

Every 15 Minutes: A Preliminary Evaluation of a School Based Drinking/Driving Prevention Program

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Abstract

This study focused on evaluating the effectiveness of “Every 15 Minutes,” a popular drinking/driving prevention program. Participants were 1651 students in 81 California high schools. Pretest/post-tests comparisons revealed that student participating in the program as the “living dead” characters reported drinking less, being more likely to talk to their friends about drinking and driving, and being less likely to drive after drinking or ride with someone who had been drinking.

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Introduction

Drinking and driving continues to be a major adolescent health and safety issue (O'Malley & Johnston, 1999). Despite declines in rates of adolescent drinking and driving, youth are still over-represented in alcohol-related traffic fatalities (NHTSA, 1998).

Numerous school and community based drinking and driving prevention programs have been instituted in response to the problems associated with adolescent drinking, with mixed results (Hansen, 1993). Kolaya and Grimes-Smith (1999) have stated that programs that rely on knowledge only may be limited. They insist that students must personalize learning to enable them to understand the effect of a behavior on their lives.

The “Every 15 Minutes” (E15M) program combined both school and community involvement during a two day program focused on high school students' alcohol related behaviors. E15M programs have been presented at over 250 high schools in California since 1996. The program challenges high school students to think about their drinking, driving, personal safety, and the responsibilities of making mature decisions. E15M requires extensive involvement and cooperation among

students, school officials, and community professionals (i.e., fire, police, emergency workers, health personnel).

Hover, Hover, and Young (2000) evaluated this program when it was presented in Springfield Missouri. Using a nearby comparison school, they found that the program did change student's attitudes about drinking and driving but not behaviors. Although, a small focus group taken from the larger study, indicated that the E15M program was catalyst for conversations about alcohol behavior and may allow students to resist drinking and driving pressures.

This study focused on three aspects of adolescents' behaviors that reflect the goals of the program: self-management (frequency/amount of consumption), relations with peers in alcohol-related situations, and driving practices.

Methods

Sixteen hundred and fifty one students from 81 California high schools who participated in E15M as “living dead” completed pretests and post tests. They ranged in age from 14-20 years (mean: 16.8 years). The majority were upper class students: 53.1% seniors and 35.2% juniors. The group also included 6.5% sophomores and

4.8% freshman. In addition, 774 parents completed pretests and post tests.

Materials

A total of 29 questions were used to assess student behavior and attitudes before, immediately after and six months later their participation in the E15M program (see Appendix A). Many of the questions appear on the California Healthy Kids Survey (CHKS, 2003) (see California Substance Use Survey Questionnaire). In this study, Subscale I examined self regulation of alcohol use and included questions about the amount and circumstances under which alcohol was consumed by the participant. Sample items were "How many times have you drunk alcohol in the last six weeks?"; "How many times have you become ill after drinking?"; and, "How many times have you talked to teachers or other adults about drinking?".

Subscale II investigated student observation and intervention of their peers in alcohol-related environments. Questions included: "How frequently do you worry about a friend's drinking?"; and "How many times have you talked to your friends about their drinking?".

Subscale III inspected driving practices of participating students. They were asked to disclose information about behaviors as drivers or passengers in alcohol-related environments. Items included: "How many times have you driven when you were or had been drinking 1-2 drinks? 3-4 drinks? 5 or more drinks?", "Have you taken the keys from a friend who was drinking?"; and, "How often have you been the designated driver?"

Parents were asked question before and after their son or daughter were involved in the program. Questions included information about their communication and expectations of alcohol use with their children.

Procedure

The E15M program is a scripted program outlined at the National Organization for Every 15 Minutes (2003). Other resources include Chico Police Department (2003) or the

California Alcohol Beverage Control Board (2003).

During the first day of the program, an adult playing "Grim Reaper" calls students who have been pre-selected from a cross-section of the entire student body out of their class. These are the "living dead" designees. One student is removed from class every 15 minutes. A police officer enters the classroom to read an obituary written by the "dead" students' parent(s). Near noontime, a simulated traffic collision is viewable on the school grounds. Actual rescue workers treat the injured student victims as if it was a real scene. The corner handles the fatalities while injured students are extricated by the jaws of life. Officers arrest and book the student drunk driver. The most critically injured student may be picked up by helicopter and taken to the hospital.

At the end of day 1, the 'dead' students and accident victims are transported to an off-campus site for an overnight student retreat. This simulates the separation from friends and family. Counselors and other professionals facilitate the retreat discussing the reality of impulsive decisions and risky behavior. Each student writes a letter to their parent that begins:

"Dear Mom and Dad: Every fifteen minutes someone in the US dies from an alcohol related traffic collision. Today I died. I never had the chance to tell you..."

The following day, a mock funeral service is held at the high school. A video of typical activities at the school with the victims is shown followed by the crash scene staged the day before. Speakers include community members affected by drinking and driving accidents. Students and parents read their letters to all. The focus of the assembly is that the decision to drink and drive affects many others than just the one who drinks.

Results

The results of all three subscales showed significant differences between pre and post test results (see Table 1). Students were less likely to practice dangerous and risky behaviors,

including drive practices, after their participation in the E15M program. They were also more likely to observe and intervene when their peers were in risky alcohol related situations.

Subsequent analysis of additional data collected approximately seven months later also showed significant differences as seen in Table 2. The positive effects of the E15M program continued to be evident among students who completed the survey.

Parents (N=295) whose children participated as E15M “living dead” completed pre- and post-surveys. There were significant differences in their attitudes and behaviors about alcohol use among their children. See Table 3. Following their participation in the program, parents also reported being more likely to discuss drinking and driving, more prepared to control or prevent alcohol problems, and more confident that their teenager would not drink and drive.

Table 1
Results of Pre-Test / Post-Test (57-Day Average Interval)

	PreTest	Post	<i>t</i>	<i>p</i>
Self Management (N=356)	26.99	29.02	10.02	.000*
Peers (N=1006)	13.96	16.72	25.06	.000*
Driving Practices (N=359)	52.33	64.57	28.65	.000*

**p* < .001

Table 2
Results of Pre-Post-Post Tests (218-Day Interval)

	PreTest	Post 1	Post 2	<i>F</i>	<i>p</i>
Self Management (N=46)	27.39	29.74	30.85	28.51	.000***
Peers (N=197)	14.46	17.78	16.26	6.39	.015*
Driving Practices (N=48)	54.47	66.13	71.10	288.76	.000***

p* < .05; **p* < .001

Table 3
Attitudes About Alcohol Among the Parents (N=295)

Items	Pre	Post	<i>t</i>	<i>p</i>
Discuss drinking with teen	2.82	2.78	2.29	.022*
Permission for teen to attend a party	2.35	2.49	2.44	.015*
Disapproval of teens' friends drinking	3.95	4.03	2.28	.022*
Disapproval of teens' friends binge drinking	4.61	4.66	2.55	.011*
Prepared to deal with alcohol problems	1.74	1.61	4.08	.001**

***p* < .01; **p* < .05

Discussion

Results suggest lasting program effects on all three subscales for students and on certain items for parents. Strongest effects are evident in initial pre-test / post-test comparisons which is congruent with other prevention program research data. However, one of the goals of the program is to prevent alcohol related driving

mishaps during prom and graduation months, so short term intervention may be successful.

Recent research has suggested that peers often estimate the amount and occurrence of alcohol consumption among their friends. Efforts to make the reality of actual alcohol use has been labeled “norm breaking” intervention. These

data suggest that the E15M program may contribute to this by encouraging peers to observe and intervene in their friends alcohol use. This research also may indicate that students may talk more with their friends, parents and teachers about drinking behaviors. This may have the effect of “uncovering” actual behavior.

The activities in this program send a clear message to students that community professionals, school personnel and family members are concerned about the teen alcohol use. This may provide a reason for some teens to think carefully about their own alcohol use and be alert to community expectations.

All research has flaws. These data were collected by agencies in each community that presented the program. As a result, data were often incomplete and attrition rates were high. Further evaluation of E15M will focus on two areas. We are interested in forming control groups at similar high schools in the nearby regions to make comparisons with participations in E15M. We would also like to investigate the extent to which the E15M program has an impact on students who participate less extensively (e.g., students who view the crash scene and attend the assembly but do not participate as living dead).

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Appendix A

Item Content for Three Subscales

Self Management

In the last six weeks, how many times have you drank alcohol?
During the last six weeks, on how many days did you have five or more drinks in an hour?
Talk to my teachers or other adults about drinking?
Set a limit on your own alcohol consumption?
Become ill after drinking?
Choose not to drink with your friends?
Do “binge” drinking (five or more drinks / one time)?
Participate in drinking games / consumption?
Establish / use a “no questions asked” contract with an adult / parent?

Peer

How do you feel about another student your age trying one or two drinks of alcohol?
How do you feel about another student your age drinking five or more drinks in an hour?
How do you think your best friends would feel if you got drunk?
Watch out for my friends who were drinking?
Talk to my friends about their dangerous drinking?

Driving Practices

During the last six weeks, have you driven a car when you were or had been drinking?
During the last six weeks, have you been in a car with friends who were drinking?
Would you drive in a car after you have drank:
 One or two drinks?
 Three or four drinks?
 Five or more drinks?
Would you ride with a driver who has drank:
 One or two drinks?
 Three or four drinks?
 Five or more drinks?
Would you prevent someone from driving who has drank:
 One or two drinks?
 Three or four drinks?
 Five or more drinks?
How frequently do you worry about friend’s drinking and driving?
Try to prevent a friend from drinking and driving?
Talk to my parent(s) about drinking and driving?
Be the designated driver?
Buckle your seat belt?
Call someone for a ride home instead of driving?
Give up your car keys because you had been drinking?
Walk home instead of driving?
Designate a sober driver?
Get a ride with a designated driver?