The average respondent put .54 best friends in his or her network.

Other peers	0.11	---	The average respondent put .11 other peers in his or her network.
Romantic partners	0.19	---	The average respondent put .19 romantic partners in his or her network.
Other professionals	0.13	---	The average respondent put .13 other professionals in his or her network.
Media	0.04	---	The average respondent put .04 media alters in his or her network.
Teachers	0.25	---	The average respondent put .25 teachers in his or her network.
IDPH representatives	0.11	---	The average respondent put .11 IDPH representatives in his or her network.
Coaches	0.15	---	The average respondent put .015 coaches in his or her network.
Others related to job	0.00	---	The average respondent put .00 alters related to a job in his or her network.
Religious leaders	0.04	---	The average respondent put .04 religious leaders in his or her network.
Other adults	0.15	---	The average respondent put .15 other adults in his or her network.
Other alter type	0.13	---	The average respondent put .13 other alter types in his or her network.

Variable	Mean	Percentage	Interpretation
Average percent of type of alters in network			
Family	0.59	59.0%	For the average respondent, family made up 59% of his or her network.
Friend	0.15	15.0%	For the average respondent, friends made up 15% of his or her network.
Best friend	0.08	8.0%	For the average respondent, best friends made up 8% of his or her network.
Other peers	0.01	1.0%	For the average respondent, other peers made up 1% of his or her network.
Romantic partners	0.03	3.0%	For the average respondent, romantic partners made up 3% of his or her network.
Other professionals	0.02	2.0%	For the average respondent, other professionals made up 2% of his or her network.
Media	0.01	1.0%	For the average respondent, media made up 1% of his or her network.
Teachers	0.04	4.0%	For the average respondent, teachers made up 4% of his or her network.

IDPH representatives	0.02	2.0%	For the average respondent, IDPH representatives made up 2% of his or her network.
Coaches	0.02	2.0%	For the average respondent, coaches made up 2% of his or her network.
Others related to job	0.00	0.0%	For the average respondent, other alters related to a job made up 0% of his or her network.
Religious leaders	0.00	0.0%	For the average respondent, religious leaders made up 0% of his or her network.
Other adults	0.02	2.0%	For the average respondent, other adults made up 2% of his or her network.
Other alter type	0.01	1.0%	For the average respondent, other alter types made up 1% of his or her network.

Participants in TOP and Wise Guys completed the programs with an average of 7.6 individuals in their social networks, with a range between 3 and 22 alters. Family members again represented the largest proportion of types of alters, with friends and best friends coming in next, followed by romantic partners. On average, family members comprised 59% of alters in the respondents' social networks. The average network density was .50, indicating that on average 50% of alters in respondents' social networks knew each other.

Table 51. Communication characteristics by topic area (post-test) for respondents in the TOP and Wise Guys programs, n=79

Variable	Mean	Standard Deviation	Minimum	Maximum
Average number of alters who R has talked to about:				
Friendships	3.10	2.21	0	9
Romantic relationships	2.48	2.02	0	9
Decision making	3.42	2.27	0	8
Masculinity/Femininity	1.16	1.38	0	6
Sex	1.71	1.66	0	6
Abstinence	0.84	1.31	0	7
Birth control	1.53	1.78	0	7
STI	1.13	1.47	0	8
Suicide	1.16	1.61	0	7
Average number of alters who R would talk to about:				
Friendships	3.63	2.21	0	10
Romantic relationships	2.97	1.50	0	7
Decision making	3.65	2.44	0	10
Masculinity/Femininity	2.04	1.61	0	7
Sex	2.41	1.56	0	8
Abstinence	1.96	1.57	0	8
Birth control	2.33	1.72	0	8
STI	2.16	1.86	0	8
Suicide	3.44	2.40	0	9
Average number of alters who R would not talk to about:				
Friendships	1.09	1.37	0	9

Romantic relationships	1.86	1.77	0	9
Decision making	0.89	1.32	0	6
Masculinity/Femininity	1.96	1.90	0	8
Sex	2.23	2.15	0	10
Abstinence	1.81	2.02	0	9
Birth control	1.82	2.03	0	10
STI	1.78	1.95	0	10
Suicide	1.01	1.53	0	7

After completion of the TOP and Wise Guys programs, respondents reported that they **have talked** and **would talk** about topics related to decision-making, friendships, and romantic relationships with the most alters in their social networks. The topics that respondents had discussed with the least number of alters in their networks were abstinence, masculinity/femininity, and STIs. Respondents would **not** talk to the most amount of alters about sex (2.23 alters) and masculinity/femininity (1.96 alters).

Table 52. Communication characteristics (post-test) by type of alter for respondents in the TOP and Wise Guys programs, n=79

Variable	Mean	Standard Deviation	Minimum	Maximum
Average total network members R has talked to	5.41	2.04	0	9
Average total network members R would talk to	5.94	2.07	0	10
Average total network members R would not talk to	4.39	2.59	0	13
Type of alter R has talked to most:				
Family	0.90	0.30	0	1
Friend	0.22	0.41	0	1
Best friend	0.04	0.19	0	1
Other peers	0.03	0.16	0	1
Romantic partners	0.03	0.16	0	1
Other professionals	0.01	0.11	0	1
Media	0.01	0.11	0	1
Teachers	0.03	0.16	0	1
IDPH representatives	0.01	0.11	0	1
Coaches	0.03	0.16	0	1
Others related to job	0.01	0.11	0	1
Religious leaders	0.01	0.11	0	1
Other adults	0.01	0.11	0	1
Other alter type	0.03	0.16	0	1
Type of alter R would talk to most:				
Family	0.94	0.25	0	1
Friend	0.14	0.35	0	1
Best friend	0.05	0.22	0	1
Other peers	0.01	0.11	0	1
Romantic partners	0.01	0.11	0	1
Other professionals	0.01	0.11	0	1
Media	0.00	0.00	0	0
Teachers	0.03	0.16	0	1

IDPH representatives	0.00	0.00	0	0
Coaches	0.01	0.11	0	1
Others related to job	0.00	0.00	0	0
Religious leaders	0.00	0.00	0	0
Other adults	0.00	0.00	0	0
Other alter type	0.00	0.00	0	0
Type of alter R would not talk to most:				
Family	0.89	0.32	0	1
Friend	0.19	0.39	0	1
Best friend	0.10	0.30	0	1
Other peers	0.08	0.27	0	1
Romantic partners	0.08	0.27	0	1
Other professionals	0.09	0.29	0	1
Media	0.05	0.22	0	1
Teachers	0.10	0.30	0	1
IDPH representatives	0.05	0.22	0	1
Coaches	0.11	0.32	0	1
Others related to job	0.05	0.22	0	1
Religious leaders	0.05	0.22	0	1
Other adults	0.06	0.25	0	1
Other alter type	0.06	0.25	0	1

After completing the program, respondents in the TOP and Wise Guys programs reported that they **have** talked or **would** talk to more people on average than they would **not** talk to across all topic areas. Respondents reported that they **have** talked or **would** talk to family, friends, and best friends most often. Respondents reported increased levels of communication about these topics with other groups, like IDPH representatives, coaches, religious leaders, and other adults, compared with pre-test reports. Family members were also the group that respondents would **not** talk to the most across all topics.

Table 53. Other sources of information (post-test) for respondents in the TOP and Wise Guys programs, n=79

Variable	Mean	Standard Deviation	Minimum	Maximum
Other Sources of Information				
Birth Control				
None	0.00	0.00	0	0
Class/School	0.20	0.40	0	1
Technology	0.19	0.39	0	1
Professionals	0.11	0.32	0	1
IDPH representatives	0.19	0.39	0	1
Paper resources	0.01	0.11	0	1
Community centers	0.04	0.19	0	1
Peers	0.01	0.11	0	1
Family	0.03	0.16	0	1
Other	0.01	0.11	0	1
STI				
None	0.00	0.00	0	0
Class/School	0.30	0.46	0	1
Technology	0.16	0.41	0	2

Professionals	0.05	0.22	0	1
IDPH representatives	0.19	0.39	0	1
Paper resources	0.00	0.00	0	0
Community centers	0.08	0.27	0	1
Peers	0.01	0.11	0	1
Family	0.04	0.19	0	1
Other	0.00	0.00	0	0

After the conclusion of the TOP program, respondents most commonly reported using school/class as a source for information about both birth control and STIs, followed by technology and IDPH representatives.

Results: TOP and Wise Guys programs

Pre-post comparisons

Table 54. T-test comparisons between pre-test and post-test means and proportions for network characteristics for respondents in TOP and Wise Guys programs

Variable	Pre-test mean	Post-test mean
Network size	8.32	7.60*
Network density	0.38	0.50***
Type of alters		
Family	5.02	4.46
Friend	1.05	1.51
Best friend	0.64	0.54
Other peers	0.24	0.11
Romantic partners	0.25	0.19
Other professionals	0.20	0.13
Media	0.03	0.04
Teachers	0.33	0.25
IDPH representatives	0.06	0.11
Coaches	0.15	0.15
Others related to job	0.04	0.00
Religious leaders	0.03	0.04
Other adults	0.11	0.15
Other alter type	0.15	0.13

*p<0.05, **p<0.01, ***p<0.001, indicates significant difference in means

Averages for network size (p<.05) for respondents in the TOP and Wise Guys programs decreased significantly from pre-test to post-test social networks. The network density increased from .38 to .50 (p<0.001). The average number of alters in the social networks who were family members decreased from 5.02 to 4.46 alters. The average number of most other types of alters decreased from pre- to post-test. One exception was the proportion of IDPH representatives, which increased slightly from .06 to .11 from pre- to post-test.

Table 55. T-test comparisons between pre-test and post-test means for communication characteristics by topic area for respondents in TOP and Wise Guys programs

Variable	Pre-test mean	Post-test mean
Average total network members R has talked to	6.32	5.41**
Average total network members R would talk to	6.15	5.94
Average total network members R would not talk to	4.90	4.39
Average number of alters who R has talked to about:		
Friendships	3.66	3.10
Romantic relationships	2.74	2.48
Decision making	4.19	3.42
Masculinity/Femininity	1.74	1.16
Sex	2.63	1.71
Abstinence	1.28	0.84
Birth control	2.05	1.53
STI	1.90	1.13
Suicide	1.95	1.16
Average number of alters who R would talk to about:		
Friendships	3.12	3.63
Romantic relationships	2.65	2.97
Decision making	3.37	3.65
Masculinity/Femininity	2.08	2.04
Sex	2.27	2.41
Abstinence	1.63	1.96
Birth control	2.00	2.33
STI	2.08	2.16
Suicide	2.72	3.44
Average number of alters who R would not talk to about:		
Friendships	1.44	1.09
Romantic relationships	2.02	1.86
Decision making	1.28	0.89
Masculinity/Femininity	1.85	1.96
Sex	2.50	2.23
Abstinence	1.92	1.81
Birth control	2.02	1.82
STI	1.86	1.78
Suicide	1.38	1.01

*p<0.05, **p<0.01, ***p<0.001, indicates significant difference in means

Across both programs, the average number of total network members respondents in the TOP and Wise Guys programs **have** talked to, **would** talk to, and would **not** talk to all decreased from pre- to post-test. This difference was significant at the p<0.01 level of significance for average number of total network members whom respondents *have* talked to.

Table 56. T-test comparisons between pre-test and post-test proportions for communication characteristics by alter type for respondents in the TOP and Wise Guys programs

Variable	Pre-test Proportion	Post-test Proportion
Proportion of the type of alter R has talked to most:		
Family	0.87	0.90
Friend	0.14	0.22
Best friend	0.09	0.04
Other peers	0.02	0.03
Romantic partners	0.02	0.03
Other professionals	0.01	0.01
Media	0.00	0.01
Teachers	0.03	0.03
IDPH representatives	0.00	0.01
Coaches	0.00	0.03
Others related to job	0.00	0.01
Religious leaders	0.00	0.01
Other adults	0.00	0.01
Other alter type	0.02	0.03
Proportion of the type of alter R would talk to most:		
Family	0.92	0.94
Friend	0.12	0.14
Best friend	0.08	0.05
Other peers	0.00	0.01
Romantic partners	0.04	0.01
Other professionals	0.02	0.01
Media	0.00	0.00
Teachers	0.03	0.03
IDPH representatives	0.00	0.00
Coaches	0.01	0.01
Others related to job	0.01	0.00
Religious leaders	0.01	0.00
Other adults	0.01	0.00
Other alter type	0.02	0.00
Proportion of the type of alter R would not talk to most:		
Family	0.88	0.89
Friend	0.12	0.19
Best friend	0.06	0.10
Other peers	0.05	0.08
Romantic partners	0.08	0.08
Other professionals	0.05	0.09
Media	0.02	0.05
Teachers	0.05	0.10
IDPH representatives	0.02	0.05
Coaches	0.07	0.11
Others related to job	0.03	0.05
Religious leaders	0.04	0.05
Other adults	0.03	0.06
Other alter type	0.03	0.06

*p<0.05, **p<0.01, ***p<0.001, indicates significant difference in means

The proportion of alter types who respondents in the TOP and Wise Guys programs **have** or **would** talk to most increased from pre- to post-test for most alter types. The proportion of alter types who respondents would **not** talk to most also increased from pre- to post-test for most alter types.

Table 57. T-test comparisons between pre-test and post-test proportions for other sources of information for respondents in the TOP and Wise Guys programs

Variable	Pretest Mean	Posttest Mean
Birth Control		
None	0.31	0.00
Class/School	0.13	0.20
Technology	0.20	0.19
Professionals	0.20	0.11
IDPH representatives	0.04	0.19
Paper resources	0.01	0.01
Community centers	0.07	0.04
Peers	0.02	0.01
Family	0.05	0.03
Other	0.03	0.01
STI		
None	0.28	0.00
Class/School	0.19	0.30
Technology	0.17	0.16
Professionals	0.15	0.05
IDPH representatives	0.03	0.19
Paper resources	0.03	0.00
Community centers	0.08	0.08
Peers	0.02	0.01
Family	0.01	0.04
Other	0.04	0.00

*p<0.05, **p<0.01, ***p<0.001, indicates significant difference in means

The proportion of respondents in the TOP and Wise Guys programs who reported using no other sources of information for birth control and STIs decreased from .31 (birth control) and .28 (STI) to zero from pre- to post-test posttest.

Discussion

Network size and density

For both programs, the number of alters in the average social networks decreased significantly from pre-test to post-test, while the average network density increased—indicating that social networks in the post-test were smaller and more connected than those in the pre-test. This trend was especially pronounced among Wise Guys participants, for whom the average network size decreased almost a full alter from 8.81 to 7.84 and the average network density increased from .34 to .49 from pre- to post-test.

Communication patterns

While the average number of alters whom respondents *have* or *would* talk to decreased for both programs from pre- to post-test across all topics, the average number of alters whom respondents would *not* talk to also decreased—indicating that respondents on average may be less resistant to communication around these topics.

For both the TOP and Wise Guys programs, the average number of alters with whom respondents would *not* discuss sex, abstinence, birth control, STIs, and suicide all decreased, while the number of alters with whom respondents *would* discuss these same topics increased from pre- to post-test. This trend may indicate more open communication around these specific sexual health topics.

Other sources of information about birth control and STI's

For information about both birth control and STIs, respondents reported increases in number of and types of sources of information. Fewer respondents in both programs reported “no” other sources of information for these topics from pre- to post-test, indicating that program participants may have widened the scope of their searching for information around these sexual health topics. Specifically, respondents reported increasingly turning to both IDPH professionals and their classes for information about these topics.