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Assessing the effectiveness of Wise Guys: A mixed-methods approach

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Abstract

Previous research with teens raised questions on the validity of survey studies with this population. As one response, our team implemented a mixed-methods study to evaluate an evidence-based, interactive curriculum, *Wise Guys*, that is designed to promote healthy relationships and sexual behavior in young men 14–17 years of age. The current study included a Youth Advisory Group, focus groups, and a video-journaling project to delineate teens' thoughts on the most salient aspects of *Wise Guys* and we used these to develop a stakeholder-informed survey instrument. The survey was administered via REDCap, a computer-based medium via phones and mobile devices. Quantitative survey analyses revealed significant positive changes in study constructs. Qualitative interpretations provided rich data that validated the survey findings. Community engagement in the research process and mixed methods may provide the infrastructure for future research and evaluation efforts related to teens.

Keywords

Adolescent sexual health; youth advisory groups; mixed methods research

Introduction

Although young men have educational needs in the areas of sexual and reproductive health similar to young women, there are a dearth of programs that are designed for young men and even fewer that have been rigorously evaluated. Currently, the Rykers Health Advocacy Program, designed for incarcerated youth, is the only male-specific program on the Office of Adolescent Health list of approved, evidenced-based programs (Office of Adolescent Health, 2016). The *Wise Guys* program is designed to address the unique informational needs of young men about sexual health. Although previous *Wise Guys* research demonstrated positive changes in knowledge, attitudes, and behaviors, findings were confounded with the complexities of conducting survey research with teens (Herrman, Moore, & Rahmer, 2016; Herrman, Moore, & Sims, 2013). We noticed that young people discussed the positive outcomes of a program, but tired of traditional survey research. Self-report data bears its potential lack of reliability when long surveys are required of teens. Males (2010) noted that these variables threatened validity, especially related to sensitive topics such as sexuality, pregnancy, personal or intimate partner violence, and self-reflection. These factors led us to seek out additional methods to capture authentic perceptions and potential changes related to an intervention. Mixed-methods research, which allows qualitative and quantitative methods to merge, provides a complimentary approach to accessing teen perceptions, and yields larger scale, numerical data along with rich, deeper exploration of issues appeared to meet our study needs (Creswell, Klassen, Plano-Clark, & Smith, 2011; Morgan, 2014).

To assess the effectiveness of *Wise Guys* and to design a research project in tune with the capacities of young people, a mixed methods, youth participatory research study was planned and implemented. Creswell et al. (2011) described the need for mixed methods when innovative, real-life understandings are needed to both assess the magnitude and meaning of constructs. This paper describes the use of a Youth Advisory Group, focus groups, a youth-developed survey, a video-journaling project, and a phone or tablet implemented survey designed to assess the value of the *Wise Guys* program.

Review of the Literature

Wise Guys was developed in 1990 by the Family Life Council in North Carolina and has undergone several iterations since that time (Family Life Education Services, 2011). The program was operationalized in the state of study since 2007 and is designed to increase knowledge about sexual activity, enhance prosocial attitudes toward women and relationships, and promote safer sexual behaviors in participants. Delivered over eight to twelve weeks, the lessons address respect for women, acceptance of responsibilities associated with sexual activity and parenting, dating violence, communication skills, personal growth and self-esteem, values-based decision-making, safer sexual practices, resistance skills, and identification of support systems.

Research in 2001 determined that participants in *Wise Guys* demonstrated increased knowledge about reproductive health and sexually transmitted infections, along with increased use of condoms and contraception in sexually active participants when compared with a control group (Gottsegen & Philliber, 2001). This study was unable to detect measurable differences in participants' attitudes following *Wise Guys*. Subsequent

evaluation noted similar increases in knowledge and attitudinal measures such as increased feelings of responsibility related to sex, positive sex role attitudes, and greater willingness to talk with parents about sexuality following the intervention (Child Welfare League of America, 2003). In this study, youth reported less pressure to have sex, increased use of condoms at last sexual encounter, and increased use of contraception (Child Welfare League of America, 2003).

Gruchow (2009) and Gruchow and Brown (2011) noted similar findings, with increased knowledge, selected positive attitudinal changes (including respectful attitudes toward women and personal responsibilities in relationships), and reports of safer sexual practices among sexually active young men. Regression analyses demonstrated that participation in *Wise Guys* was the leading predictor for changes in knowledge and healthier sexual behaviors in young men (Gruchow, 2009; Gruchow & Brown, 2011). Although the *Wise Guys* evaluations reflected increases in knowledge variables and positive behavioral changes, attitudinal measures fail to discern appreciable or consistent changes in attitudes (Gruchow & Brown, 2011). In addition, researchers concluded that *Wise Guys* did not delay nor encourage participation in sexual activity (Gottsegen & Philliber, 2001; Gruchow, 2009; Gruchow & Brown, 2011).

Wise Guys is considered a promising program to prevent teen pregnancy but, due to attrition and small sample sizes, previous studies have not met the rigor required to be considered an evidence-based practice, precluding *Wise Guys* from being part of the Office of Adolescent Health approved programs (Kisker & Murphy, 2016). Current efforts in Iowa, using a large-scale, randomized-control group design, are in progress with findings anticipated in 2018 (Kisker & Murphy, 2016).

Local researchers published two studies designed to determine the effectiveness of *Wise Guys*. The first pilot study used the *Thoughts on Teen Parenting Survey* (Herrman & Nandakumar, 2012) in a pre/post-test design to assess for changes in attitudes following participation in the *Wise Guys* program. The sample of 70 participants noted more realistic attitudes toward the parenting experience following exposure to the *Wise Guys* curriculum (Herrman, Moore, & Sims, 2013). In this study, young men were noted to have lower scores in the cumulative scale and in the *Money* and *Life in General* subscales following the *Wise Guys* program. The lower score on the cumulative score reflected participants' appreciation of how having a baby during the teen years may affect their lives on a variety of dimensions. The lower subscale scores highlighted participants' thoughts on the negative impact of a teen birth on their financial status and their daily lives, including such areas as sleep, stress, and extracurricular activities. Previous research noted that males were more inclined to assess the impact of a teen birth from the perspective of tangible consequences, such as finances and impact on daily routine (Herrman & Waterhouse, 2011).

A subsequent study used both the *Thoughts on Teen Parenting Survey* (Herrman & Nandakumar, 2012) and the curriculum-specific measure to assess for increased sexual health knowledge (about sexual activity, reproduction, and sexually transmitted infections), safer sexual behaviors (including sexual initiation, use of condoms, and use of contraception), and changes in attitudes associated with sexual activity, women,

relationships, parenting, and communication with parents. Although the sample of 159 individuals did not have a significant change in knowledge and attitudinal measures, the group did sustain significant positive findings in the areas of safer sexual behaviors and engaging in communication with parents about dating and sexuality (Herrman, Moore, & Rahmer, 2016). The study noted that teens who conversed with parents about sexual activity were less likely to engage in unsafe sexual practices and sexually active men reported increased use of condoms and decreased use of withdrawal as a contraceptive method (Herrman, Moore, & Rahmer, 2016). Debriefing with the research team after these studies called into question the traditional survey methods of accessing pre/post-test data. Review of the completed surveys during manual data entry that noted survey guidelines were not followed and that questions were left blank, answered habitually with neutral options or the same options automatically, or showed designs and patterns in the answers that most likely did not represent valid consideration of or answering survey items.

Although previous studies demonstrated discernable improvements in knowledge and behaviors, the lack of ability to trust survey data, issues with attrition, and lack of reliable attitudinal measures led this team to develop a mixed methods study, based on the tenets of community-based participatory research, with the following specific aims: 1 Develop a valid, reliable, and teen-friendly web-based survey instrument, based on teen perceptions and informed by focus groups and a Youth Advisory Group, to measure changes in knowledge, attitudes, and behaviors pre/post the *Wise Guys* intervention; and, 2. Evaluate the impact of the *Wise Guys* program using a mixed methods design including the study-developed web-based survey instrument, focus groups, and video-journaling content analysis.

Methods

Design

This mixed-methods study used a variety of research strategies and a robust research plan to determine the effectiveness of *Wise Guys*. We received approvals from the Institutional Review Board (IRB) of the academic setting, the state human subjects' committee, and the IRB of the clinical agency that oversees the adolescent pregnancy prevention effort that sponsors the programs. For each component of the study, all participants less than 18 years of age assented to participate and received parental permission; those 18 and over provided consent to participate. The study was a multipart sequential mixed methods design (qual-quant-QUAL) and as such, took place in four phases (see Table 1) blending the qualitative and quantitative methods to examine the effectiveness of *Wise Guys* (Morgan, 2014). Each of the four phases, along with details on sample, setting, incentives, and instruments, are described below.

Procedures

Phase I—We began with recruitment of our Youth Advisory Group (YAG). Young men who previously participated in at least one *Wise Guys* program throughout the state of study were asked to join the YAG and participate in both information-gathering focus groups and provide youth expertise and perspectives to the research efforts. Ten young men accepted

this role, received a \$50 gift card, contributed to the formative work of the study design, and participated in focus groups. Youth Advisory groups or councils were found to enhance youth engagement and increase investment in project efforts (Adolescent Health Initiative, 2014). We hoped our group would increase participation in the project, inform our methods, and explore new ways of designing the evaluation.

The five focus groups included 59 individuals, including some members of the YAG who attended more than one focus group (see Table 1). Each focus group member received a gift card incentive of \$25 and a light meal. All focus groups, meetings, and trainings with the YAG took place at schools, summer camps, and community centers throughout the state of study and were held in quiet, private rooms. Focus Group One discussed the research project and explored teen perceptions of the major tenets of the *Wise Guys* curriculum. Young men were asked about the most significant memories, important lessons, and poignant topics they identified as part of the *Wise Guys* program. These were distilled down to general *Wise Guys* subject threads.

Phase II—Participants in Focus Group Two were asked to take the major subject threads and topics and place them in question format to create survey items that would be acceptable, meaningful, and understandable and would resonate with young men. Analysis of the identified survey items were found to revolve around five constructs, including: communication and relationships; sexual health and decision-making; respect for self and others; responsibilities, values, and goals; and thoughts on self. These included items related to knowledge, attitudes, and behaviors in each of the major construct areas. Additional items addressed the *Wise Guys* program in general. The data and processes of the early focus groups recursively informed subsequent focus groups and the design of the study, enhancing the role of the YAG in the research process.

Following Focus Group Two, the survey had 51 items on the pre-test with an additional 22 items (total 73 items) on the post-test. In Focus Group Three, participants completed the survey and conducted Content Validity Indexing on the survey items. Participants were asked to rank each item with a value of 2 (keep the item), 1 (keep but revise the item), or 0 (delete the item). The resulting

44-item pretest and the 58-item post-test (including 14 items unique to the post-test) were then adapted using the REDCap (Research Electronic Data Capture) mechanism, a web-based data collection program, and formatted for delivery via mobile or tablet devices. Each survey item was categorized as representing a single construct and these were grouped to form construct-specific subscales. This mechanism allowed for a subscale score for each construct. Then, the subscale score means for each construct could be compared in a pre/post-intervention manner. Half of the items of each measure were reverse scored to increase reliability.

Phase III—The 44-item pre-test survey and 58-item post-test was piloted with 21 young men during the implementation of *Wise Guys* at a local summer camp. This pilot led us to clarify some meanings of words but the survey was fundamentally unchanged.

We then recruited for and organized the implementation of the *Wise Guys*. The non-profit group that coordinated program efforts throughout the state registered participants, engaged educators, and arranged all the details of the program, all of which took place in school settings. A total 19 groups of students at 16 settings were offered participation in *Wise Guys* program and survey component of the study yielding a total of 152 students. Our final sample ($n=115$) reflected loss of students from the larger population due to lack of interest in completing the measures despite participation in the *Wise Guys* program, lack of a signed parental/guardian permission forms, or dropping out of the *Wise Guys* program. There is no indication that the members who did not participate in the research differed discernably as an aggregate from those who did participate in the study. All school administrations approved of the research.

The research team received assent/parent permission or consent from the participants who chose to be in the study and administered the 44-item pre-test on the first day of the program and the 58-item post-test on the last day of the program. The ten-session curriculum was conducted over a period of two to four months per group. During each implementation, fidelity monitoring was conducted for each of the ten sessions of *Wise Guys* and the sessions demonstrated high levels of adherence to the program. Over a period of eight months, 115 young men participated in the *Wise Guys* program. The survey included demographic questions which are summarized in Table 2. Although the age, race, ethnicity, or other demographic data were not collected from the focus groups, it is conjectured that this data is similar to the breakdown of those completing the survey. Surveys were conducted via mobile devices, when available, and via pen and paper when internet access was not available or students were not allowed to use cell phones. Those young men participating in the *Wise Guys* implementation and completing the pre- and post-test measures received a gift card for \$25.

Phase IV—Twenty young men completing the *Wise Guys* program and wishing to participate in the video-journaling project completed additional consents and were trained in the use of hand-held video devices. Several researchers explored the use of videos to yield authentic qualitative data (Dimitrova et al., 2002; Jewitt, 2012; Melton & Bland, 2013). We provided devices to each participant and training offered ground rules about the use of the devices and the goals of the study. Over the course of three weeks, the young men were sent text message reminders and prompts every two days. The young men were charged to create videos while reflecting on how *Wise Guys* affected their daily lives and how they used lessons from the curriculum in decision-making and dealing with issues they encountered in their day to day lives. Examples of prompts included “How have you used *Wise Guys* lessons about communication today or in the last few days?” “How has *Wise Guys* changed your thoughts about yourself?” and “When we talk about respecting women, what does that mean to you?” These self-reflective exercises were designed to address the young men’s thoughts and insights and access authentic perceptions via an acceptable technology. Young men in the video-journaling project received a gift card for \$50 and were able to keep the video device.

Focus Group Four provided for a validation of subject threads and constructs along with discussion with the video-journaling participants about the experiences and their thoughts on

Wise Guys. Focus Group Five provided the opportunity to validate subject threads and constructs with participants and served as a member check to provide additional rigor to the qualitative findings and ensure that findings were credible, transferable, and authentic.

Analysis

Mixed methods analysis requires that analyses are conducted independently and then enmeshed to access shared meanings and richer data than each method separately (Creswell et al., 2010). The focus group and video-journaling data were transcribed verbatim with non-verbal behavioral observations incorporated into the transcripts. Qualitative analysis used template analysis, wherein data were clustered according to focus group questions or prompts and then examined for common data points (Rubin & Rubin, 2005). NVivo (QSR International, 2015) provided the software platform for content analysis and extraction of data clusters (Dimitrova et al., 2002). This data was then organized according to the five constructs established in the survey instrument to assess for major subject threads. Each focus group informed the agenda of the following one such that analysis took on an iterative quality, allowing for the emergence of rich exemplar quotes related to the identified constructs. The videos were also loaded into NVivo ((QSR International, 2015) with the associated transcripts to allow for side-by-side content analysis.

The five constructs emerging as a result of preliminary qualitative analyses of the *Wise Guys* curriculum and used to create the structure for the survey measure included items representing knowledge, attitude, and behavior items related to that specific area. Quantitative analyses were conducted using one-sample, non-paired *t* tests to evaluate mean differences among participants' responses in the five constructs pre- and post-intervention. *T* tests are meaningful, as they evaluate whether means of the pre-tests or subscales are significantly different from the respective means of the post-tests or subscales and then may be interpreted in light of qualitative data (Morgan, 2014).

Results

Qualitative findings

Following template analysis and recursive re-examination of the data, the qualitative findings from the focus groups and video-journaling project were organized according to the five major constructs and the section on general aspects of *Wise Guys*. These constructs led to the identification of exemplar quotes that provided deeper and richer description of these constructs and subject threads. Table 3 contains the major constructs along with exemplar quotes demonstrating these shared meanings.

The data related to the video-journaling project was also clustered to assess the acceptability and feasibility of this method. The young men were positive about the value of the video-journaling, with young men stating "*it made me understand myself better by answering the questions,*" and "*it made me become better at making the videos, talking and doing the questions—I got better talking about me and how I used Wise Guys.*" The video-journaling method also demonstrated feasibility, although our findings were mixed. The young men relayed "*Some people would rather write it, some people like the video-journaling,*" "*I think*

it is good for someone who is shy and can't express themselves, but I would rather write it down and then answer on video," and "Doing the videos was something to look forward to because I like doing them."

Quantitative Findings

Quantitative analysis suggested that, with the exception of the Sexual Health and Decision-making construct, means of the remaining four sets of items representing major constructs on the pre-tests were significantly different from the means on the post-tests. For example, the sample mean of the pre-test items related to Communication and Relationships was 51.37 ($SD = 5.70$) was significantly different from 58.53, $t(101) = -12.62$, $p < .00$. The 95% confidence interval for the Communication and Relationships subscale scores ranged from -8.25 to -6.01 . Results support the efficacy of the intervention to influence participants' abilities to communicate and understand relationships. In addition, the constructs Responsibilities, Values, and Goals; Respect for Self and Others; and Thoughts on Self were significantly impacted as a result of their participation in the *Wise Guys* program (see Table 4 for analyses).

Follow-up correlation analyses were conducted to evaluate whether the strength of the relationship between the five constructs, and the general category items of the pre- and post-tests differed significantly from one another. The items of the pre-tests were significantly related to each other (i.e., adolescents' communication in relationships assessed prior to the completion of the *Wise Guys* curriculum was significantly, and positively related to their goals, responsibilities, and ideas about parenting, $r = 0.20$, $p < .05$). However, pre-test items were not significantly related to post-test items.

Discussion

Significant changes in the responses associated with the four of the five major constructs denote the value of delineating major subject threads via qualitative methods and then measuring them quantitatively. These procedures enabled us to measure changes in knowledge, attitudes, and behaviors in each construct. The qualitative data, emergent constructs, and quantitative construct subscales triangulated with the quantitative findings and supported the efficacy of *Wise Guys*. The lack of significant results in the Sexual Health and Decision-making construct was unexpected. Because we had an older sample, and young men may have participated in *Wise Guys* before, this group may already have had positive attitude and behaviors, along with increased knowledge related to sexual health and decision-making prior to our study.

The focus groups, particularly the fourth and fifth that pertained to the video-journaling project and the member check, discovered the significant value of *Wise Guys*. The qualitative data affirmed teen thoughts on perceived changes in knowledge, attitudes, and behaviors as a result of the *Wise Guys* program. The young men affirmed messages about the roles and responsibilities associated with being male and safer sexual activities. From a qualitative perspective, the mixed-methods approach validated gains noted in knowledge and self-reported behavioral changes from previous studies (Gottsegen et al., 2001; Gruchow, 2009; Gruchow & Brown, 2011; Herrman et al., 2013; 2016). In addition, the approach

provided the forum for analysis of attitudinal changes not adequately measured in past research (Gottsegen et al., 2001; Gruchow, 2009; Gruchow & Brown, 2011).

The young men expressed that participation in *Wise Guys* both provided a forum for safe and mentored communication about personal and sensitive issues and generated discussion with others in their world. Young men discussed going home and talking with parents, relatives, or friends about issues related to relationships, respect for others, and their future after *Wise Guys* sessions. These conversations, which may translate to enhanced communication about sexual and reproductive health, represent an important benefit of the *Wise Guys* program. Herrman et al. (2016) emphasized the value of the program in increasing participant engagement in conversations with parents about dating and sexual activity and the correlation of these conversations with safer sexual practices.

The video-journaling method provided a medium for accessing rich data from the participants. This was especially true in light of the sensitive nature of the data, the active engagement of young men in technology and social media, and varying levels of verbal expressiveness during research on the part of some teens. The young men's videos yielded rich data in the video-journaling project, although satisfaction with the process itself varied. Although Melton and Bland (2013) found that the video-journaling method was far superior to paper and pencil methods, our sample members had mixed reactions to this method of data collection. Strategies with young people that promote reflection and communication are critical when studying issues that are difficult to conceptualize or represent complex issues wherein teens find expression difficult (Drew, Duncan, & Sawyer, 2010). The video-journaling method may be valuable in light of the challenges associated with research with teens related to developmental capacity, the role of technology, and issues with engaging young people. This method may benefit from increased study to validate its effectiveness, feasibility, and acceptability with youth participants.

Limitations

Several limitations prevent these findings to be generalized beyond the current study. The ability to recruit and maintain a group of young men who remained dedicated to the YAG over fifteen months proved difficult. Several of the young men graduated high school, but others required significant effort by program staff to stay engaged with the project. A power analysis indicated that we need a sample of approximately 137 young men to participate in the survey to demonstrate 80% power at the 80% confidence level. We were only able to recruit and retain 115 members in the survey completion phase. The suggested age level for *Wise Guys* is 11 to 14 years (Family Life Education Services, 2011), while our sample included members older than that age group. These may change the generalizability of this survey and findings to the young population.

Several of the young men taking *Wise Guys* participated in the program several times before, limiting our access to true pre-test findings. This may have contributed to the lack of significant differences on the Sexual Health and Decision-Making subscale of the survey between the groups. In converse, the focus groups and video-journaling served as a forum for collecting data related to self-reflection and accumulated knowledge and perceptions, providing a more accruing-over-time perspective of program benefits. An additional

limitation of our findings was associated to the small size of some of the focus groups. Although number of participants is not generally considered a limitation in qualitative research, the young men may have perceived increased pressure from peers or the need to respond in social desirable ways when groups were small. In contrast, having five focus groups, and having larger numbers of participants in some, offset this limitation.

Due to school policies, the use of mobile devices and access to the internet were restricted to students on school property. In addition, access to WiFi signals in school settings was not reliable, creating a significant barrier in being able to access REDCap. Because of these factors, many surveys were administered using traditional paper and pencil methods, limiting our ability to assess the acceptability of mobile surveys. Although the video-journaling project was an effective forum for expressing ideas and validating constructs, the young men tended to videotape themselves answering questions like a cameo performance, rather than depicting the impact of the *Wise Guys* lessons on their personal lives. In contrast, the video-journaling offered an option with a group with varying developmental levels, expressive abilities, comfort with technology, and level of ease in discussing sensitive topics and issues.

Conclusions

Mixed methods research provides the opportunity to access authentic teen perceptions and substantiate quantitative survey findings with qualitative data. This may be especially important when attempting to measure attitudes or changes in attitudes as a result of interventions. The ability to triangulate data while realizing the weaknesses associated with survey studies with adolescents provides valuable information for future study. Further, exploring the impact of the intervention as experienced from the adolescent participants' perspectives lends an element of cultural external validity that may be difficult to represent in traditional research or survey methods (Drew et al., 2010). Ongoing research with *Wise Guys* will continue to assess its capacity to be part of the evidence-based programs identified as effective in promoting responsible sexual behavior in teens (Office of Adolescent Health, 2016). The use of the Youth Advisory Groups and other youth-informed interventions are critical. The implementation of community-based participatory research and mixed methods, coupled with ensuring that authentic youth perceptions are heard, enhance the ability for policies, programs, and interventions to speak to the realities of teen lives. Findings of this study, and others, may be disseminated as local and national providers seek out male-directed sexual health programs.

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Implications and Contribution

This study validates the use of mixed methods research with teens who may lack the ability or motivation to participate in traditional research methods. Given the scarcity of valid survey measures that inform male-focused intervention programs, findings from this study could provide the foundation for a benchmark approach to future research. We learned that teens value the framing of sexual health within the larger constellations of respect, goals, and relationships. The YAG, focus groups, and video-journaling project provided unique opportunities for youth to inform the research process and components and ensure that their voices were heard. Community-based participatory and mixed methods research, wherein youth are seen as key stakeholders in their own health and destinies, may provide the infrastructure for future study.

Table 1.

Phases of the Mixed-Methods Study

Phase	Methods	Purpose	n
I	Establish Youth Advisory Group	Inform Research Design; Begin to Identify Program Subthreads	n=10
	Focus group 1	Determine Major Subthreads	n=3, n=11, (total N=14)
II	Focus group 2	Establish Thematic Priorities; Develop Survey Items from Subthreads and Derived Constructs	n=3, n=3, n=4 (total N=10)
	Focus group 3	Content Validity Indexing of Survey items	n=5
III	Pilot Survey administration	Pilot Survey Items	n=21
	Program and Survey Administration	Survey Implementation	n=115
IV	Video-Journaling Project	Explore Perceptions	n=20
	Focus Group 4	Validate Content Analysis from and Reactions to Video-Journaling Project	n=20
	Focus Group 5	Construct Validation; Member Check	n=9
			Total N =224

Table 2.

Summary of Demographic Findings from Survey Administration

N= 115	N	Percentage
Age		
Median	16	
Range	12-20	
Grade in school (10 missing)		
Freshman	16	15.2
Sophomore	24	22.9
Junior	31	29.5
Senior	34	32.4
Race/Ethnicity		
Black	75	65.2
White	13	11.3
Hispanic	13	11.3
Mixed	13	11.3
Native American	1	1.7
Family Structure (4 missing)		
Single-parent	69	62.2
Two-bio parents	30	27.0
Adult (relative)	9	8.1
Adult (non-relative)	1	.9
Parent & Parent's partner	2	1.8
Report having ever engaged in sexual intercourse (5 missing)		
No	32	29.1
Yes	62	56.4
Prefer Not to Answer	16	14.5

Table 3.

Evidence of major constructs in qualitative data with exemplar quotes

Construct	Exemplar Quotes
Communication and Relationships	<ol style="list-style-type: none"> 1. "It will help you understand both sides of relationships between guys and females, also if you see something wrong with the other person you can talk with them, come to and approach them in a nice way instead of just doing it how you think is right." 2. "I communicate better with my parents because I let them talk." 3. "From Wise Guys [I learned] that, in a relationship, communication is a must and it helps you be better in your relationship." 4. "Wise Guys showed me to communicate more to my partner...show respect and talk to her about stuff."
Sexual Health and Decision-Making	<ol style="list-style-type: none"> 1. "I've learned that if I want to have sex with someone, she should want to do it, it can't be against her will, she'll cry." 2. "I think it's because we're responsible to ourselves and the other person because you don't want them to get pregnant or a disease, just as much as you don't." 3. "Wise Guys teaches you about sexual health, how to prevent pregnancy and what's the best way to do it, like puberty and stuff like that...all about your sexual health and stuff." 4. "If you want to have sex, be prepared—have a condom—how to put it on, check the expiration date, make sure it is right."
Respect for Self and Others	<ol style="list-style-type: none"> 1. "Girls should know how to treat guys with respect and we should treat them with respect...I don't agree you have to pay all the time...it's half and half...you'd be flat out broke." 2. "Like self-respect...putting on a condom, that's self-respect right there." 3. "I approach situations with more respect...for the people and their experiences." 4. "I respect women more."
Responsibilities, Values, and Goals	<ol style="list-style-type: none"> 1. "Wise Guys taught me the importance of having values, what things you put as values and what things aren't that important. I learned that people don't approve other people's values, but it's still important...if it's important to you, it shouldn't matter to anyone else." 2. "Wise Guys taught me that everything we learned from our parents is a value." 3. "It teaches you to take responsibility for yourself in everything you do. That's one of the main factors to becoming a man." 4. "I have goals. Every day I wake up and work on them."
Thoughts on Self	<ol style="list-style-type: none"> 1. "Wise guys helped me with my anger, I still have trouble with my anger." 2. "It taught you not just how to be a man, but to be your own person, not just one of a group, but to express yourself the way you want to." 3. "Wise Guys changed me a lot, helping me to know what to do and what not to do...helped build my self-esteem." 4. "I am more mature."
Wise Guys in general	<ol style="list-style-type: none"> 1. "Wise Guys is a safe place to talk about things and to have discussions with other guys. To trust everybody." 2. "We talk about health...there's not a lot of places for men to do that." 3. "There's certain things I don't say to others. That trusted leader? Well, I have somebody [the group facilitator] who I know will have my back and won't say anything to others." 4. "We laugh a lot...we are always laughing."

Table 4.

One- sample T-Tests of constructs and knowledge, attitudes, and behaviors

Construct	Pretest Mean	Post-test Mean	t-Statistic	Significance (P-Value)
Communication and Relationships	51.37	58.53	-12.62	0.00
Goals, responsibilities, and parenting	13.07	16.87	-23.05	0.00
Respect	22.74	30.38	-26.75	0.00
Thoughts on self	12.69	32.29	-106.54	0.00
Sexual Health and safe sexual practices	58.49	58.03	0.70	0.49

* Constructing demonstrating significantly different means are bolded.