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Using the Thoughts on Teen Parenting Survey to determine the impact of Wise Guys

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Abstract

Purpose. The purpose of this project was to determine if the Wise Guys program influences young men's perceptions of the impact a teen birth would have on their lives in the areas of relationships, vocation, and personal life.

Design and Methods. The Wise Guys program was implemented with 70 adolescent males. The Thoughts on Teen Parenting Survey was used to determine participants' perceptions of the costs and rewards associated with teen parenting.

Results. Data, analyzed using paired *t*-tests, demonstrated that Wise Guys was effective in reinforcing less positive perceptions of teen parenting.

Practice Implications. Wise Guys offers an important strategy to impact young men's perceptions about the teen parenting experience and provides one means to promote responsible sexual behavior in teen men.

Reductions in teen pregnancy rates in the past three decades have largely been attributed to more teens choosing not to engage in sexual activity and the use of birth control and protection by those who do participate in sexual intercourse (Martinez, Copen, & Abma, 2011). Although these reduced rates may be celebrated, teen pregnancy continues to be an important issue and appears to be more significant for those who live in poverty, minority youth, and teens in certain geographic areas (Child Welfare League of America, 2003; Martinez et al., 2011). Recent federal funding initiatives emphasizing evidence-based curricula and programming, public policies related to adolescent sexual health, and media depictions of the realities of teen childbearing have reinforced initiatives designed to continue to reduce teen pregnancy and birth rates.

Educational efforts to prevent teen pregnancy strive to enhance sexual decision making, contraceptive self-efficacy, abilities to negotiate, relationship skills, concepts of personal responsibility, and knowledge of consequences. Additional efforts focus on youth development strategies, fostering future goal setting for educational and career trajectories,

or on healthcare interventions that increase access to reproductive health services and affordable birth control. Although all of these interventions may be credited with contributing to the reduction in teen pregnancy rates, most efforts focus on young women, young mothers, and the female role in safe sexual behavior. Despite evidence that 42% of adolescent males are sexually active and account for a large percentage of those with sexually transmitted infections (Martinez et al., 2011), and the fact that males are obviously involved with teen pregnancy, prevention strategies focused on men are less prominent in the literature, and comprehensive programs focusing on the role of young men in responsible sexual behavior are limited. Sonenstein (2001) reinforced that young men who are most vulnerable, including those of color, living in poverty, out of school, involved in the juvenile justice system, in foster care, who are gay or bisexual, and men in their early 20s, require the most intense efforts to continue to make positive strides in teen pregnancy prevention.

The lack of educational and healthcare resources focused on the reproductive health of young men

may have significant impacts for men, women, and society. In addition to implications for rates of teen pregnancies and sexually transmitted infections, prevention programming for males may have far-reaching impacts on peer and intimate relationships, perceptions of masculinity, and emotional health (Brindis, Barenbaum, Sanchez-Flores, McCarter, & Chand, 2005; Gruchow & Brown, 2011; Healthy Teen Network, 2010). Researchers have proposed several potential reasons for the lack of male-directed teen pregnancy prevention programs, including the healthcare focus on women and positive birth outcomes, lack of routine male sexual health care, the limited contraceptive options open to men, and the lack of social and political advocacy for male reproductive health services (Brindis et al., 2005). Efforts must emphasize the male role in pregnancy and sexually transmitted infection prevention for many reasons, including the facts that males have sex earlier, have more sexual partners than females, and are often the initiators of sexual activity (Sonenstein, 2001).

Researchers have purported that teen pregnancy prevention strategies may require unique adaptations to enhance effectiveness with young men. Gottsegen and Philliber (2001) noted that instruction on safe sexual behavior must occur prior to initial sexual activity to encourage the development of responsible behaviors and to avoid forming negative habits. In addition, strategies must focus on establishing resistance skills among males who perceive that they are not yet ready for sexual activity but may feel pressure to participate in sex in response to peer or other pressures (Gottsegen & Philliber, 2001). Hacker, Amare, Strunk, and Horst (2000) found, in their study examining teens' preferences for pregnancy prevention strategies, that males prefer to hear about contraception and condoms from health classes in school and from their parents, in contrast to girls who rely on healthcare services. Researchers contend that an important component of male-focused teen pregnancy prevention strategies is to attend to attitudes toward pregnancy, and personal roles and responsibilities associated with having a baby (Herrman & Waterhouse, 2011; Lohan, Cruise, O'Halloran, Alderdice, & Hyde, 2010, 2011). From these perspectives, interventions and curricula developed to address these attitudes may promote responsible sexual behavior and prevent unintended pregnancy.

One such prevention curriculum, Wise Guys, focuses on young men and bridges this gap in teen pregnancy prevention programming. This article

describes an evaluation of the Wise Guys program held as part of a comprehensive teen pregnancy prevention agenda in the reproductive health plan of a mid-Atlantic state. This curriculum fosters positive sexual decision making by challenging teens' attitudes toward a pregnancy as they consider the costs and rewards of teen parenting, how their life would change if they sustained a pregnancy as a teen, and the realities of parenting. The inclusion of these elements ensures that teens focus on their personal futures and the impact of an unintended pregnancy on their lives. Previous research examining the effectiveness of Wise Guys demonstrated discernible improvements in knowledge and behaviors but was less able to detect changes in attitudes (Gruchow & Brown, 2011). This evaluation uses a valid and reliable survey, the Thoughts on Teen Parenting Scale (TTPS), to measure this construct in young men participating in the Wise Guys program. A review of the literature related to male-oriented teen pregnancy prevention strategies, the Wise Guys curriculum, the TTPS, and the results of the pre/posttest assessments will be described. This study will lay the groundwork for future expansion of a male-focused, state-wide strategy designed to promote responsible sexual decision making and prevent teen pregnancy.

REVIEW OF THE LITERATURE

Conceptual framework

The TTPS is based on an adaptation of the theory of reasoned action in which individuals weigh the costs and rewards of actions to inform the decision-making process. This adapted theory originally integrated the cost and reward model into the theory of reasoned action to determine adolescent decision making related to the use of contraceptives (Adler, Kegeles, Irwin, & Wibbelsman, 1990). The theory dictates that it is individuals' assessments of these costs and rewards that frame their intention to engage in a behavior, in this case responsible sexual behavior and prevention of a partner's pregnancy and potential parenting. The TTPS identifies costs and rewards associated with the teen parenting experience on selected areas of their lives, including relationships, vocation, and personal life, as a way to measure teen attitudes toward a potential teen pregnancy. These perceptions of consequences may subsequently influence adolescent sexual decision making, and measurement of these elements may indicate important points in prevention strategy development.

Male attitudes toward teen parenting

Although the research related to male perceptions of pregnancy and parenting is limited, some conclusions may be drawn. Authors have indicated that discussing the realities of teen parenting may be important in the development of teen pregnancy prevention strategies (Hacker et al., 2000; Herrman, 2008; Herrman & Waterhouse, 2011; Little, Henderson, Pederson, & Stonecipher, 2010). Lohan et al. (2010) explored young men's attitudes toward potential pregnancies and pregnancy options. In this synthesis of the literature, the authors noted that young men viewed unintended pregnancies as negative events and cited that parenting would cause interruptions in areas such as education, career goals, and current social life and activities. They also perceived that an unwanted pregnancy would serve as a significant stressor imposed on their current lives. A small percentage of the studies they analyzed reported that young men attributed positive aspects of fatherhood, including perceptions of enhanced masculinity, the ability to change one's life for the better as the result of the increased responsibilities associated with fatherhood, and the desire to be a father (Lohan et al., 2010). Herrman (2008) noted that young men participating in focus groups identified that the need to pay child support and be responsible for the child financially had powerful impacts on how they viewed the teen parenting experience. A subsequent survey study revealed that males had more positive perceptions of the impact a teen birth would have on their lives when compared with females (Herrman & Waterhouse, 2011). Additional analyses noted that males more than females perceived a birth during the teen years to significantly impair a future career. They were less likely than girls to believe that a birth would impact their finances or activities in their daily lives (Herrman & Waterhouse, 2011). These differences may reflect young men not having clear understandings of the day-to-day responsibilities and financial costs associated with parenting but more realistic perceptions of the career impacts having a child as a teen may impose.

In contrast, other studies indicated that males do not consider the costs and rewards of parenting prior to engaging in sexual activity. Deptula, Henry, Shoeny, and Slavick (2006) found that males were less likely than females to weigh the costs associated with parenting when considering engagement in sexual activity. Young men focused on the pleasure associated with sex rather than potential conse-

quences and responsibilities. Ryan, Franzetta, and Manlove (2007) found that negative attitudes toward pregnancy and parenting were associated with enhanced contraceptive intentions and behaviors in females but not in males. These researchers noted that young women were more apt to diligently contracept to avoid a pregnancy, whereas young men did not consider potential teen parenting as a deterrent to sexual activity, indicating a potentially important component of prevention efforts with males.

Kegler, Bird, Kyle-Moon, and Rodine (2001) found that males participating in focus groups were less likely than females to report teen pregnancy as a big problem and that parenting as a teen afforded a young man with increased status, enhanced masculinity, and perceptions of adult status. Boys mentioned life hindrances such as loss of freedom, educational impediments, financial costs, damaged reputations, and increased responsibilities associated with teen parenting, but these impacts appeared to be less significant to the boys than the girls (Kegler et al., 2001). These studies reflect that continued research is needed to determine the impact of how the realities of parenting may impact young men's sexual decision making.

Teen pregnancy prevention strategies targeting males

As early as 1991, Meyer argued that males were left out of teen pregnancy prevention policies and programming. Brindis et al. (2005) described the California Male Involvement Program representing a comprehensive collection of strategies in an initiative addressing males in culturally specific ways throughout the diverse populations in that state. A grant-type mechanism allowed individuals, non-profit agencies, and governmental programs to apply for funds to operationalize male-specific strategies. Projects included educational, after school, youth development, healthcare, and other programs all with the intent to foster responsible sexual decision making in men ages 12–24. The evaluation of individual programs and aggregate state data demonstrated increases in knowledge but only moderate reductions in sexual risk behaviors (Brindis et al., 2005). Howard, Davis, Evans-Ray, Mitchell, and Apomah (2004) described an outreach education program designed to meet the specific needs of young men in an urban, low-income community. The authors shared positive outcomes of male-only classes, facilitated by male role models, in lowering

the incidence of sexually transmitted infections, delaying sexual involvement in young men, and increasing the use of condoms (Howard et al., 2004). Strategies focused on male sexual responsibility, and programs designed specifically for young men, continue to be underrepresented in the literature.

Research evaluation of the Wise Guys curriculum

The earliest evaluation of the Wise Guys program, conducted by Gottsegen and Philliber (2001), found the program effective in fostering sexual responsibility in 335 seventh- and eighth-grade males when compared with an equivalent control group of 145 males. Surveys measuring knowledge, attitudes, and behaviors were administered on the first and last days of the program and 6 months after the program was completed. Researchers demonstrated that this program was effective in increasing young men's knowledge about reproduction and transmission of sexually transmitted infections, and sexually active participants reported increases in the use of condoms and contraception. The authors were unable to correlate program completion with changes in attitudes toward women, responsibility for pregnancy, and the relationship between intercourse and masculinity (Gottsegen & Philliber, 2001).

A follow-up evaluation described by the Child Welfare League of America (2003) documented similar outcomes with 718 male youth from the 1999–2000 and 2000–2001 program years. Researchers reported that, following participation in the Wise Guys program, young men reported increased knowledge about reproduction, increased sense of responsibility related to sex, positive sex-role attitudes, and claimed to be more willing to talk with parents about sex. Participants who were sexually active demonstrated more consistent condom use and were more likely to report using a condom at their last sexual experience (Child Welfare League of America, 2003).

Gruchow (2009) documented a rigorous evaluation of the Wise Guys curriculum in a quasi-experimental study representing middle school students from 2005 to 2007. The curriculum was delivered in school health classes to 1,100 males, with 298 males meeting study criteria. This sample was matched with a control of 228 students who received an alternate health curriculum. The results of this evaluation showed that young men participating in Wise Guys demonstrated increased general knowledge of sex, reproductive behaviors, and the

transmission of sexually transmitted infections. This study detected more desirable attitudes toward young men's roles, responsibilities, and thoughts on intimate partner behaviors. Sexually active youth reported increased use of condoms and consistent contraception following the intervention. Regression analyses clarified that participating in the Wise Guys program was the strongest predictor for these results when compared with any other trait. Although the program did not appear to delay initiation of sexual activity, it was able to increase responsible sexual behaviors (Gruchow, 2009).

The final evaluation of the Wise Guys curriculum included 124 seventh-grade participants who were compared with 106 randomly selected control students (Gruchow & Brown, 2011). Similar to the results documented earlier, program participants reported increased knowledge, more positive scores on selected attitudes, and more responsible sexual behavior than the control group. The authors discussed that participants sustained more significant changes in knowledge and reported behaviors than those noted in the attitude realm. They conjectured that this may be due to the more precise surveys available to measure these concepts than those available to measure attitudes. The measuring of attitudes offers challenges to researchers in the ability of a self-reported, objective survey to capture personal perceptions while attending to the impact that cultural norms, family values, and environmental issues may have on attitude formation (Gruchow & Brown, 2011). The current study may provide an important method to survey attitudes and the measurement of the perceptions of the responsibilities associated with parenting, further enhancing the evaluation of the Wise Guys program.

METHODS

Design

As part of a comprehensive, state-wide adolescent reproductive life plan, the Alliance for Adolescent Pregnancy Prevention conducts Wise Guys programs on an ongoing basis. This pretest/posttest design study was developed to answer the following research question: Does participation in the Wise Guys program lead to more realistic attitudes toward the parenting experience and lower scores on the TTPS in young men? For the purpose of this study, students completed the TTPS, measuring attitudes toward the impact a birth would have on their lives, to determine if there was an attitude change after

participation in Wise Guys. Each student was required to attend at least nine of the 10 lessons and complete the study measures to receive a \$50 gift card.

Human subjects approval was obtained from the state institutional review board (IRB), the IRB from the associated academic institution, and from the medical vendor providing services to the wellness centers. Coding ensured confidentiality, and all materials were stripped of identifiers. The program leaders of each course received parental permission forms and student assent forms for participation in the research. Students completed the scale as a pretest on day 1 of course administration and as the posttest on the last day. Students were able to participate in the Wise Guys program regardless of their affiliation with the research study. The hypothesis of the study was that young men participating in the Wise Guys program would demonstrate more negative perceptions of the teen parenting experience after the program, as measured by a lower score on the TTPS.

Setting

All Wise Guys courses were held within high schools in a mid-Atlantic state. Some sessions were held in wellness centers and others in public meeting rooms in high schools. Efforts were made to ensure privacy, reduce distractions, and provide learning-conducive environments.

Sample

Students were recruited from high schools via school-based wellness centers, teachers, and word of mouth. Most students volunteered to be part of this program, but a small percentage were given the option to attend the Wise Guys sessions as an alternative to disciplinary measures. All program participants were young men ages 12–18 and students in a public high school. A total of 93 young men were invited to be in the study, with 70 returning all forms and completing the necessary program components. The larger set of 93 Wise Guys program participants were 87% Black/African American, 8% White/Caucasian, 3% Hispanic, and 2% other. Although demographic data were not specifically collected from the research sample ($N = 70$) itself, program leaders believed that the demographic characteristics of the larger sample of 93 and the actual sample of 70 participants did not differ appreciably.

The Wise Guys program

The Wise Guys male responsibility curriculum is designed to prevent teen pregnancy by focusing on enhancing the knowledge about sex, attitudes toward women and relationships, and safe sexual behaviors among males ages 11–17. The major themes addressed in the program included acceptance of responsibility in sexual behavior and parenting, respect for women, and communication skills. The 8- to 12-week program includes such concepts as self-esteem, personal and family values, communication, masculinity, sexuality, dating violence, abstinence, contraception, sexually transmitted infections, goal setting, decision making, and parenthood. The lessons of Wise Guys portray messages of positive personal growth and self-esteem, the importance of value-based decision making, the value of resistance skills, and the identification of support systems. Each 45-min lesson includes class activities, case studies, values exercises, video presentations, group discussions, lectures, role plays, games, and goal-setting exercises. The curriculum is augmented by train-the-trainer programs, a curriculum manual, handouts, and other class materials. The potential outcomes of sexual decision making are specifically addressed from the male perspective, and courses are designed for school and community implementation. Developed by the Family Life Council of Greater Greensboro, North Carolina, the program has undergone several evaluation efforts and is considered to be a promising practice in teen pregnancy prevention (Child Welfare League of America, 2003).

TTPS

Previous individual and focus group studies provided the foundation for the development of a quantitative survey, the TTPS, designed to measure the costs and rewards associated with a teen birth and the parenting experience (Herrman, 2006, 2007, 2008). Pre-testing, piloting, exploratory factor analysis, and a variety of reliability and validity assessments were used to determine the value of the measure (Herrman & Nandakumar, 2012). The 44 Likert-style items ask individuals to determine the level to which they agree with statements about the impact a teen birth would have on their lives. Responses range from strongly agree to strongly disagree. The survey demonstrated high reliability (Cronbach's $\alpha = .90-.93$). The TTPS yields a cumulative score, eight subscale scores representing different aspects of the teen's life, and demographic data allowing for correlation of

Table 1. Internal Consistency Coefficients for the Pretest Cumulative Scale and Subscales

Subscale	N of items	Alpha
Cumulative	44	.93
Relationships with friends	3	.55
Relationships with boyfriends/girlfriends	6	.75
Relationships with parents/family	4	.78
Money	4	.76
Education	5	.75
Career/work	4	.72
Personal characteristics	9	.83
Life in general	9	.86

scores with specific traits (Herrman & Nandakumar, 2012). Higher cumulative and subscale scores on the TTPS indicate more positive attitudes, and lower cumulative and subscale scores indicate more negative, and potentially more realistic, attitudes toward the parenting experience. It is postulated that, for most youth, having a baby during the teen years has a detrimental impact on the teen's life and that less positively inflated attitudes would yield a more realistic view of the impact on their life (Herrman & Nandakumar, 2012). For some youth, a teen birth may glean positive rewards. This tool captures both positive and negative impacts, provides a means to measure these perceptions, and may be used to assess for changes in attitudes pre- and post-intervention. The subscales assess the impact a teen birth would have on their lives in the areas of relationships (friends, boyfriends/girlfriends, parents/family), vocation (education, career/work, money), and personal life (personal characteristics and life in general). For example, teens are asked to indicate their agreement with such statements as "If I had a baby as a teen I would have more friends," "If I had a baby as a teen I would need more money," or "If I had a baby as a teen I would drop out of school" (Herrman & Nandakumar, 2012). The Cronbach's α level for this sample was .93; the subscale internal consistency coefficients can be found in Table 1.

The TTPS was previously administered to 695 high school students (Herrman & Waterhouse, 2011) and has also been used to measure the impact of an infant simulator on adolescent perceptions of the realities of teen parenting (Herrman, Waterhouse, & Chiquoine, 2011) and a sexual decision making curriculum designed for the unique needs of girls in juvenile justice (Herrman & Waterhouse, 2012).

Data analysis

Descriptive statistics were run for the TTPS cumulative scale and each of the subscales. Next, a reliability

analysis was conducted for the TTPS cumulative scale and the eight subscales. Finally, paired samples *t*-tests were run to determine any significant differences in pre- and post-intervention scores attributed to the Wise Guys program across both the cumulative and the eight subscale scores.

RESULTS

There was a significant decrease in cumulative scores from pre- to post-intervention ($t = 2.12, p < .04$). This finding suggested more negative attitudes regarding the teen parenting experience following the Wise Guys program. Next, the money subscale scores decreased significantly from pre- to post-intervention ($t = 2.47, p < .01$), suggesting more realistic attitudes regarding the financial demands of a teenage pregnancy following the intervention. The life in general subscale score also showed a significant decrease following the Wise Guys program ($t = 2.40; p < .02$). This finding suggested more realistic attitudes about the impact teen parenthood would have on certain aspects of daily life after the intervention. No other subscales showed a significant change from pre- to post-intervention. The results of all paired samples *t*-tests are found in Table 2.

DISCUSSION

The Wise Guys program was effective in promoting realistic attitudes toward the parenting in young men as demonstrated by lower (more negative) cumulative scores and in two subscales. These lower scores indicated that teens were able to reflect on the potential realities of parenting and on the impact a teen birth would have on their lives. The significant change in attitudes from more positive to more negative may also reflect that the young men had not previously considered the realities of parenting prior to the intervention. Wise Guys may represent an important strategy to bring these concepts to their attention and to ensure their consideration and internalization of such issues as they approach sexual decision making (Hacker et al., 2000; Herrman & Waterhouse, 2011; Kegler et al., 2001). Teens believe that an important method of reinforcing pregnancy prevention is in the discussion of the realities of teen parenting and in the discussion of the hardships of the teen parenting experience (Hacker et al., 2000; Herrman, 2008). The inclusion of this content in the Wise Guys curriculum may highlight a key component of teen pregnancy prevention, especially with young males, as they

Table 2. Thoughts on Teen Parenting Survey Pre/Posttest Results

Results table	Pretest: <i>M (SD)</i>	Posttest: <i>M (SD)</i>	<i>t</i> value	Significance
	Range	Range		<i>p</i> value
Cumulative*	114.68 (22.76) 50–162	109.81 (22.68) 65–146	2.12	.04
Relationships with friends	6.78 (2.02) 3–11	6.22 (2.03) 3–11	1.86	.06
Relationships with boyfriends/girlfriends	15.23 (3.89) 8–29	14.73 (4.16) 6–27	1.31	.19
Relationships with parents/family	10.72 (3.32) 4–20	10.16 (3.09) 4–20	1.66	.10
Money*	10.85 (3.48) 5–19	9.93 (3.3) 5–19	2.47	.01
Education	11.29 (3.17) 5–18	10.88 (3.15) 4–18	1.00	.31
Career/work	11.46 (2.74) 4–18	11.59 (2.87) 4–18	–.27	.78
Personal characteristics	27.66 (5.54) 10–39	28.24 (5.37) 15–39	–1.03	.30
Life in general*	21.45 (6.17) 9–33	20.28 (6.21) 9–31	2.40	.02

Note: *indicates significance at $p < .05$. *SD*, standard deviation.

balance their decisions about sexual activity with the responsibilities of potential parenting.

Perceptions about two areas of the young men's lives, as represented by the two subscales (money and life in general), were impacted by the intervention. Previous survey findings noted that these two scales were where males had more positive perceptions than females about the impact a teen birth would have on their lives (Herrman & Waterhouse, 2011). The young men's perceptions about the money associated with teen childrearing, as well as the ability for the Wise Guys curriculum to lead to more realistic perceptions of the impact of parenting on their personal financial status, may offer a point of intervention, and this finding may inform future programming. Because teen males were more able to identify with the tangible and reality-based impacts on finances after the program, these findings may indicate an important area of intervention development or may indicate an area that may be expanded in the Wise Guys curriculum. Questions in the life in general subscale include such topics as impact on sports and activities, sleep, personal reputation, attention getting, stress, and life improvement. Wise Guys was able to provide young men with more realistic perceptions of the impact of a teen birth in these areas. Again, emphasis on the tangible impacts of parenting on activities and sleep may provide insights into the key areas demanding emphasis when working with young men.

Young men's sexual decision making may be influenced by how they perceive the rewards and

costs of the parenting experience. The TTPS was able to detect changes in these perceptions as a result of participation in the Wise Guys program on the cumulative score and in two subscales. In addition, previous authors associated positive perceptions of the teen parenting experience with subsequent pregnancy (Jaccard, Dodge, & Dittus, 2003; Rosengard, Phillips, Adler, & Ellen, 2004). Brindis et al. (2005) reinforced that these positive perceptions of the teen parenting experience may be informed and perpetuated by peers, families, and community values. Any intervention, whether classroom, outreach, healthcare based, or other, must attend to the norms of the community and provide culturally sensitive programs to positively impact teen pregnancy prevention efforts. The ability for Wise Guys to foster realistic attitudes further validates this intervention as a means to foster responsible sexual behavior in young men.

Because boys prefer school as one of the places to receive sexuality information, whether in health class or school-based health centers, classroom-based curricula may be an effective means to reach young men (Hacker et al., 2000). The Wise Guys curriculum provides a school or community class-based alternative by including young men exclusively in their programs and by providing a curriculum specific to the needs of young men.

One of the positive impacts of the Wise Guys curriculum is the male role modeling associated with group facilitation. The ability for group participants to bond with and emulate a positive male role

model, while learning important skills and information, is integral to effective teen pregnancy prevention programming (Howard et al., 2004). The issues of masculinization and the ability for masculinity to be fostered in other ways than having children, as addressed in Wise Guys, may offer an important component of male-focused strategies (Herrman & Waterhouse, 2011).

This study is limited by a number of factors. The original sample included 93 students, but only 70 students returned their assent/permission forms. It is not known if the perceptions of those who did not return their consent forms differed from those who were included in this analysis. Many of the young men complained about the length of the survey. It was noted during data entry that many of the participants answered neutral responses and left items blank, potentially skewing the results. A larger sample and the use of a control group may increase the rigor in future studies. In contrast, the TTPS provided a sensitive attitudinal measure for young men participating in Wise Guys. Previous evaluations of Wise Guys have determined the need for additional measures of attitudes and perceptions, indicating the importance of these findings.

A future goal is to replicate this study using the curriculum-specific evaluation tools available with the program, along with the TTPS, to provide a comprehensive view of the impact of Wise Guys on young men's level of knowledge, attitudes, and reported behaviors. These curriculum-specific surveys determine the level of knowledge of sex, reproduction, and communicability of sexually transmitted infections; attitudes toward sex, appropriate sexual behaviors, and women in relationships; and self-reported behaviors (initiation of sexual activity, using condoms, and use of contraception).

How might this information affect nursing practice?

Nurses often have a critical role in planning and implementing teen pregnancy prevention programming. The dearth of research associated with teen males and their sexual decision making and involvement in sexual activity is itself telling as nurse advocates seek to address teen pregnancy prevention. It is only through ongoing research that effective strategies may be pursued focusing on the unique needs of young men. The Wise Guys curriculum is one of the few programs designed

specifically for these needs as it addresses such culturally infused concepts as sexual responsibility, masculinity, gender, and communication skills. Nurses may find Wise Guys an important intervention when planning prevention strategies focused on teen males. The TTPS may provide an important enhancement to the evaluation of attitudinal variables related to young men's perceptions of the realities of parenting in this intervention. Continued research with Wise Guys will add to what is known about the means to foster sexual responsibility in males, strategies to prevent unintended pregnancy in teens, and nursing's role in conducting effective prevention initiatives.

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