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Executive Summary

This report details changes in key beliefs, risk perceptions, and motivation to reduce use that occurred in Alaska youth who attended PRIME For Life between January and June 2006. Their future drinking and drug use intentions following the PRIME For Life program are also examined. Results are based on 63 participants who completed pre- and post-test surveys. The sample size greatly limited the ability of analyses to yield statistically significant findings.

Approximately half of program participants were female; 54% were Caucasian and 13% were Alaska Natives. Average age was 17 years. Twenty-seven percent reported at least completing of high school or earning a GED. Fifty-two percent reported they did not make any high-risk alcohol or drug choices in the thirty days prior to PFL. Twenty-five percent reported experiencing three or more indicators of possible alcohol dependence. Fifty-one percent of the respondents reported that a parent, grandparent or sibling has or has had serious problems with alcohol. Twenty-four percent had one or more arrests for impaired driving.

At post-test, participants were more willing to report higher past high-risk choices than they were at pre-test. For example, on the post-test the average maximum drinks in a day during the 30 days prior to PFL was 5.6 drinks, yet for the same time period reported at pre-test the average was 2.6 drinks. Similarly, 16% of the sample described themselves as ever having an alcohol or drug problem, while 8% indicated this at pre-test.

After the program, 40% indicated they are in Phase 1 (consistently making low-risk choices), 52% classified themselves in Phase 2 (making high-risk choices, but not psychologically dependent), 6% reported being in Phase 3 (psychologically dependent), and 1.6% indicated being in Phase 4 (physically dependent).

Changes in Attitudes, Beliefs, Perceptions of Risk, and Motivation to Reduce Use

High-risk drinking and drug use choices are supported by common attitudes, beliefs, and risk perceptions on several dimensions, as well as low motivation to reduce use. Though not all changes were statistically significant, after attending PRIME For Life, participants indicated greater:

- agreement with attitudes and beliefs that are supportive of making low-risk choices;
- perception of risk associated with drinking 6-7 drinks once or twice a week and marijuana use;
- perception of personal risk for developing alcoholism;
- motivation to reduce their use (by those with three or more indicators of possible alcohol dependence).

The beliefs, “My current drinking and drug choices could interfere with keeping the things I value” and “If I drink as much as in the past, I could develop alcoholism,” changed significantly more for participants who designated having three or more symptoms of possible dependence than for those who with no symptoms.

Behavioral Intentions and Detailed Plans

Participants were asked on the post-test about the drinking and marijuana or other drug choices they think they would make in the 30 days after the program. Sixty-five percent of those who had been making high-risk drinking choices indicated they intend to make low-risk drinking choices in the 30 days following the program—one-third of which intend to abstain. One third of those who used marijuana or other drugs in the 30 days before the program indicated intentions to not use in the following month. Over 60% of participants also indicated that they had made detailed plans to avoid high-risk drinking and drug use and to substitute other activities.

Course Evaluation and Summary

At the end of the course, most participants agreed that PRIME For Life helped them to decide to drink and/or use drugs less, helped them feel confident in being able to drink less or use drugs less, and helped them to develop skills to be able to drink less or use drugs less. These findings are consistent with the participants’ reported intentions to make less risky choices in the future.

Background and Objectives

Since 2002, PRIME For Life (PFL) has been used in Alaska under the jurisdiction of the Alaska Department of Health and Human Services Division of Behavior Health for youth with alcohol-related offenses. The program was developed by Prevention Research Institute (PRI), a non-profit organization based in Lexington, Kentucky. The data in this report includes youth, many of whom had been caught possessing or selling alcohol or other illegal substances, receiving this program between January and June 2006. This report:

- describes the characteristics of the youth,
- compares data from previous evaluations, when applicable,
- assesses change in key perceptions and beliefs about substance use,
- examines the level of motivation and intentions of the group with regard to future drinking.

Method

The PFL program was delivered by instructors trained by PRI. At the beginning of the program, participants completed a survey (the pre-test) that included demographic information, alcohol consumption, level of motivation to change their choices, beliefs about alcohol and substance use, and perceptions of risk related to marijuana and alcohol use. At the conclusion of the program, a post-test was administered that included alcohol-related beliefs, perceptions of risk, and behavioral intentions.

All completed pre- and post-tests were sent to REACH of Louisville. PRI received the scanned and compiled data from REACH and authored this report in collaboration with REACH.

In the six-month period included in this analysis, 86 participants provided usable data on the pre-test; 63 of these participants completed the post-test survey with usable information. The sample size is less than half the number of paired surveys received in 2005 which greatly limited the ability of analyses to yield statistically significant findings.

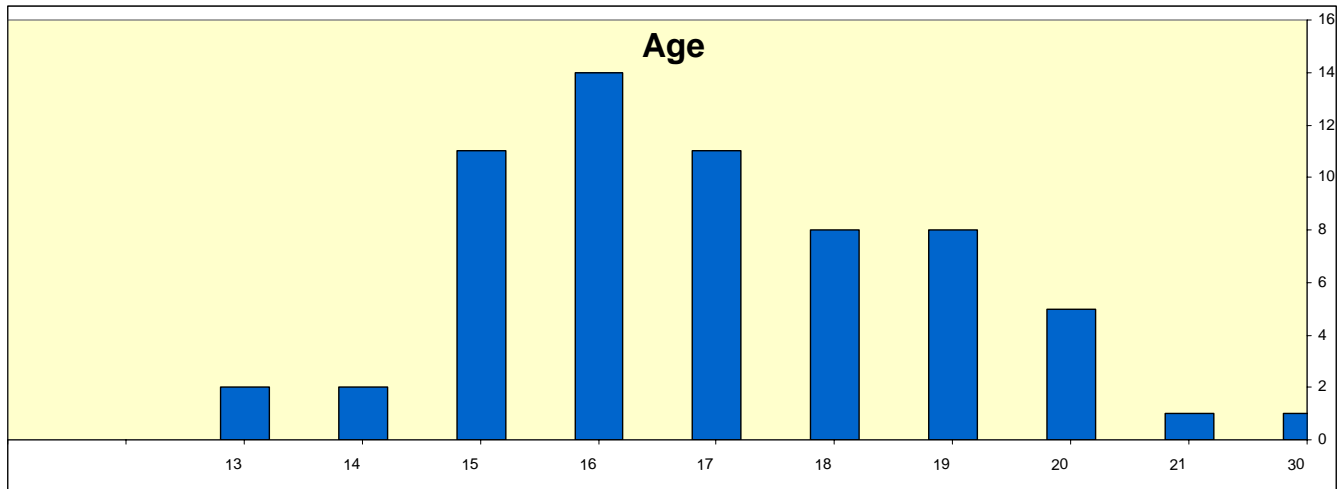
Seventy-one percent indicated they have never been arrested for impaired driving, twenty-one percent indicated having one arrest, and three percent indicated having two or more such arrests. Five percent did not answer this question.

Key Points and Levels of Significance

The analyses are summarized and elaborated upon in “Key Points” within each section. These points typically direct attention to outcomes that are of interest because there is a noteworthy relationship between a variable and a descriptor (such as gender or offender status).

Discussion of the analyses will occasionally refer to an outcome as “statistically significant.” Unless noted otherwise, this refers to the results of a paired samples *t*-test where comparison of pre and post measures for each individual with complete data is employed (using the .05 level of significance as the standard).

Group Demographics



Key Points

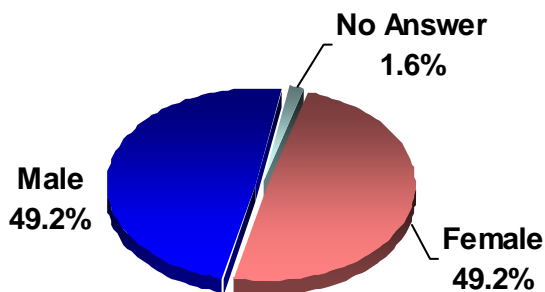
As can be seen in the above chart, the most participants were between 15 and 20 years old. Three-fourths were under 19 years of age. The average and median (the point that splits the distribution in half) age was 17. The most common (modal) age was 16.

Males were, on average, approximately one and a half years older than females (17.9 and 16.4, respectively). Alaska Natives were the oldest (17.6) and American Indians the youngest (16 years). Youth indicating other races/ethnicities were at or near the mean age.

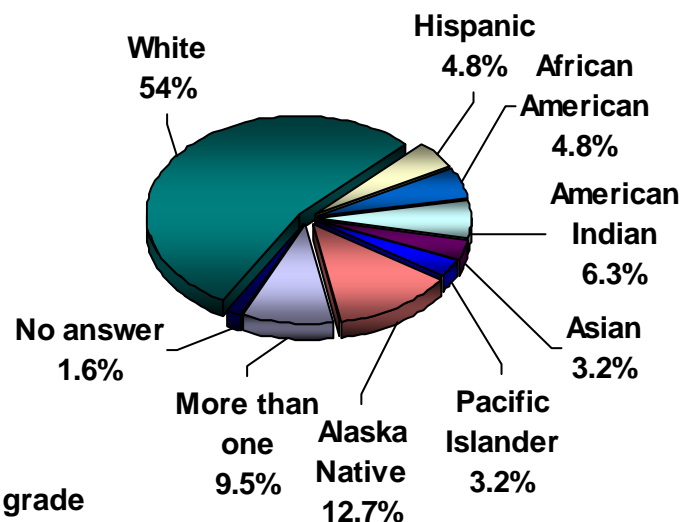
The average age in 2006 was considerably younger than in previous years (15.4 in 2005 and 15.8 in 2004).

Group Demographics

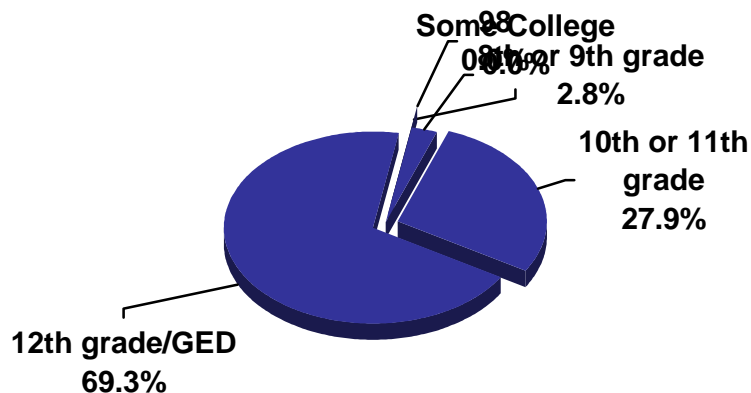
Gender



Race/Ethnicity



Education



Key Points

In 2006, the sample was equally split by gender as compared to a greater percentage of males in 2005 and 2004 (62% and 59%, respectively). A little over half of the participants were Caucasian (54%) with Alaska Native as the second most prevalent group at 12.7%. In 2005, more participants were Caucasian or Alaska Native (68% and 15%, respectively).

A greater percentage of males were White than were females, and a greater percentage of females were Alaska Native or “more than one” than were males (61% versus 48%, and 16% and 19% versus 7% and 0%, respectively).

Seventy-one percent of the youth indicated their highest completed education to be 8th through 11th grades, while 27% had either completed high school or earned a GED, or attended college (19% and 7.9%, respectively). In contrast, only 1% had attended college in 2005. This indicates that not only were the participants older on average in 2006, but they had also completed more education.

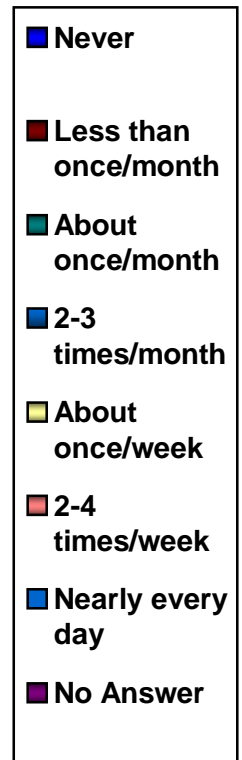
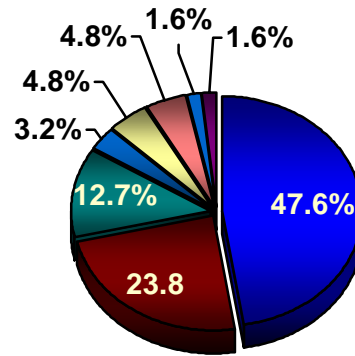
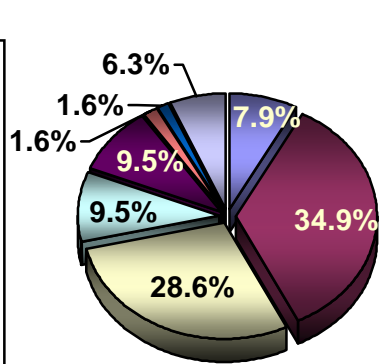
Alcohol and Drug Choices Prior to PRIME For Life

At pre-test participants were asked about their alcohol and drug choices 12 months prior to PFL and at pre-test and post-test, participants were asked to indicate their choices 30 days prior to PFL. Below are specifics for the prior 12 months as reported at pre-test and the 30 days prior to PFL as indicated on the post-test.

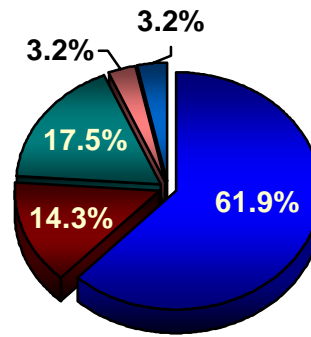
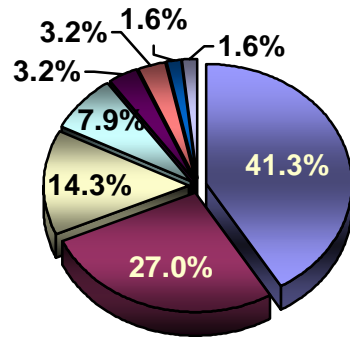
Drinking Choices

Marijuana and Drug Choices

12 Months Prior to PFL



30 Days Prior to PFL



Key Points

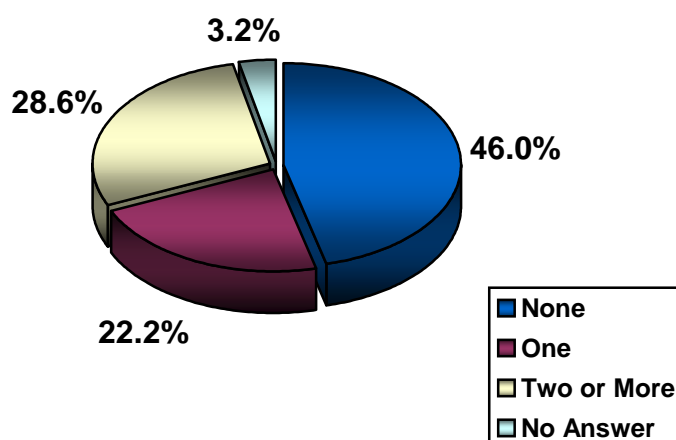
While 43% of the sample reported consistently making low-risk drinking choices for the 12 months prior to PFL, 68% reported they either abstained or drank within the low-risk range in the 30 days prior to PFL. About half indicated they abstained from marijuana and other drugs throughout the 12 months prior to PFL; 62% indicated they did not smoke marijuana or use drugs during the thirty days prior to PFL. In total, 52% reported they did not make any high-risk alcohol or drug choices in the 30 days prior to PFL.

Eight percent of the 2006 sample indicated they abstained from alcohol in the prior 12 months. This is lower than the 13-14% of participants in prior years who indicated they did not drink or use drugs.

Family History and Self-Reported Alcoholism or Addiction

Research indicates that heredity plays a role in the development of alcohol problems, so participants were asked on the post-test whether or not they believed that a biological parent, grandparent, or sibling has or has had a serious drinking problem or alcoholism. They were also asked if they personally have alcoholism or drug addiction.

Close Relatives Ever Have a Serious Drinking Problem



Key Points

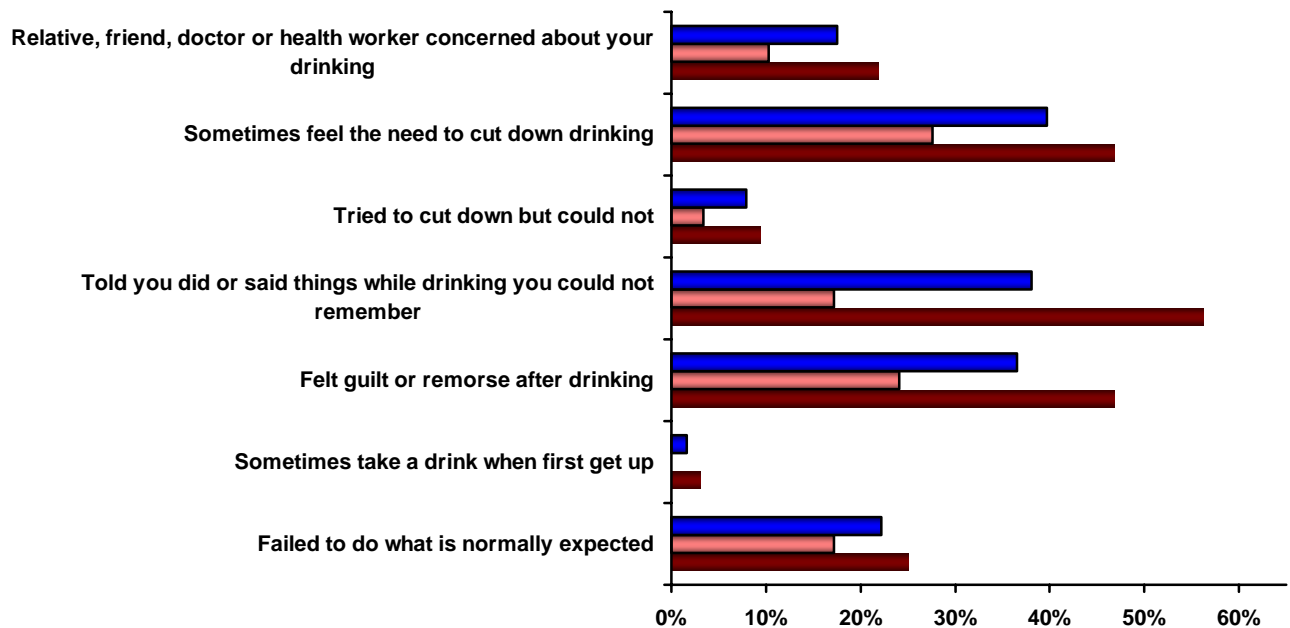
Fifty-one percent of participants reported having at least one sibling, parent, or grandparent with a serious drinking problem or alcoholism (22% reported one and 29% two or more); 46% reported having none; and 3% did not answer this question. Seventy-three percent of those reporting three or more indicators of potential alcohol dependence reported some family history of serious drinking problems, compared to 36% of those with no indicators.

At post-test, only one person (1.6%) reported having alcoholism or drug addiction, 76.2% reported not having alcoholism or drug addiction and 7.9% indicated they were unsure. Fourteen percent did not answer this question. At pre-test, 92% said they did not have alcoholism or addiction, three percent were unsure and 2% did not answer. This suggests that more participants were at least considering the possibility they might have alcoholism or addiction after PFL than they did before the program.

Indicators of Possible Alcohol Dependence

At post-test, participants were asked to indicate if they had seven drinking-related experiences during the previous 12 months. Having experienced these problems may indicate a potential for having or developing alcohol dependence.

■ Family members with alcohol problems ■ Family members without alcohol problems ■ All



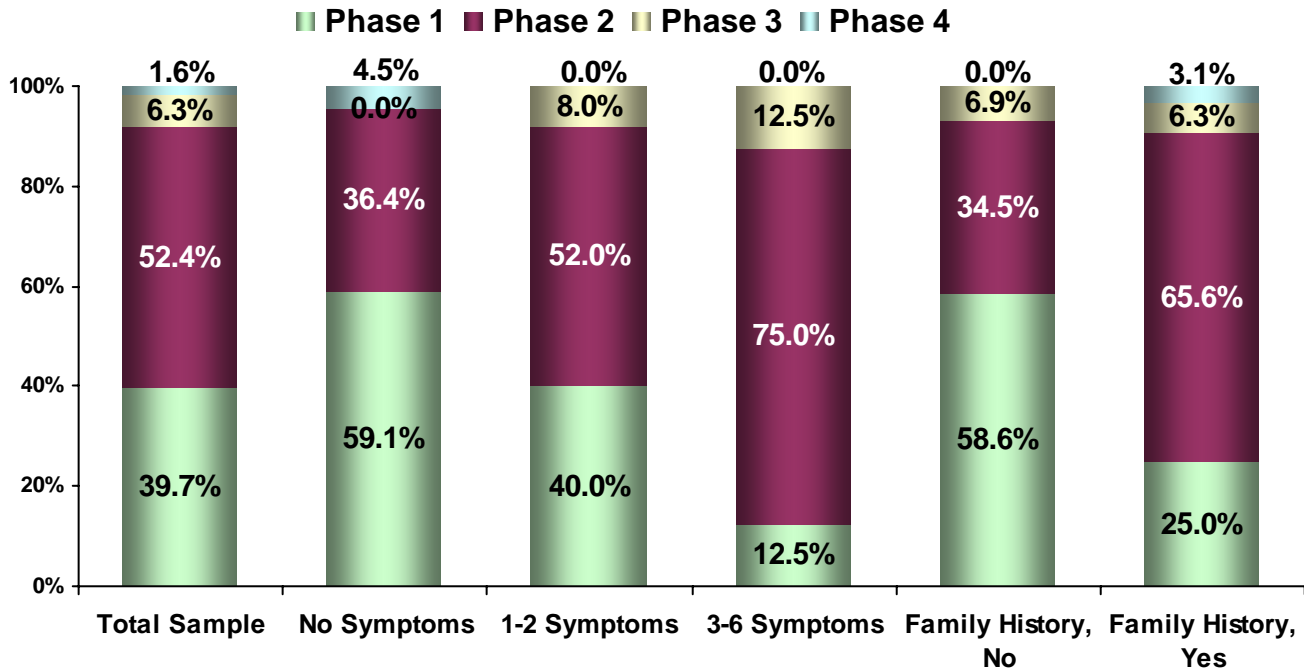
Key Points

Sixty-five percent experienced at least one of these indicators of potential dependence, 40% at least two of these experiences, 25% three or more, 19% four or more, 10% five or more, 5% six or more, and 0% all seven. The two most common experiences were “sometimes feeling a need to cut down on your drinking” and “told you did or said things while drinking you could not remember” (39.7% and 38.1%, respectively). The mean number of symptoms was 1.6. Participants who indicated they are in Phase 3 averaged significant more symptoms than those reported being in Phase 1 (2.3 versus 0.9).

As the graph indicates, youth with close blood relatives who have ever had a serious drinking problem were much more likely to report each of these symptoms. In addition, significantly more participants with a family history of serious alcohol problems reported having three or more symptoms compared to those without such a family history (34% vs. 14%, respectively). Among those who reported being in Phase 3, having three or more symptoms was much more common than among those who reported being in Phase 2 or Phase 1 (50% vs. 36% and 8%, respectively). Those who reported ever experiencing an alcohol problem and those who were unsure if they ever experienced an alcohol problem were also much more likely to signify they had three or more of these experiences compared to those did not (50% and 25% vs. 20%).

Self-Assessed Phase: Post-Test

Four phases in the progression of drinking and drug use choices are taught in PFL. The four phases consist of low-risk choices in Phase 1, high-risk choices in Phase 2, psychological dependency in Phase 3, to physical addiction in Phase 4. On the post-test, participants were asked to indicate the Phase they believed applies to them.



Key Points

Forty percent of participants classified themselves as being in Phase 1, 52% as being in Phase 2, 6% as being in Phase 3, and 2% as being in Phase 4.

As expected, the more symptoms of possible dependency reported, the greater the likelihood participants classified themselves as being in Phase 2, 3, or 4. Compared to those with no reported symptoms, twice as many of those who reported 3-6 symptoms classified themselves as being in Phase 2, 3, or 4 (41% and 88%, respectively.)

Youth with relatives who have ever had a serious drinking problem or alcoholism were significantly more likely to report being in Phase 2 and significantly less likely to indicate being in Phase 1 compared to those with a family history of a drinking problem.

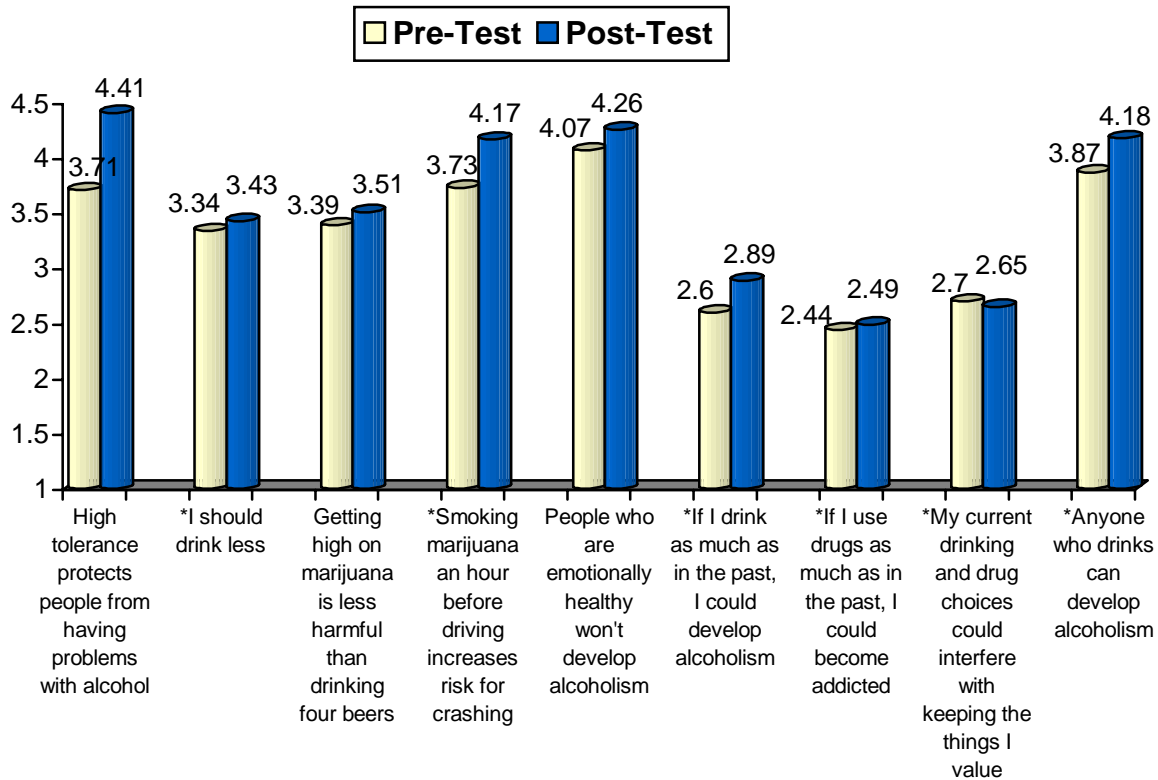
Immediate Impact of PRIME For Life: Post-Test

By providing students with information on risk factors associated with alcohol use, PFL is designed to guide individuals toward making low-risk drinking decisions and adopting more accurate, i.e., less risky, beliefs that will support those decisions. The post-test examines the immediate impact of and reactions to the program in the following areas:

- beliefs about drinking and marijuana use
- perceptions of risk associated with specific drinking and marijuana decisions
- accuracy of self-reporting
- perceptions of personal risk for developing alcoholism
- motivation to change
- behavioral intentions
- detailed planning for change
- reactions to the course

Attitudes and Beliefs: Comparisons Pre- to Post-Test

The pre- and post-tests contained the same set of nine attitudes and beliefs concerning drinking or marijuana use. In each survey, participants were asked to indicate their degree of agreement or disagreement, using a five-point scale, with (1) being strongly agree and (5) being strongly disagree. The six starred items (*) are reverse scored so that a higher score indicates the desired response.



Key Points

The above chart shows the extent to which participants in PFL evidenced meaningful gains in beliefs and attitudes about alcohol and drug use from the beginning to the end of the program. The nine items above are derived from the curriculum and are indicative of key learning that is expected.

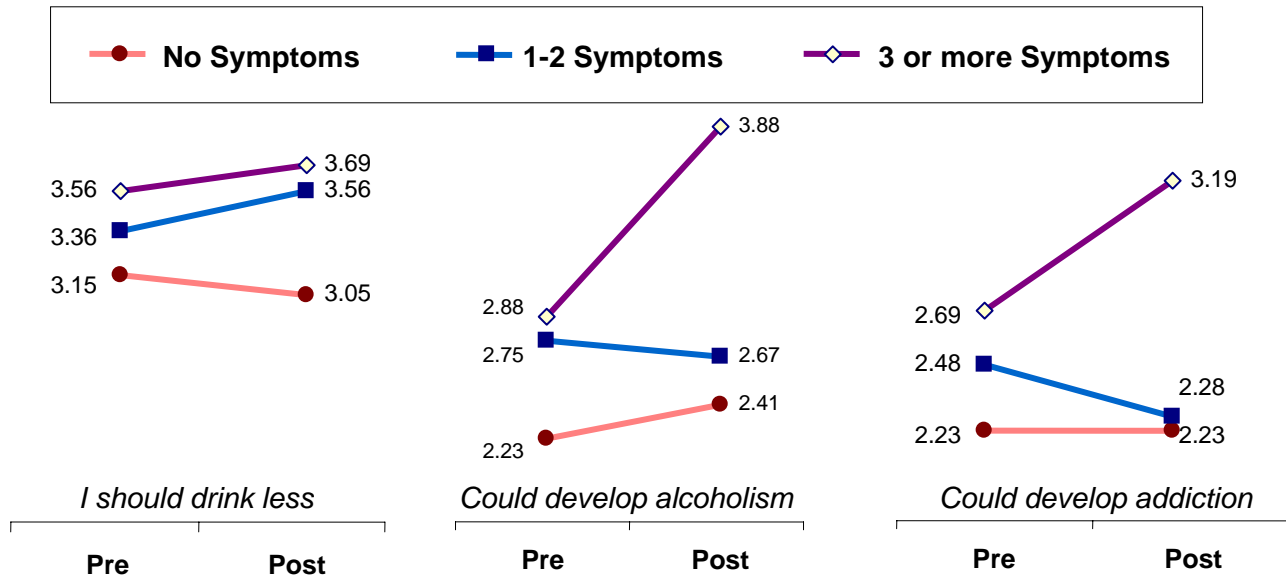
While eight of the items showed movement in the desired direction, based on a paired samples t-test, changes from pre- to post-test in three of the attitudes and beliefs were statistically significant in the desired direction. These were: “high tolerance protects people...,” “smoking marijuana an hour before driving ...,” and “anyone who drinks can develop alcoholism.” Changes in “people who are emotionally healthy won't develop alcoholism” and “if I drink as much as in the past...” approached statistical significance ($p=0.083$ and $p=0.098$, respectively), and it is highly likely that with a larger sample, these changes would also have been statistically significant.

Changes in cognitive attitudes and beliefs are important precursors to behavior change. They are even more meaningful when coupled with changes in risk perception, intention, and behavioral planning (see following sections).

Differences in change on the four beliefs related to their own behavior by other characteristics are described on the next page.

Attitudes and Beliefs, Continued

The graphs below shows pre- and post-test scores on the items, “I should drink less,” “If I drink as much as in the past, I could develop alcoholism,” and “If I use drugs as much as in the past, I could develop an addiction” by number of self-reported symptoms of possible dependence. Higher scores indicate the desired responses.



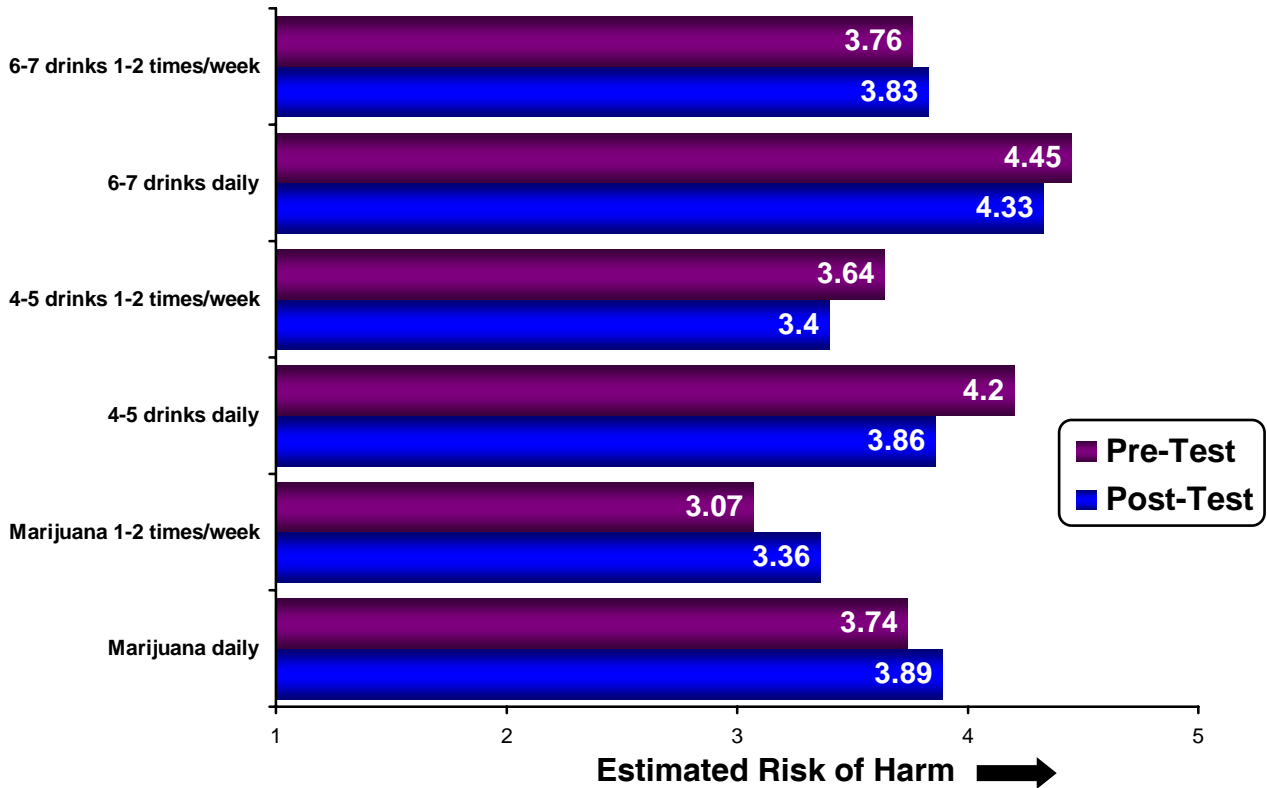
Key Points

For those with three or more self-reported symptoms, increases in agreement to the belief “If I drink as much as in the past, I could develop alcoholism,” from pre- to post-test were highly statistically significant ($p=0.005$). The increase from pre- to post-test for “If I use drugs as much as in the past, I could become addicted,” approached significance ($p=0.135$). None of the pre- to post-test changes for those with no symptoms or 1-2 symptoms approached significance. Given that in the 30 days prior to PFL over half of the youth were making low-risk choices and an additional 14% were making choices that were close to the low-risk guidelines, the lack of significant change by those with few or no symptoms is not surprising.

As can be seen by examining the slopes of the lines in the above graphs, the increases were greater for those with 3 or more symptoms compared to those with no symptoms. Except for “I should drink less,” the increases were also greater for those with 3 or more symptoms compared to those with 1-2 symptoms. These findings suggest that PFL generally impacted these attitudes among people with 3 or more symptoms of possible dependence more positively than those with no symptoms, and those with 1-2 symptoms.

Perception of Risk: Comparisons Pre- to Post-Test

On the pre- and pos-tests, participants were asked to rate, on a five-point scale, the degree of their risk if they made specific drinking and drug choices. No risk is indicated by (1) and great risk by (5).

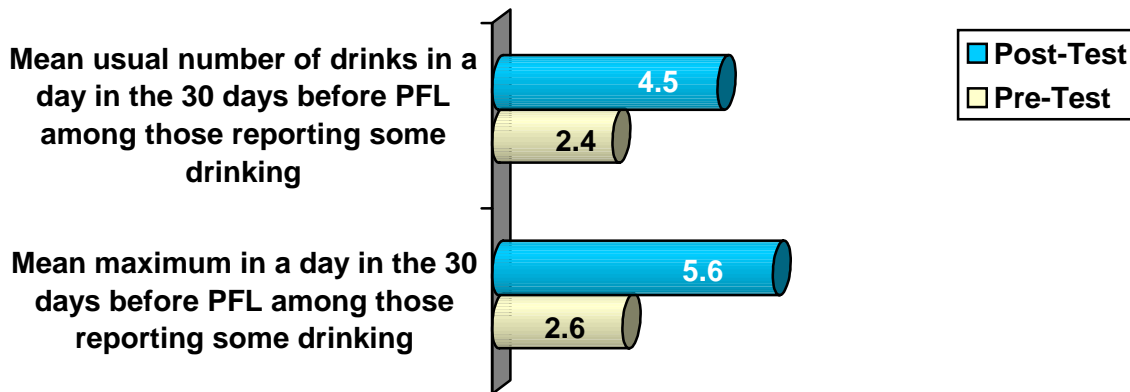
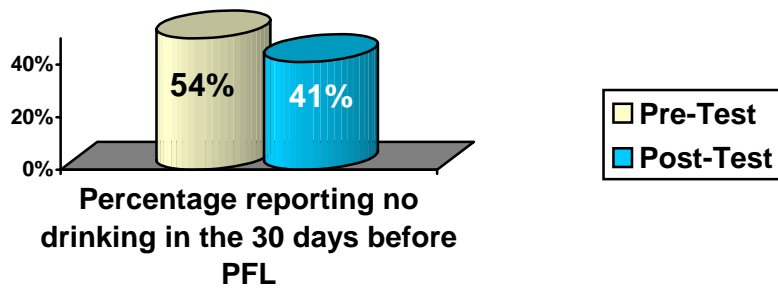


Key Points

The above chart shows changes from pre- to post-test in the perception of risk associated with certain behaviors. Consistent with program content, participants rated 1-3 drinks daily and 1-2 times per week (not shown) as less risky on post-test than at pre-test.

With the exception 4-5 drinks daily, comparisons from pre-test to post-test were not statistically significant for the full sample. The increase in perception or risk for smoking marijuana once or twice a week approached significance ($p=0.1$) for the full sample and was statistically significant for the subgroup who reported they made high-risk drinking choices in the 30 days prior to PFL ($p=0.046$). The lack of significant changes in other risk perceptions might be due to the small samples size or the fact that the risk perceptions were already quite high at pre-test.

Self-Reports: Comparisons Pre- to Post-Test



Key Points

On both the pre- and post-test, participants were asked to report on their alcohol use within the 30 days before PFL. As can be seen, participants evidenced higher *reporting* of past drinking (over this same 30-day time period) at post-test than at pre-test. The greater the prior use designated on the post-test, the greater this difference, with the 2 participants who indicated at post-test having consumed 14 drinks reporting on the pre-test they drank an average of nearly 12 drinks less. The participant who reported on the post-test having consumed 20 or more drinks indicated on the pre-test having consuming 15 drinks less. [Note: the average number of drinks only includes those who reported some drinking. When those who did not drink are included, the means are lower, but large differences between pre- and post-tests still exist.]

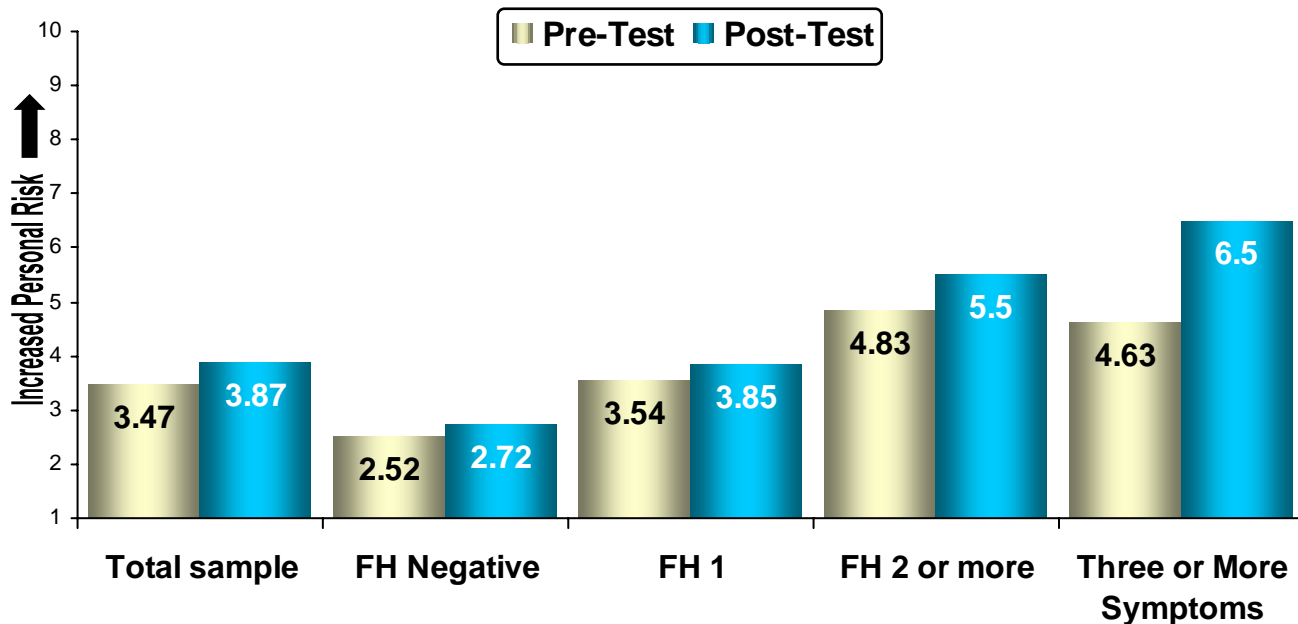
At post-test more participants also reported any marijuana or drug use in the 30 days prior to the program than did at pre-test (35% and 30%, respectively). Twice as many participants reported near daily use on the post-test than on did on the pre-test (3.2% versus 1.6%).

While there are several possible explanations for these findings, two seem the most probable. First, it is likely that people are more comfortable sharing personal information after getting to know their instructor and experiencing PFL. Second, they might also have been more accurate about their number of drinks. That is, while participants were provided with the definition of a drink at pre-test, after learning this definition in the program they might have utilized it more accurately on the post-test. For these reasons, most analyses utilize post-test reports of use 30 days prior to the program instead of such use as reported on the pre-test.

Also, twice as many participants indicated at post-test ever having had a problem with alcohol or drugs than at did pre-test (16% and 8%, respectively). This finding is consistent with the first explanation (above).

Perception of Alcoholism Risk: Comparisons Pre- to Post-Test

Becoming aware of one's own vulnerability for developing alcoholism can be one factor in motivating a person to reduce personal risk by adopting low-risk drinking behaviors. To determine whether or not PFL affected this awareness, participants were asked on both surveys to rate their own risk for developing alcoholism on a 10-point scale.



Key Points

Upon participation in PFL, the full sample and various subgroups indicate an increased understanding of the personal risks involved in their past drinking.

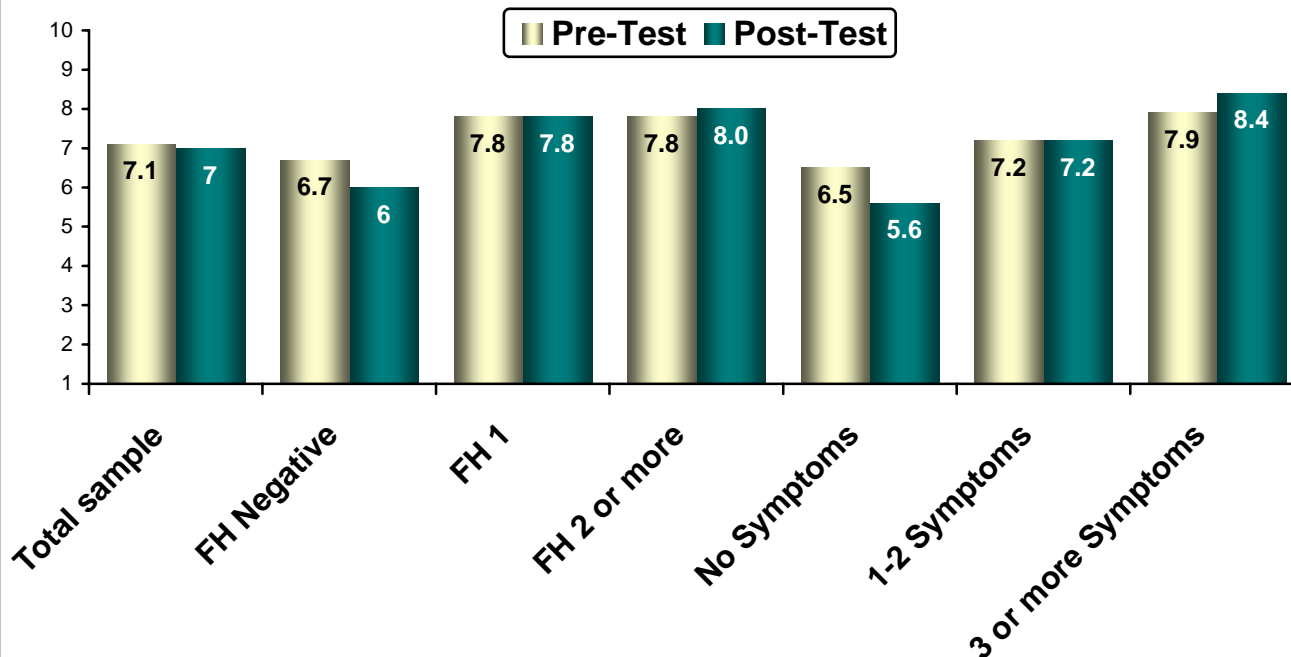
The greater the number of close blood relatives with a serious alcohol problem (FH), the greater the perceived risk for developing alcoholism. Similar changes were found based on the number of reported symptoms of possible dependence with those who reported three or more symptoms having the highest perception of risk for alcoholism at pre- and post-test. When looking at the most drinks reported in one day in the 30 days before the program, those who reported having had 20 or more drinks had the highest perception of personal risk.

The subgroups portrayed above begin at different points on the pre-test, but appear to evidence gains of a similar magnitude over time with the exception of those with three or more symptoms having almost twice the increase of other groups.

Research has shown that appreciation of the personal risks associated with high-risk drinking is a crucial component of sustained behavioral change.

Motivation to Change: Comparisons Pre- to Post-Test

Participants were asked on both surveys to rate their level of motivation for reducing their alcohol or drug use on a 10-point scale, with “1” indicating low motivation and “10” indicating high motivation.



Key Points

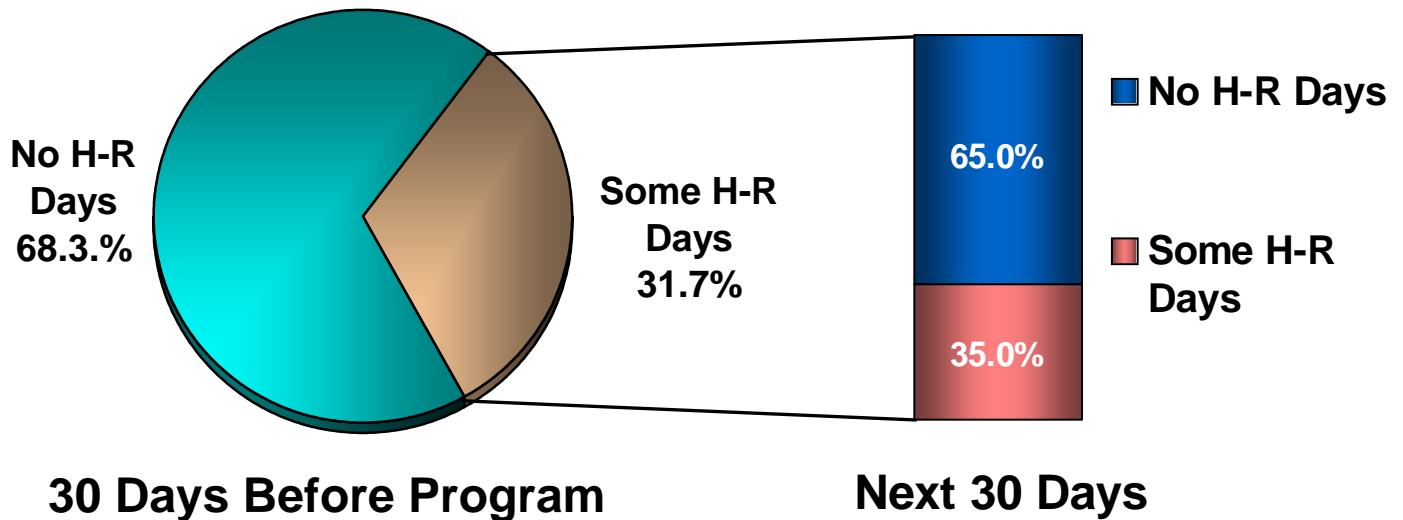
Even at pre-test, motivation to drink or use drugs less was relatively high. For the subgroups shown above, increases from pre- to post-test in motivation to change occurred among those who reported having three or more potential symptoms of alcohol dependence and those with two or more close blood relatives who ever had a serious drinking problem. Females showed an increase in motivation to change from pre-test to post-test, while males did not.

None of the differences in pre-test as compared to post-test reports in motivation to change were statistically significant. As with some other findings, this might be due to high pre-test scores, few youth having made high-risk choices in the 30 days before the program, and/or the small sample size.

The above findings suggest that those who could benefit the most from reducing their drinking or drug use had the greatest increase in motivation to do so.

Behavioral Intentions: Alcohol

On the post-test, participants were asked the maximum drinks they had in a day in the 30 days before the program and the most drinks they think they would have in a day in the next 30 days. The chart below shows how the participants who indicated they made high-risk choices in the 30 days before the program answered the question about their intentions in the next 30 days.



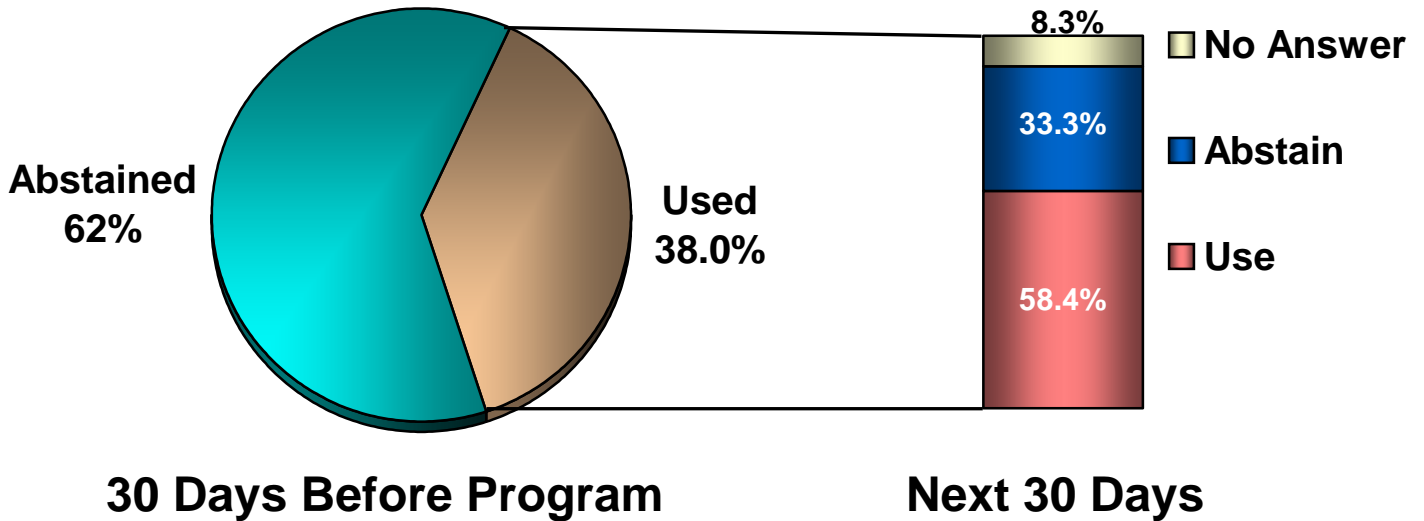
Key Points

Less than one-third of the sample indicated that they made high-risk drinking choices on at least one day in the 30 days before the program. Twenty percent of the participants who made high-risk drinking choices in the 30 days before the program indicated the intention to abstain in the next 30 days (after the program). An additional 45% percent reported they intend to drink within the low-risk range, thus, in total, 65% expressed intentions to not make any high-risk choices in the next 30 days.

The average maximum number of drinks for the next 30 days among those who reported the intention to drink was 4.1 drinks, which is about half of what was reported for the 30 days prior to the program (5.6 drinks). The average usual number of drinks in the next 30 days among the intended drinkers was 2.7 drinks, as compared to 4.5 drinks prior to PFL.

Behavioral Intentions: Marijuana and Other Drugs

The chart below shows how participants who indicated they smoked marijuana or used other drugs in the 30-day period before the program answered the question about intentions to smoke marijuana or use drugs in the next 30 days.

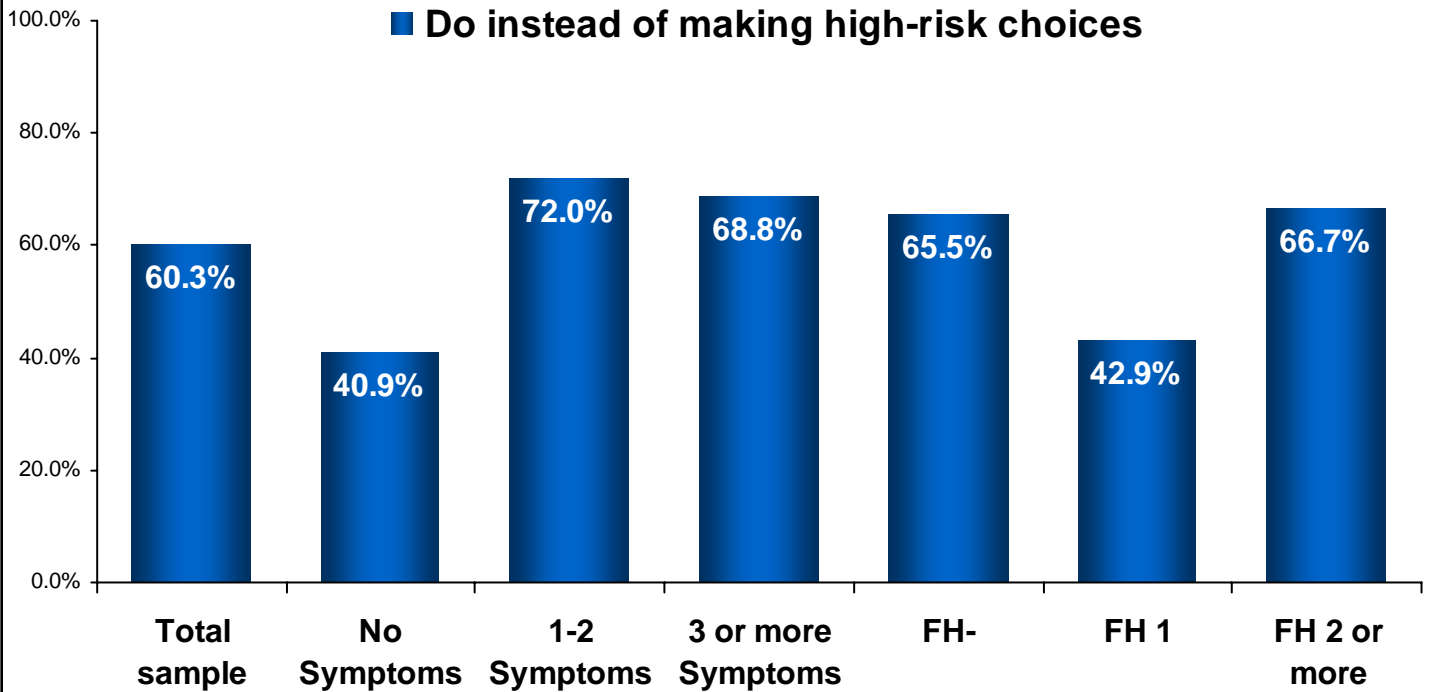


Key Points

Thirty-eight percent of the sample indicated that they smoked marijuana or used other drugs on at least one day in the 30 days before the program. Of these, 33% expressed intentions to not smoke marijuana or use other drugs in the next 30 days (after the program).

Detailed Planning

The chart below provides perspective on the extent to which program participants engaged in detailed planning about reducing high-risk use. Two questions that appeared on the post-test asked about: (1) whether the individual had made detailed plans to avoid high-risk drinking or drug choices, and (2) whether the individual had made detailed plans to establish substitute behaviors to high-risk drinking and drug choices.



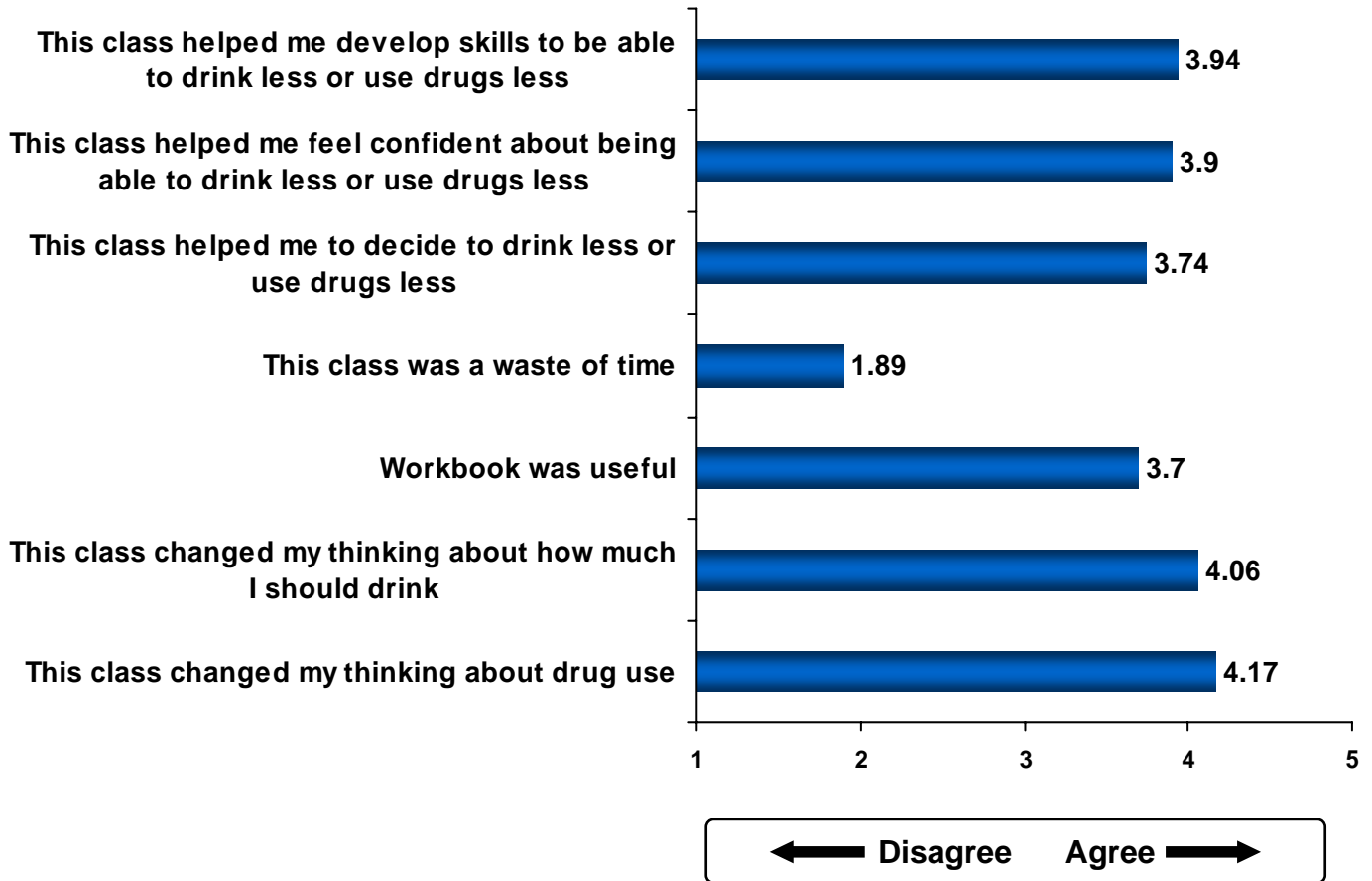
Key Points

The percentages of participants reporting they made plans to do something else instead of making high-risk choices and the percentages indicating they had made plans to avoid high-risk situations were both approximately 60%. For simplicity's sake, only the percentages for plans to do something else instead of making high-risk choices are shown above.

There were some variations in the findings for some subgroups, including number of symptoms of potential dependence and family history of alcohol problems (FH). In addition, those who indicated that they made low-risk choices in the 30 days prior to the program were significantly more likely than those who reported having made some high-risk choices to make these plans (67% and 45%, respectively).

Course Evaluation: Post-Test

Participants were asked on the post-test to rate seven statements evaluating PFL, using a five-point scale, with (1) being strongly agree and (5) being strongly disagree. Items were reversed scored to indicate degree of agreement.



Key Points

Most participants agreed (varied between 70% and 84% for the seven items) that PFL influenced their thinking about drinking and drug use, helped them to decide to drink and/or use drugs less, helped them feel confident in being able to drink less or use drugs less, helped them to develop skills to be able to drink less or use drugs less, did not consider the program to be a waste of time, and thought the workbook was useful.

Prevention Research Institute

Prevention Research Institute is a private not-for-profit organization that pioneered the Risk Reduction approach to alcohol and drug problems in 1983. Ray Daugherty and Terry O’Bryan, co-founders of Prevention Research Institute and co-authors of the Risk Reduction series, bring years of experience and strong commitment to their work of reducing the incidence of alcohol- and drug-related problems. Additionally, the professional staff has extensive experience in the prevention, early intervention, and treatment of alcohol and drug problems. The Prevention Research Institute regularly provides workshops in the Lifestyle Risk Reduction programs throughout the country.

PRI’s curriculum is used for people convicted of driving under the influence of alcohol, although many populations can benefit from its lifestyle risk reduction message. The curriculum does more than simply give information about alcohol and drugs. It has been carefully designed to function as “therapeutic education” for people who make high-risk drinking and drug-using choices. The program does not moralize or dictate, but instead uses its unique content and process in a delivery that avoids the emotional land mines and defense mechanisms so often utilized by participants in impaired driving programs. The program serves people who do not have alcoholism through its prevention message, while still reaching participants with alcoholism with its non-threatening pretreatment content.

Prevention Research Institute's impaired driving curriculum is used statewide in Georgia, Hawaii, Indiana, Iowa, Maine, New Hampshire, North Dakota and South Carolina, and is one of two programs mandated in Kentucky. The program is used in a number of communities throughout the country, including Nashville, Tennessee.

For additional information, contact Mark Nason, research analyst, at mark@askpri.org or 859-296-5048. Other evaluation information can be found at www.askpri.org or phone 888-2ASK PRI (888-227-5774) or regular mail 841 Corporate Drive, #300, Lexington, Kentucky 40503.