

## Health-Related Social Norms Among High School Students

By: [David L. Wyrick](#), Cheryl Haworth Wyrick, Dana Bishop, Melodie Fearnow-Kenney, Christina Yongue Hardy, and William B. Hansen

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### **Abstract:**

Adolescents tend to overestimate the prevalence and acceptability of high-risk behaviors such as drug use and underestimate that of protective behaviors such as proper nutrition. Educational campaigns designed to correct social norms have demonstrated success at improving a variety of health-related behaviors and are among the most successful prevention efforts to date. A sample of 125 high school students responded to questions that addressed beliefs about substance use and other lifestyle choices. Student responses were tallied to determine the most popular responses to each question. Results revealed that the majority of youth surveyed did not endorse the use of alcohol, tobacco and other drugs and many believed that individuals who use these substances are making unwise decisions. In contrast, proper nutrition and exercise were valued. Strategies are offered to assist health educators with the goal of illuminating prosocial group norms that will protect students from substance use and other risky behaviors.

### **Article:**

Perceptions of the behaviors and attitudes of others, and especially of friends, are among the best predictors of adolescent substance use. Young people who perceive alcohol use, cigarette smoking, and sexual activity to be prevalent and acceptable ("cool") among their peers are more likely to engage in these behaviors in the future (Hansen & Graham, 1991).

These perceptions, known as social norms, are often erroneous. Research suggests that adolescents tend to overestimate the prevalence and acceptability of high-risk behaviors (Sussman, Dent, Rauch, Johnson, Hansen, & Flay, 1988) and underestimate the prevalence and popularity of healthy or protective behaviors (Berkowitz, 2003); therefore, the most successful problem behavior prevention programs are designed to modify social norms so that they are less tolerant of risky behaviors and more supportive of protective ones. Programs that have successfully targeted this mediator have demonstrated reductions in the use of steroids (MacKinnon, et al., 2001), alcohol (Wynn, Schulenberg, Maggs, & Zucker, 2000), tobacco (Taylor, et al., 1998), and inhalants (Botvin, Griffin, Diaz, & Ifill-Williams, 2001). There is also initial evidence that social norms can be targeted to prevent ecstasy use. In a study of youth in the United Kingdom, social norms, attitudes, and perceived behavioral control accounted for 63% of the variance in intention to use ecstasy in the next 2 months. Intentions and perceived control predicted 55% of the variance in subsequent ecstasy use (Conner, Sherlock, & Orbell, 1998).

An obstacle to the success of programs that target social norms is the difficulty with obtaining accurate normative data. Young people must see the normative data as relevant to the issues they are facing and representative of the behavior and attitudes of their peers (Keeling, 1999). The purpose of this study was to collect relevant and believable normative data and summarize health-related social norms held by a sample of high school students. Strategies for collecting normative data are presented, as are ways in which this information can be used to optimize health promotion efforts.

## **Method**

### ***Design***

Qualitative data were collected from a sample of high school students participating in an evaluation of the health education program, All Stars, Sr., during a single test occasion. Students completed a 15-item anonymous survey, the Opinion Poll Survey, assessing their health-related beliefs and opinions. The tallied results were used to play the Opinion Poll Game, a normative beliefs activity included in All Stars, Sr. Students were instructed to complete the survey without discussing any of the questions or individual responses with anyone other than the teacher. Once students completed the survey, they were to turn the survey over on their desk and raise their hand indicating they were finished. At that time, the health teacher would take the survey from students. The Opinion Poll Game and other activities of the All Stars, Sr. program were implemented during regular health education classes. In addition to administering the survey, the health teachers also tallied the results. The only persons with access to the completed Opinion Poll Surveys were the health teacher, the principal investigator, and the project manager. Once the surveys were tallied, they were stored in the office of the principal investigator.

### ***Sample***

Students from six high schools in North Carolina were recruited to participate in the evaluation of All Stars, Sr. (Fearnow-Kenney, Wyrick, Jackson-Newsom, Wyrick, & Hansen, 2003). A written description of the study and an active informed consent form were sent home to parents or guardians. Students (N = 125) who completed the Opinion Poll Survey were students at the three high schools that were assigned to the treatment group. The data presented here were collected as part of an activity known as the Opinion Poll Game. The game was played anonymously; therefore, exact demographic data cannot be reported; however, the sample of students who participated in the evaluation of the program was 38% male (n = 48) and 62% (n = 77) female. Students' ages ranged from 13 - 19 years. The average age was 14.2 years and the majority of students were in the ninth grade (91%; n = 114). Health education in North Carolina is a required course for ninth graders which explains the high percentage for this age group. The remaining students were distributed in 10th grade (7%; n = 9) and 11th grade (2%; n = 2). Ethnicity was roughly evenly split between White (46%; n = 57) and African American (44%; n = 55) students with very few Asian (3%; n = 4), Hispanic (2%; n = 2), Native American (1%; n = 1), and Pacific Islanders or others (5%; n = 6).

### ***Measure***

Students completed a 15-item anonymous health survey that consisted of open-ended questions assessing student opinions about drug use and other health-related behaviors. Measures for assessing normative beliefs were adapted from items used in the evaluation of the All Stars Core program (Harrington, Giles, Hoyle, Feeney, & Yungbluth, 2001). Harrington assessed the internal consistency of the normative beliefs scale by calculating a Cronbach alpha coefficient resulting in a respectable .782.

The student responses were tallied by the instructor. The class was then divided into two teams, among which students took turns trying to guess the most common student responses to selected survey questions. The team that was most successful at guessing the class "norms" won the game. The purpose of the game was to elicit class norms that are conventional and protective against high-risk behaviors such as drug use. Previous studies indicate that adolescents often perceive high risk behaviors to be more prevalent and acceptable among others than they actually are. When adolescents are given the opportunity to communicate their own opinions regarding these high risk behaviors in a safe environment (e.g., anonymous survey), they often report personal beliefs that are not tolerant of substance use; however, they also erroneously perceive that others are tolerant of substance use (Hansen & Graham, 1991; Graham, Marks, & Hansen, 1991; Perkins & Wechsler, 1996). After the opinion survey answers are tallied, the true social norms among the students are revealed. Specifically, demonstrating to adolescents the inaccuracy of their perceptions regarding drug use has been shown to delay the onset of substance use and to promote cessation among current users (Hansen & McNeal, 2001; McNeal & Hansen, 1999).

## Analysis and Results

Survey responses for each student were entered into a database. Student responses to each item of the survey were sorted by frequency. The sorted database was used to tally the responses that occurred most often for each question. Responses from 12 of the items were summarized for this report. The three items not included in the analysis were "filler" items meant to promote student engagement with the game (i.e., Who is your favorite college sports team?; Who is your favorite musical group?; and Who is your favorite actor/actress?).

The top three responses for each survey item are reported in Table 1. Contrary to images portrayed in some movies, teen magazines, and popular music, students in this study viewed substance use as unacceptable behavior. Marijuana, chewing tobacco, and cigarette use were seen as "stupid," and teens who avoid drug use were respected by their peers. Likewise, individuals who drive after drinking alcohol were judged as being "reckless" and "irresponsible."

Table 1

*Top Responses For Survey Items*

Opinion poll item	Top three responses	Number of students endorsing a response
What is one thing people your age do in excess?	Talk	12
	Smoke cigarettes	8
	Watch T.V.	7
What word describes someone who drinks and drives?	Stupid	70
	Irresponsible	9
	Drunk driver	6
What word describes someone who uses chewing tobacco?	Stupid	50
	Disgusting	25
	Hick/redneck	11
What word describes someone who uses marijuana?	Stupid	53
	Pothead	11
	Crazy	9
Teens who have made up their minds to never use illegal drugs are...?	Smart	81
	Cool	10
	Responsible	6
What causes the most stress for your family?	Money/Bills	17
	Fights/Disputes	7
	Bad Grades	5
What food should you eat less than you do?	Candy/Sweets	10
	Chips	10
	Ice Cream	10
What food should you eat more than you do?	Vegetables	46
	Fruit	18
	Salad	10
What disease do you fear getting the most?	HIV/AIDS	45
	Cancer	37
	AIDS and Cancer	9
What is the greatest benefit of exercise?	Health	44
	Fit/in shape	19
	Strength	11
What is one thing that can really start gossip among students?	Rumors	22
	Sex	19
	Dating relationships	10
What is something that other people do that bothers you the most?	Gossip	15
	Talking too much	13
	Smoking	9

Additional data were gathered in this study assessing student opinions regarding a variety of other health-related issues. Sources of family stress were assessed and students were surprisingly insightful. They listed financial issues as the greatest source of family stress with fights/disputes also receiving endorsement as a common source of family stress. Students easily named candy, chips, and ice cream as foods they should avoid and reported needing to eat more fruits and vegetables. In addition, good health, being in shape, and strength were listed as benefits of exercise. HIV/AIDS and cancer were the diseases with which students were most familiar

and feared the most. Starting rumors and engaging in gossip were behaviors seen by youth in this study as unacceptable.

## Discussion

Students in this study were given a unique opportunity to express their opinions on several health-related behaviors. Information such as this is critical to program developers and educators who are attempting to design and implement health-related curricula. Contrary to popular thought, the data collected here clearly illustrate adolescent social norms that are intolerant of substance use. Health educators can use these data to make prosocial norms more salient. In order to be effective, however, this information must be presented in a credible manner. Students are more impressed and influenced by what they perceive their close friends are doing than they are by statistics from county, state, or national survey data. (Baer, Stacy, & Larimer, 1991). Class debates, open discussions, and class or school-wide surveys are examples of activities that can be used to elicit positive norms regarding substance use. When used properly, each of the aforementioned teaching methods can provide students a safe and reinforcing environment for communicating their personal opinions regarding substance use in a direct contrast to over perceptions that commonly exist when adolescents consider the use and level of acceptability among their peers. Adolescents who adopt more accurate perceptions of the prevalence and acceptance of drug use by their peers are less likely to use drugs in the future.

Finances were listed as a source of stress for many adolescents and their families. Health educators can help students cope with this source stress by teaching them money management techniques, different methods of saving money, and where appropriate, assist them in attaining important job skills. Students may also benefit from conflict management training when family fights and disputes are a source of stress.

Student responses to the nutrition and exercise questions were clear - students know which foods they should eat and which they should avoid. Likewise, they understand the benefits of exercise. The challenge is moving beyond this knowledge into healthy behavior. Educators can offer students opportunities to make personal and public commitments regarding their eating and exercising habits. Research has demonstrated that commitments (intentions) are associated with desired health outcomes (FearnowKenney, Hansen, & McNeal, 2002). Using the activities listed above to make healthy norms salient may also be ameliorative.

Discussions on the causes, symptoms, treatment, and short- and long-term consequences of HIV/AIDS and cancer seem to be relevant to student health concerns. Educators can do much to alleviate some of these concerns by teaching ways in which exercise, diet, sexual activity, and substance use can work to increase or decrease one's risk of contracting these diseases.

Most students can see the connection between rumors and gossip and the ability to develop positive personal relationships; however, these behaviors are also indirectly related to personal health, in that they can operate to perpetuate and or prevent high-risk behaviors. Rumors and gossip (e.g., young people engaging in sexual behavior) can contribute to the perpetuation of erroneous beliefs. Health educators can lead classroom discussions on how rumors and gossip are harmful because they can exaggerate the prevalence and acceptance of high-risk behaviors. Student-generated strategies for avoiding participation in gossip can be elicited and stressed.

It should be noted that the results of this study are limited to the extent that they are based on a small sample of adolescents from the southeast. The health-related social norms reported here may not generalize to high school students in other regions of the country. It could also be argued that social desirability influenced the findings; however, the anonymous nature of the survey was designed to minimize this potential problem.

Despite its limitations, the results of this study have important implications for health educators and prevention practitioners. Health educators can play an important role in changing health-related social norms among young people. Survey questions, like the ones in Table 1, can be adapted and augmented to reflect the health concerns of a particular class of students. Data from the anonymous survey can be summarized and used in a classroom-

based game. Questions that do a particularly good job of highlighting a conservative norm (i.e., questions for which most students endorse healthy attitudes and behaviors) can be used in class discussions. Questions for which students' opinions appear to be more split, provide great topics for class debates. All of these formal methods can be used to identify and illuminate healthy social norms.

In addition, health educators can look for informal teaching moments to correct misperceptions about the prevalence or acceptance of a particular health-related behavior. Informal conversations with students may offer opportunities to correct erroneous norms (e.g., "You know as well as I do that most students at this school are like you and do not drink."). However, the same informal conversations can inadvertently perpetuate erroneous norms (e.g., "You guys be careful tonight. I know how much drinking goes on around here over the weekend."). At the very least, health educators may wish to avoid becoming what Perkins (1997) has termed "carriers of the misperception." That is, teachers and school administrators can be sensitive to situations in which erroneous norms may be inadvertently promoted. Becoming aware of the social norms held by targeted young people will help health educators and others maximize their health promotion efforts.

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