

Abstinence Attitudes and Behaviors in Peer Educators: Risk and Protective Factors

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The following article describes an examination of data produced by Project H. O. P. E., a New Jersey based state-wide peer counseling group, that examined the correlation among attitude toward sexual abstinence, intent to remain abstinent, and sexual activity and a number of variables including gender, attendance of religious services, self-esteem, age, communication with family about sexual activity, and knowledge regarding sexuality. The state wide sample (n=316) of peer counselors ranged in age from thirteen to eighteen. Significant findings at $p < 0.01$ were that attitude towards abstinence correlated with gender, self-esteem, and religious attendance. Intent to remain abstinent was correlated with gender, grade level, self-esteem, and religious attendance. Sexual activity was correlated with grade level and religious attendance. These findings reflect the attitudes, behaviors and perceptions of a group of self-selected peer educators.

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Introduction

Nationwide, almost half of all high school students (48.4%) have engaged in sexual intercourse (Kann et al., 1998). Black students (72.7%) were significantly more likely than Hispanic and White students (52.2% and 43.6%) to have had intercourse, and in all cases, males were significantly more likely than females to have done so (Kann et al., 1998). Black students are also significantly more likely (21.7%) than Hispanic and White students (7.7% and 4.0%) to have initiated intercourse before age 13 (Kann et al., 1998).

There is evidence of a national trend for earlier initiation of sexual intercourse. Female students in grade 9 were significantly more likely to experience early initiation (6.5%) than female students in grade 12 (2.9%). Male students in ninth grade were significantly more likely to have initiated intercourse before age 13 (14.7%) than males in grades 11 or 12 (8.2% and 6.0%). (Kann et al., 1998) Despite all the advances in pedagogy and increases in attention that sexuality education has received, programs currently in place are not reducing sexual activity among early adolescents.

Nationwide statistics regarding students of high school age with four or more lifetime partners for sexual activity do not show a trend in increasing numbers and types of partners. There are, however, disturbing differences in these statistics across race and ethnicity. Black students were significantly more likely (38.5%) than Hispanic or White (15.5% and 11.6%) to have had 4 or more partners. Significant differences were also seen across age ranges, with older students

having been more likely than younger students to have had more partners (Kann et al., 1998).

Nationwide, White students are significantly more likely (93.3%) to have received HIV/AIDS education than Black and Hispanic students (89.7% and 85.9%). Despite this, White students (55.8%) are significantly less likely than Black students to use condoms consistently if engaging in intercourse (Kann et al., 1998). When considering some of the more obvious of risk behaviors including multiple partners and drug use before intercourse, 17.8% of all students surveyed had intercourse with four or more partners (Kann et al., 1998). According to the Youth Risk Behavior Surveillance of 1997, 80.3% of Black male students had initiated intercourse, and one fourth of experienced black male students reported alcohol or drug use at last intercourse. These alarming statistics suggest a serious need for effective intervention at the high school level to decrease risk behaviors and increase protective behaviors associated with adolescent sexuality.

There is some evidence, however, that the variables we seek to study can have some effect on sexual behavior. Brewster, Billy, & Grady (1993) examined data collected nationally and found that socioeconomic status and female income patterns in a community had significant effects on adolescents' decisions to initiate sexual activity and whether or not to use contraception at first intercourse. Earlier surveys of urban young adolescents in New England have found significant interactions between gender, age, and sexual behavior (Barone et al., 1996).

Other programs focusing specifically on increasing self-esteem and communication between adolescents

and their families have had some positive impact on sexual intentions (Buysse & Van Oost, 1997). Another study have shown that adolescent women describing themselves as "committed" to their religion were significantly more likely to refrain from initiating intercourse than those who were "occasionally" religious (Brewster et al., 1998).

This study seeks to more closely examine the effects these variables have on a unique adolescent population engaged in peer education projects. Because peers can have a tremendous impact on each other and because peer education programs are growing in popularity, knowledge about the effects of attitudes on the behavior of the subset of students intended to serve as peer educators is valuable information. It can help us to better understand peer educators in order to provide more effective training and better recruitment methods.

Peer Education has been perceived as more effective if the peer educators were trained (McDowell, 1983). Peer counselors are often able to relate to their clients more effectively than adults (especially if these clients are adolescents (Buck, 1977)), and since self-disclosure is so important in sexuality education, it is for this reason that training peer counselors has been examined in the field of sexuality.

The following data were collected as part of Project H. O. P. E. Project H. O. P. E. (Helping Others through Peer Education) is a cooperative program between Montclair State University and the already existing Teen Institute of the Garden State (TIGS). TIGS has as its focus abstinence from the use of alcohol, tobacco and other drugs. Project H. O. P. E. infuses abstinence from early sexual activity into this message. Students from twenty of the twenty-one counties of New Jersey attend statewide, weeklong conferences focusing on leadership skills, peer perceptions, and strategies for change. They bring these skills back to their own high schools, where most serve as members of "peer counseling" teams or other leadership groups focused on helping and guiding their peers.

Project H. O. P. E. added a series of workshops focusing on sexuality attitudes, knowledge, and behavior, with an emphasis on abstinence as a protective health behavior, to the TIGS workshops. *Pick and Choose: Abstinence Activities* (Young & Young, 1996) was used as a model for these workshops. The project further met with the teachers that serve as advisors in home institutions for these students, utilizing *Pick and Choose: Abstinence Activities* to provide them with experience implementing the lessons and activities and otherwise handling sensitive issues related to sexuality education.

Methods

Three-hundred sixteen students grades 9-12 participating in peer education programs in New Jersey responded to the questionnaire which was designed to assess the following research objectives: To what extent are (a) attitudes favorable toward teen sexual abstinence, (b) intent to remain abstinent, and (c) current sexual activity related to: (1) gender, (2) grade level in school, (3) religious attendance, (4) home self-esteem, (5) communication about sex with adult family members, and (6) ethnicity. This questionnaire was provided to students upon arrival at the TIGS workshop and students were informed that their answers were anonymous, and that they should answer as honestly as possible.

Description of the questionnaire

Attitudes favorable toward sexual abstinence were measured by the mean of five items asked on a 4-point scale ranging from 1 = strongly agree to 4 = strongly disagree, with items oriented so a higher score favors teen sexual abstinence:

1. It is all right for two people to have sex before marriage if they are in love.
2. Having sexual intercourse (a male's penis going into a female's vagina) can cause a lot of problems for people my age. [reverse scored]
3. When it comes to making decisions about sex, abstinence (not having sexual intercourse) is probably the best choice for people my age. [reverse scored]
4. It is OK for people my age to have children.
5. Having sexual intercourse is just a normal part of teenage dating (going out).

In the sample studied, the internal consistency of the attitude scale as measured by coefficient alpha was 0.63.

Intent to remain abstinent is measured by the mean of four items asked on a 4-point scale oriented so 1 = definitely will have sex or already have, 2 = probably will, 3 = probably will not, and 4 = definitely will not have sex:

1. What are the chances that you will have sexual intercourse during the next year?
2. What are the chances that you will start having sexual intercourse before you finish high school?
3. How likely is it that you will become pregnant or get someone pregnant while you are a teenager?
4. If someone does try to get you to have sexual intercourse with him or her during the next year, what will you do?

Coefficient alpha for the 4-item intent scale was 0.76.

Table 1 Description of the Sample

	<u>N</u>	<u>Mean</u>	<u>S.D.</u>	<u>Range</u>
Attitude	316	3.16	0.51	1.60-4.00
Intent	314	3.10	0.73	1.25-4.00
Home Self-Esteem	314	3.42	0.60	1.17-4.00

	<u>N</u>	<u>Category</u>	<u>Percent</u>
Sexual Activity	312	Yes	13%
		No	87%
Ethnicity	305	Caucasian	60%
		Black	20%
		Hispanic	12%
		Asian	8%
Gender	316	Male	27%
		Female	73%
Grade	313	Grade 8	<1%
		Grade 9	7%
		Grade 10	32%
		Grade 11	39%
		Grade 12	21%
Religious Attendance	315	Never	16%
		< monthly	29%
		monthly	11%
		2-3 times/ month	17%
		weekly	28%

Parental Communication			
Feel Comfortable	315	Yes	36%
		No	64%
Talked in the Last 30 Days	313	Yes	35%
		No	65%

Current sexuality is a yes/no variable based on responses to two items:

1. Have you ever had sexual intercourse (a male's penis going into a female's vagina)?
2. If you had sexual intercourse within the last 30 days, did you or your partner use a condom every time?
(a) Yes, (b) No, (c) I have not had sexual intercourse in the last 30 days, (d) I have never had sexual intercourse.

Students considered currently sexually active are those who answered yes to the "have you ever" question and selected yes or no to the regular condom use question.

Religious attendance was the response to a single item ranging from 1 = never to 5 = once a week or more. Home self-esteem was the average response to six items from the Hare Self-Esteem Inventory where 1 = strongly agree and 4 = strongly disagree:

1. My parent(s)/guardian(s) are proud of the kind of person I am. [reversed]
2. No one pays much attention to me at home.
3. I often feel that if they could, my parent(s)/guardian(s) would trade me in for another child.

4. My parent(s)/guardian(s) try to understand me. [reversed]

5. I am an important person to my family. [reversed]
6. I often feel unwanted at home.

Coefficient alpha for the 6-item home self-esteem scale was 0.80.

Communication about sex with adult family members is the total of two yes/no items:

1. If I had a question about sex, I would feel comfortable talking to my adult family members (such as parents, stepparents, grandparents, aunts, uncles, etc.). (Recoded as 1 = yes, 0 = no)
2. During the last 30 days, how many times have you had a conversation or discussion about sex with an adult family member (such as a parent or guardian, grandparent, aunt, uncle, etc.)? (Re-coded as 1 if any, 0 if none)

Coefficient alpha for the two item scale was 0.48.

Ethnicity was dummy coded with white as the reference category into three variables: Black, Hispanic, and Asian.

Table 2 Correlation Among Variables

(n = 304)	Att	Int	Act	Male	Gra	Rel	SE	Com	Blk	His	Asi
Attitude	1.00	.62**	-.36**	-.30**	-.13*	.25**	.27**	-0.01	-0.06	-0.03	0.06
Intent	.62**	1.00	-.55**	-.27**	-.14*	.14*	.17**	0.02	-0.13	-0.05	0.22
Active	-.36**	-.55**	1.00	0.08	.14**	-.14*	-0.07	0.00	.11*	0.02	-0.07
Male	-.30**	-.27**	0.08	1.00	.13*	-0.06	0.06	-0.09	-0.04	0.03	-0.03
Grade	-.13*	-.14*	.14*	.13*	1.00	-0.10	0.01	0.04	-0.01	-0.01	0.01
Rel.Att.	.25**	.14*	-.14*	-0.06	-0.10	1.00	-0.01	-0.03	.12*	-0.10	-0.02
Home SE	.27**	.17**	-0.07	0.06	0.01	-0.01	1.00	0.84	-0.06	-.14*	-0.04
ParComm	-0.01	0.02	0.00	-0.09	0.04	-0.03	.18**	1.00	-0.04	-0.05	-0.04
Black	-0.06	-.13*	.11*	-0.04	-0.01	.12*	-0.06	-0.04	1.00	-17.00	-.14*
Hispanic	-0.03	-0.05	0.02	0.03	-0.01	-0.10	-.14*	-0.05	-.17**	1.00	-0.10
Asian	0.06	.22**	-0.07	-0.03	0.01	-0.02	-0.04	-0.04	-.14*	-0.10	1.00

*p<0.05, **p<0.01

Attitude = Attitude toward abstinence

Intent = Intent to remain sexually abstinent

Active = Sexually active in the past 30 days

Rel.Att. = Religious Attendance

Home SE = Home Self-Esteem

ParComm = Parental Communication

Analysis

To assess the relationship among the independent and dependent variables, three regression analyses were conducted. Multiple linear regression was used on the continuous outcomes of attitude and intent, and logistic regression was used on the dichotomous outcome of current sexual activity. All independent variables were entered into the regression equations.

Results

Table 1 lists descriptive statistics for the variables. As a group, the students had positive attitudes toward abstinence (3.16 on a 4-point scale) and indicated they probably will remain abstinent (3.09 on a 4-point scale). Only 13% of the group indicated they had sexual intercourse in the last 30 days. The group was mostly female (73%), in senior high (mean grade = 10.7), varied considerably in their attendance at religious services, and had a high level of home self-esteem (3.42 on a 4-point scale). Only 36% indicated they were comfortable discussing sex with their parents, and only 34% indicated they had discussed sex with their parents in the past 30 days.

Table 3 reports the results of the regression analyses for each outcome. For the attitude toward abstinence variable, the independent variables had an adjusted R-square value of .230, a statistically significant finding ($F(8,295) = 12.29$; $p < .001$). Three of the variables were significantly related to attitude: males showed less support for abstinence, whereas students with higher levels of home self-esteem and students who reported higher levels of religious attendance generally gave higher ratings on the attitude

toward abstinence scale. Grade level in school, parental communication about sex, and ethnicity were not significantly related to attitude toward abstinence.

For the intent to remain abstinent variable, the model was also significant (adjusted R-square = .170; $F(8,295) = 8.78$; $p < .001$). Gender and church attendance were again statistically significant, with females and frequent church attenders more likely to intend to practice sexual abstinence. In addition, home self-esteem showed a significant positive relationship with intent. By ethnicity, Black students were less likely and Asian students were more likely to express an intent to practice abstinence. Nonsignificant variables in the regression equation were grade level in school, parental communication, and the Hispanic ethnicity variable.

Finally, for the current sexual activity variable, the logistic regression model was significantly, but weakly related ($R\text{-square} = .067$; $\chi^2(8) = 21.02$; $p = .007$). The variables significantly related to sexual activity were: church attendance, grade level in school, and the Black ethnicity variable. Regular church attenders were less likely to be sexually active, and students in the higher grades and Black students were more likely to be active sexually. Gender, home self-esteem, parental communication, and the Hispanic and Asian ethnicity variables were not significantly related to sexual activity.

Table 2 details zero-order correlations between each pair of variables. These correlations are based on only the 304 cases with complete data that were used in the regression analysis.

Table 3 Regression Results

ATTITUDE	Adjusted R-square=0.230		F(8,295)=12.29 p=0.000		
	Beta	B	SE	t	p
Constant		2.88	0.36	7.91	0.00
Male	-0.31	-0.36	0.06	-5.97	0.00
Grade	-0.06	-0.04	0.03	-1.25	0.21
Relig. Att.	0.24	0.08	0.02	4.65	0.00
Home SE	0.31	0.27	0.05	5.85	0.00
Parental Comm.	-0.08	-0.05	0.04	-1.54	0.13
Black	-0.08	-0.10	0.07	-1.51	0.13
Hispanic	0.03	0.04	0.09	0.49	0.62
Asian	0.06	0.11	0.10	1.06	0.29

INTENT	Adjusted R-square=0.170		F(8,295)=8.78 p=0.00		
	Beta	B	SE	T	p
Constant		3.48	0.53	6.53	0.00
Male	-0.26	-0.43	0.09	-4.89	0.00
Grade	-0.09	-0.07	0.04	-1.75	0.08
Relig. Att.	0.13	0.06	0.03	2.49	0.13
Home SE	0.19	0.24	0.07	3.56	0.00
Parental Comm.	-0.03	-0.03	0.05	-0.56	0.58
Black	-0.12	-0.23	0.10	-2.28	0.02
Hispanic	-0.01	-0.01	0.13	-0.11	0.91
Asian	0.20	0.55	0.15	3.71	0.00

SEXUAL ACTIVITY	R-square=0.067		c ² = 21.02		p=0.007
	R	B	SE	Wald	p
Constant		-5.62	2.54	4.89	0.03
Male	0.00	0.49	0.38	1.66	0.20
Grade	0.11	0.46	0.21	4.65	0.03
Relig. Att.	-0.13	-0.32	0.13	5.74	0.02
Home SE	0.00	-0.35	0.28	1.58	0.21
Parental Comm.	0.00	0.06	0.24	0.06	0.81
Black	.11	0.91	0.42	4.59	0.03
Hispanic	.00	0.07	0.57	0.02	0.90
Asian	.00	-1.14	1.07	1.14	0.29

Discussion

The students in this sample scored very high in home self-esteem but not in parent communication. They also scored high in the attitudes towards abstinence and indicators of sexual behavior. When compared to national averages, these students do not fit the normative characteristics of their age. Only 13% of the group indicated they had sexual intercourse in the last 30 days. This group was mostly female (73%), in senior high (mean grade = 10.7), varied considerably in their attendance at religious services, had a high level of home self-esteem (3.42 on a 4-point scale). Only 36% indicated they were comfortable discussing sex

with their parents, and only 34% indicated they had discussed sex with their parents in the past 30 days.

In contrast, nationwide, almost half of all high school students (48.4%) have engaged in sexual intercourse (Kann et al., 1998). In contrast to national statistics, this sample has more sexually experienced females than males. Although these results are not representative of all adolescents in the state of New Jersey, they do provide some important information about this particular population of self-selecting students who participate in TIGS. Because peer education programs are currently being implemented in many areas of health education, gaining information about this population can help us to better design training for these students, which in turn, could increase

their effectiveness in counseling their peers. Self-disclosure is vital to many areas of sexuality education, including risk assessment for exposure to STIs. For this reason, peer education programs are likely to experience wider implementation in this field and the design of effective programs becomes important to the health and well-being of a large segment of the adolescent population.

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