



Iowa

PRIME
For Life®



2006 Program Evaluation Report

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Executive Summary

This report details changes in key beliefs, risk perceptions, and motivation to reduce use that occurred in Iowa OWI offenders who attended a 12-hour version of PFL between January and June, 2006. The offenders' future drinking and drug use intentions following PFL are also examined. Results are based on 3,740 participants who completed pre- and post-test surveys.

Approximately three-fourths of program participants were male and 90% were Caucasian. Average age was 31.3 years. Over half had never been married, and nearly 90% reported completion of high school. Fifty-six percent indicated this as their first OWI offense, 27.3% reported having two or more such arrests, and 4.1% indicated they had never been arrested for impaired driving. Over 50% reported experiencing three or more indicators of possible alcohol dependence. Nearly two-thirds, 63.3%, of the respondents reported that a parent, grandparent or sibling has or has had problems with alcohol.

At post-test, participants were more willing to report higher past high-risk choices than they were at pre-test. Similarly, 19.4% of the sample described themselves at post-test as having alcoholism or drug addiction, while 16.4% indicated this at pre-test.

Nearly 37% of multiple OWI offenders reported at post-test that they have alcoholism or addiction. In contrast, 12.2% of those who indicated this was their first arrest self-reported that they had alcoholism or addiction. After the program, 46.2% of those who felt they have alcoholism or addiction said they were in Phase 4 (physical addiction) while 31.7% classified themselves in Phase 3 (psychologically 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. After attending PFL, participants indicated significantly greater:

- agreement with attitudes and beliefs that are supportive of making low-risk choices;
- perception of risk associated with high-risk drinking and marijuana use;
- perception of personal risk for developing alcoholism;
- motivation to reduce their use.

Three of the beliefs related to their past high-risk choices, such as "I should drink less," changed more for participants who designated having three or more symptoms of possible dependence than for those who indicated having fewer or 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. Over half 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. Over 40% of those who used marijuana or other drugs in the 30 days before the program indicated intentions to not use in the following month. Nearly 75% 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, on average, participants agreed that PFL 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. The evidence of changes in beliefs, risk perceptions, and motivation to reduce use confirms this, as does the participants' reported intentions to make less risky choices in the future.

Background and Objectives

PRIME For Life Iowa (PFL) is a program approved for substance abuse education for OWI offenders in Iowa. The program was developed by Prevention Research Institute (PRI), a non-profit organization based in Lexington, Kentucky. Most Iowa DWI offenders attend a 12-hour version of the program. The data in this report includes offenders receiving this program between January and June, 2006. This report:

- **describes the characteristics of offenders;**
- **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 and drug use behavior.**

Method

The PFL program was delivered to OWI offenders by instructors trained by PRI. At the beginning of the educational intervention, 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 intervention—typically one week later—a post-test was administered which included these pre-test items as well as whether or not participants have made detailed plans to help them make low-risk choices, their behavioral intentions, and a course evaluation.

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.

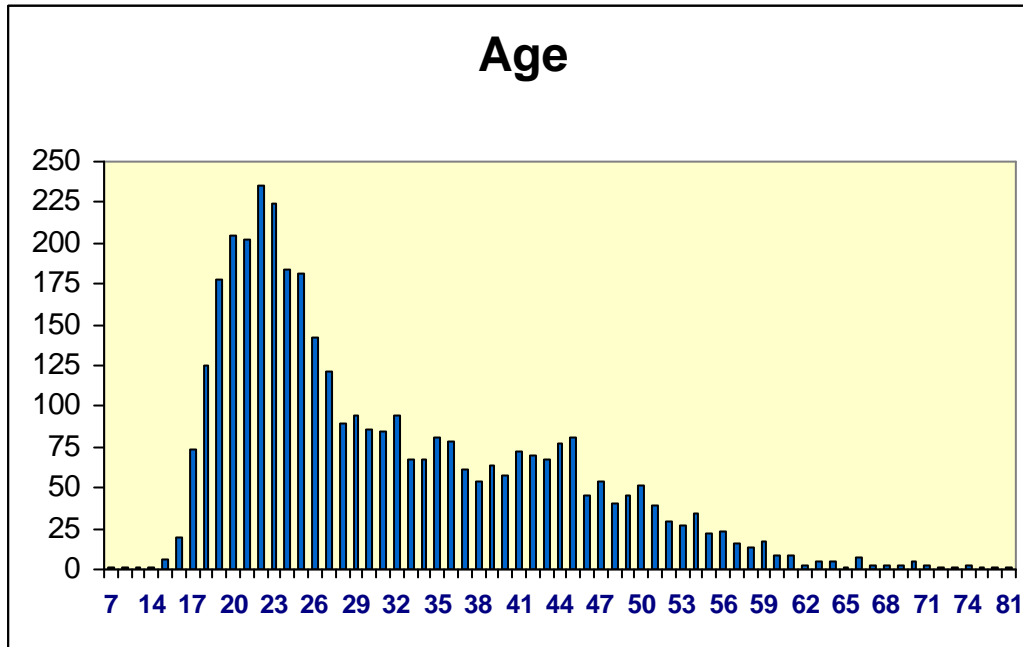
In the six-month period included in this analysis, 4,136 participants provided usable data on the pre-test. Approximately 3,740 of these participants completed the post-test survey with usable information. On the post-test, participants were asked how many times in their lifetime they have been arrested for impaired driving. Over half, 55.9%, indicated this was their first offense, 27.3% said they have had at least two arrests for impaired driving, and 4.1% said they have never been arrested for impaired driving.

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

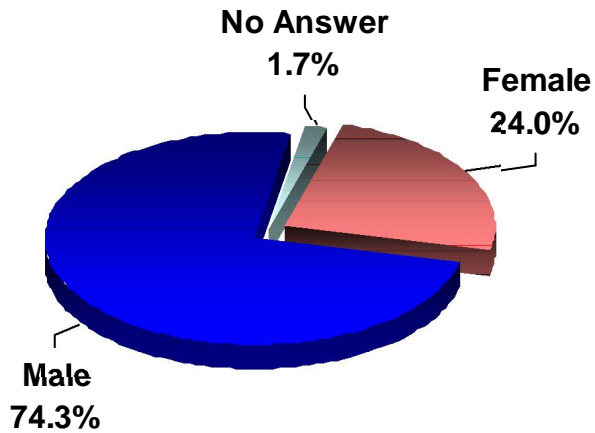
As can be seen in the above chart, participants are not distributed evenly across the age ranges. Three-fourths are under 40 years of age. The average age of participants is 31.29 years, but the median age (the point that splits the distribution in half) is lower (27.0), demonstrating the skew of the distribution. The most common (modal) age is 22.

On the average, the age of African-Americans is slightly higher (32.83) than among Caucasians (31.22) and Hispanics (31.52). The age differences are smaller between men (31.43) and women (30.50).

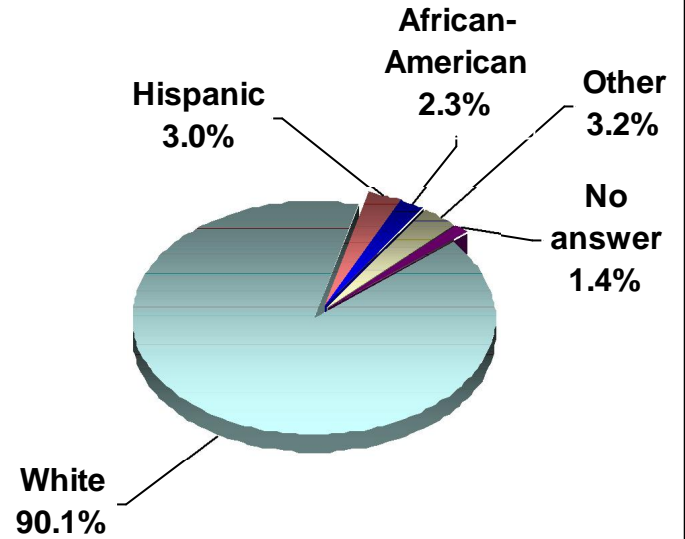
Average age also varied by marital status with married (39.36) and divorced (42.33) at the high end and never married (24.89) at the low end.

Group Demographics

Gender



Race/Ethnicity



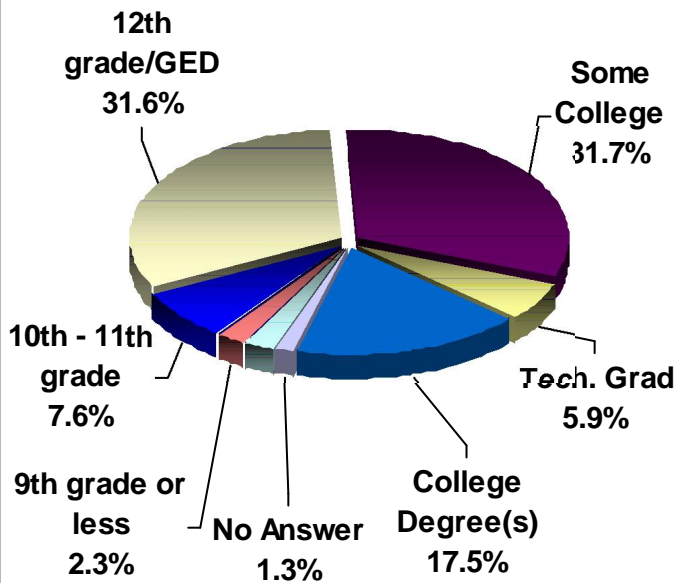
Key Points

There was an approximate three-to-one ratio of males (74.3%) to females in the program. With respect to race and ethnicity, the vast majority of participants were Caucasian (90.1%), with Hispanics at 3.0%, and African-Americans at 2.3%. Participants in the “other” race/ethnicity category were significantly more likely to be male (85.2%).

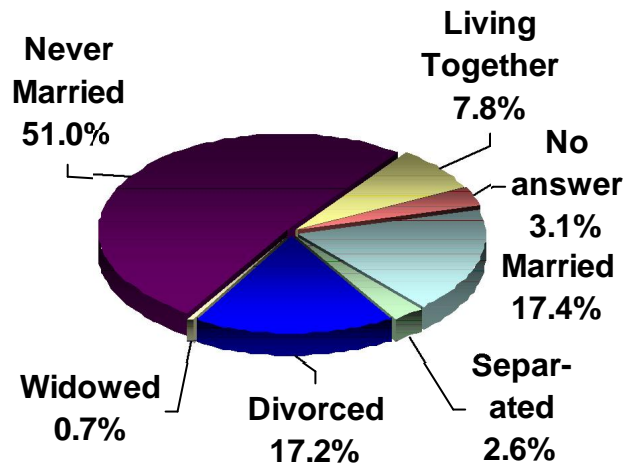
Participants reporting they had three impaired driving arrests were more likely to be male than those with 0 or 1 arrest (85.7%, 69.9% and 71.0%, respectively).

Group Demographics

Highest Education Level



Marital Status



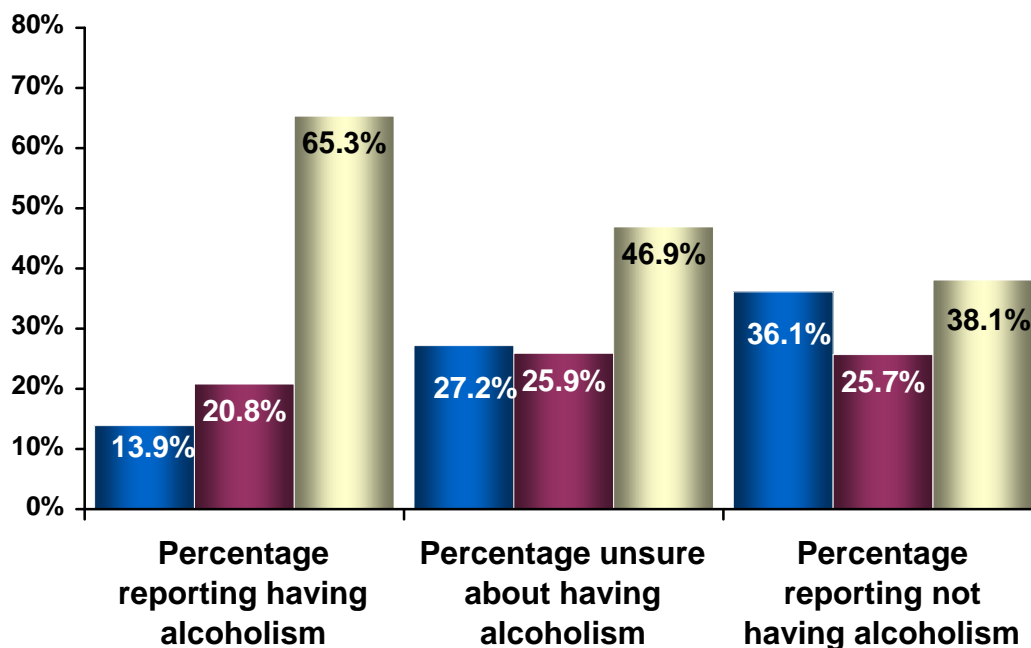
Key Points

The average age of participants who were married (39.36), separated (35.51), divorced (42.33) or widowed (47.89) was considerably older than those who had never married (24.89). Differences between men and women in marital status were less pronounced. Women were somewhat more likely than men to be divorced (20.2% vs. 16.2%), while men were more likely than women to have never been married (52.6% vs. 47.7%).

With respect to education level, there were not appreciable differences in age between the groups. In regard to gender, females were more likely to have a college degree or some college than males (59.4% versus 47.8%). There was no appreciable difference between males and females with respect to having less than a 10th/11th grade education (2.2% versus 2.4%).

Family History and Self-Reported Alcoholism

Because research indicates that heredity plays a role in the development of alcohol problems, 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.



Family Members with a Drinking Problem: ■ None ■ One ■ Two or more

Key Points

The majority, 59.2%, of participants reported having at least one sibling, parent or grandparent with a serious drinking problem or alcoholism (23.5% reported one and 35.7% two or more); 34.3% reported having none; and 6.6% did not answer this question.

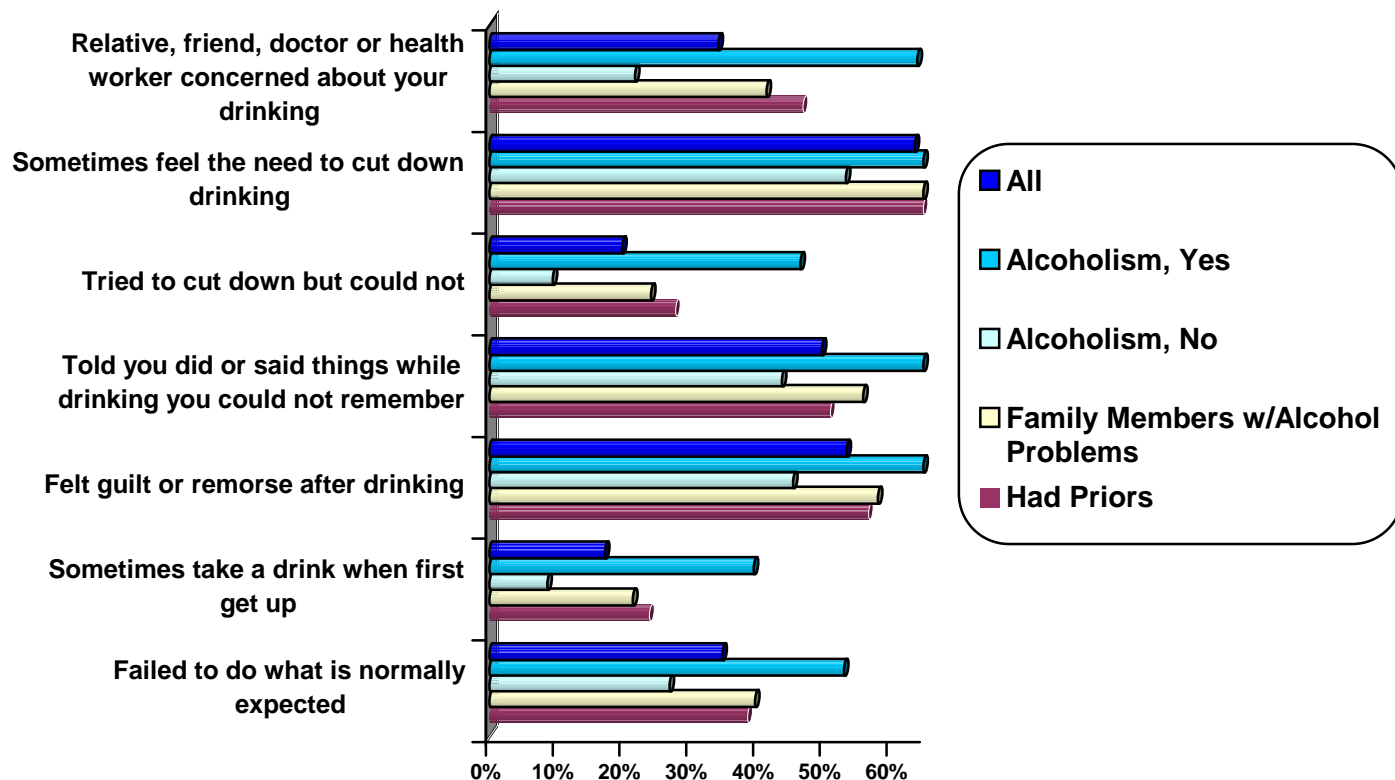
At pre-test, 16.4% reported having alcoholism or drug addiction, 72.1% reported not having alcoholism or drug addiction and 10.6% indicated they were unsure. At post-test, 19.3% reported having alcoholism or drug addiction, 60.1% did not, and 12.1% were unsure. As shown above, participants with alcoholism had more alcohol problems in their family.

Individuals with a family history of alcoholism were much more likely to report at the end of the program that they considered themselves to have alcoholism or drug addiction. Of the total cases, 17.2% had a family history and reported they have alcoholism or drug addiction.

Compared to those who reported two or more arrests for impaired driving, those who reported this was their first arrest were significantly less likely to report having a family history of alcohol problems (69.8% vs. 61.4%). Among those who reported not ever having been arrested for impaired driving, 44.2% reported having an alcohol problem in the family.

Indicators of Possible Alcohol Dependence

At post-test, participants were asked to indicate if they had 7 drinking-related experiences during the previous 12 months. Having experienced these problems may indicate a potential for having or developing alcohol dependence.



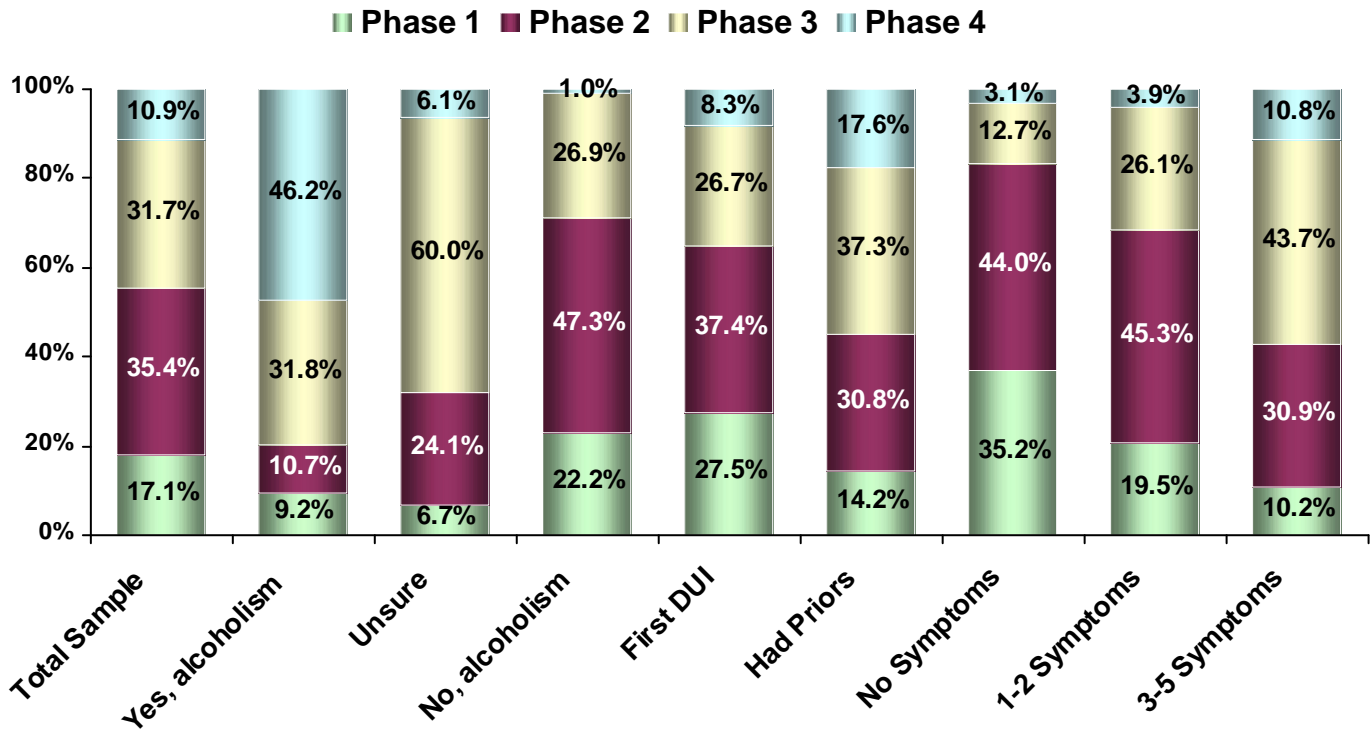
Key Points

Approximately 82% experienced at least one of these indicators of potential dependence. In addition, 66.3% reported two or more of these experiences, 51.0% three or more, 35.7% four or more, 22.7% five or more, 12.2% six or more, and 4.8% all seven. The two most common experiences were sometimes feeling a need to cut down on drinking and feeling guilt or remorse after drinking—each was experienced by over half of the participants (64% and 54%, respectively).

There was no appreciable gender difference in mean number of experiences reported. There were, however, statistically significant differences within several other subgroups. Those who reported two or more arrests for impaired driving had more of these experiences than did those with one arrest (average of 3.19 versus 2.57). Those with a family history of alcohol problems also reported more of these experiences than those without a family history (average of 3.12 versus 2.09). Individuals that reported on the post-test that they have alcoholism or drug addiction reported twice as many of these experiences than those who indicated they do not (average 4.22 versus 2.11). Participants who indicated they have ever had an alcohol problem averaged 3.67 symptoms, while those who did not averaged 1.88. Last, participants reporting being in Phases 1 or 2 averaged 1.68 and 2.08 experiences, respectively, while those in Phase 3 or 4 averaged 3.41 and 4.71, respectively.

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 One, high-risk choices in Phase Two, psychological dependency in Phase Three, to physical addiction in Phase Four. On the post-test, participants were asked to indicate the Phase they believed applies to them.



Key Points

As can be seen on the graphic above, 17.1% of participants classified themselves as being in Phase 1, over a third as being in Phase 2, nearly another third as being in Phase 3, and 10.9% as being in Phase 4. [Note: 4.9% of participants did not answer this question.]

Among the participants who had said they have alcoholism, about 78% felt they were addicted (Phase 4) or psychologically dependent (Phase 3). In contrast, among those who said they did *not* have alcoholism, 69.5% felt they were in Phase 1 or Phase 2. Nearly two-thirds of those who were unsure about having alcoholism indicated they are in Phase 3 or 4.

Males and females (not shown) were very similar in their self-assessment. Almost half (48.2%) of the respondents who indicated they had had previous DUI convictions classified themselves as in either Phase 3 or Phase 4. This compares with 38.8% of first-time offenders.

As expected, the more symptoms of possible dependency reported, the greater the likelihood participants classified themselves as being in Phase 3 or Phase 4. Compared to those with no reported symptoms, over three times as many of those who reported 3-5 symptoms classified themselves as being in Phase 3 or 4 (15.8% and 54.5%, respectively).

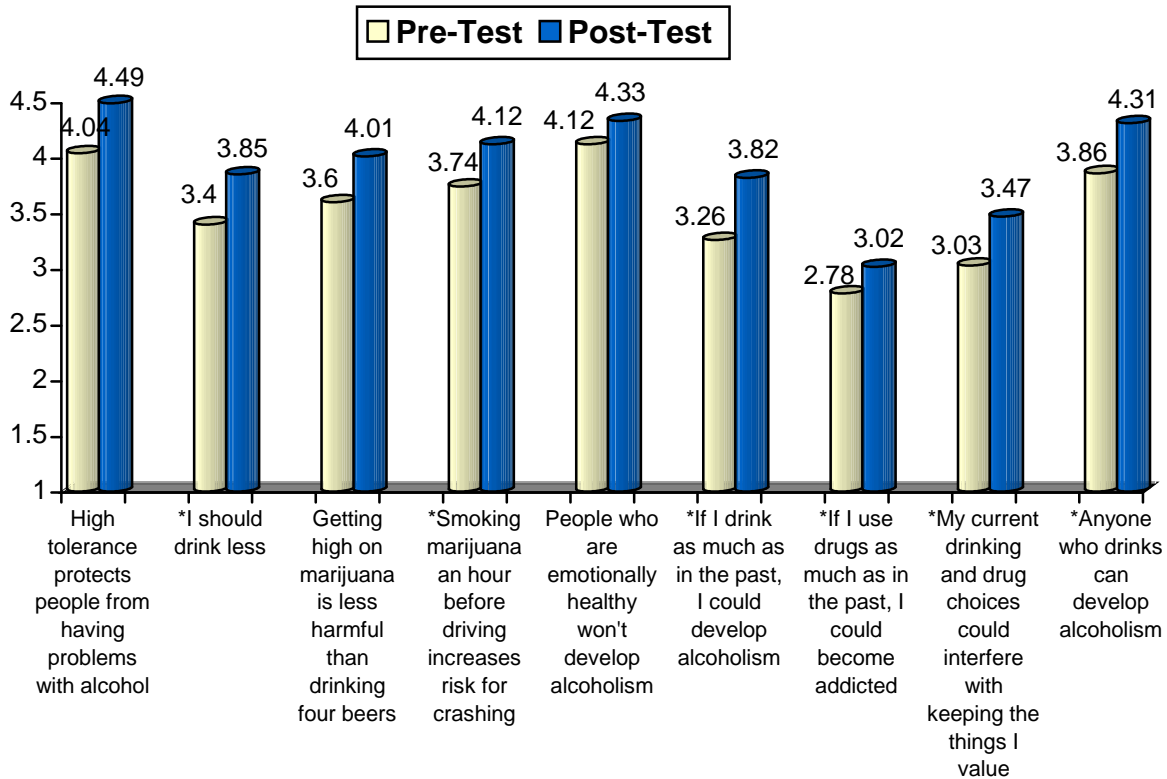
Immediate Impact of PRIME For Life: Post-Test

By providing students with information on risk factors associated with alcohol use, PFL can guide individuals toward making low-risk drinking decisions and adopting more accurate/less risky beliefs that will support those decisions. The post-test examines the immediate impact 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 graphic portrays 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 program, and are indicative of key learning that is expected.

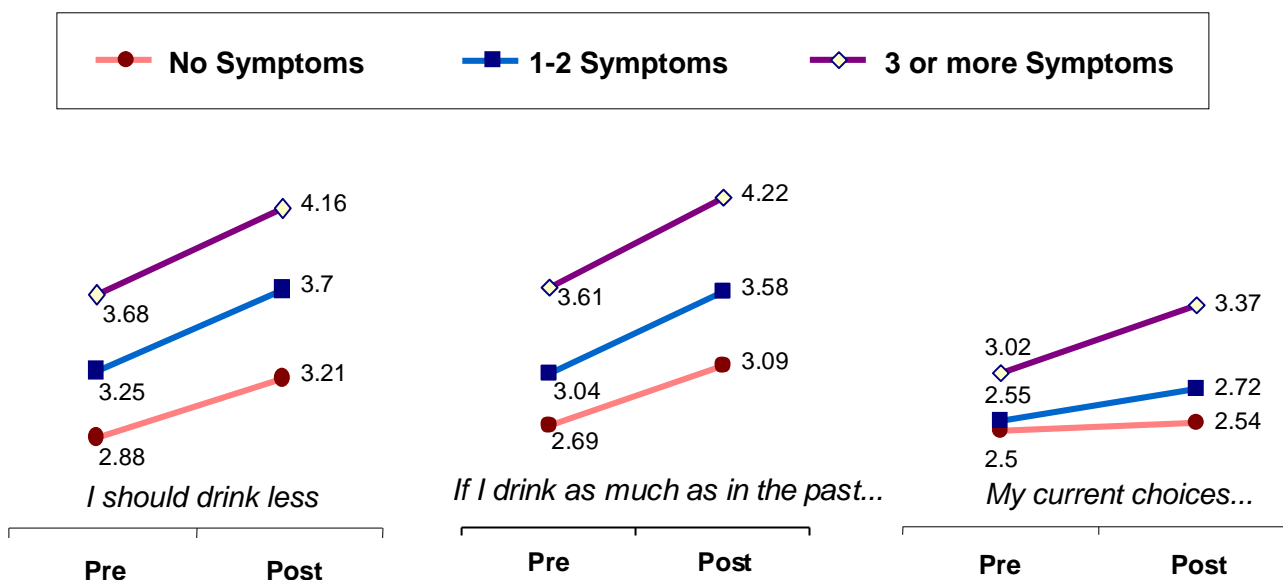
Based on a paired samples t-test, changes from pre- to post-test in all nine attitudes and beliefs were statistically significant in the desired direction at the .05 level or better.

Changes in cognitive attitudes and beliefs are important precursors to behavior change, although in and of themselves, these changed cognitions are insufficient as they must be 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 “My current drinking and drug choices could interfere with keeping the things I value” by number of self-reported symptoms of possible dependence. Higher scores indicate the desired responses.



Key Points

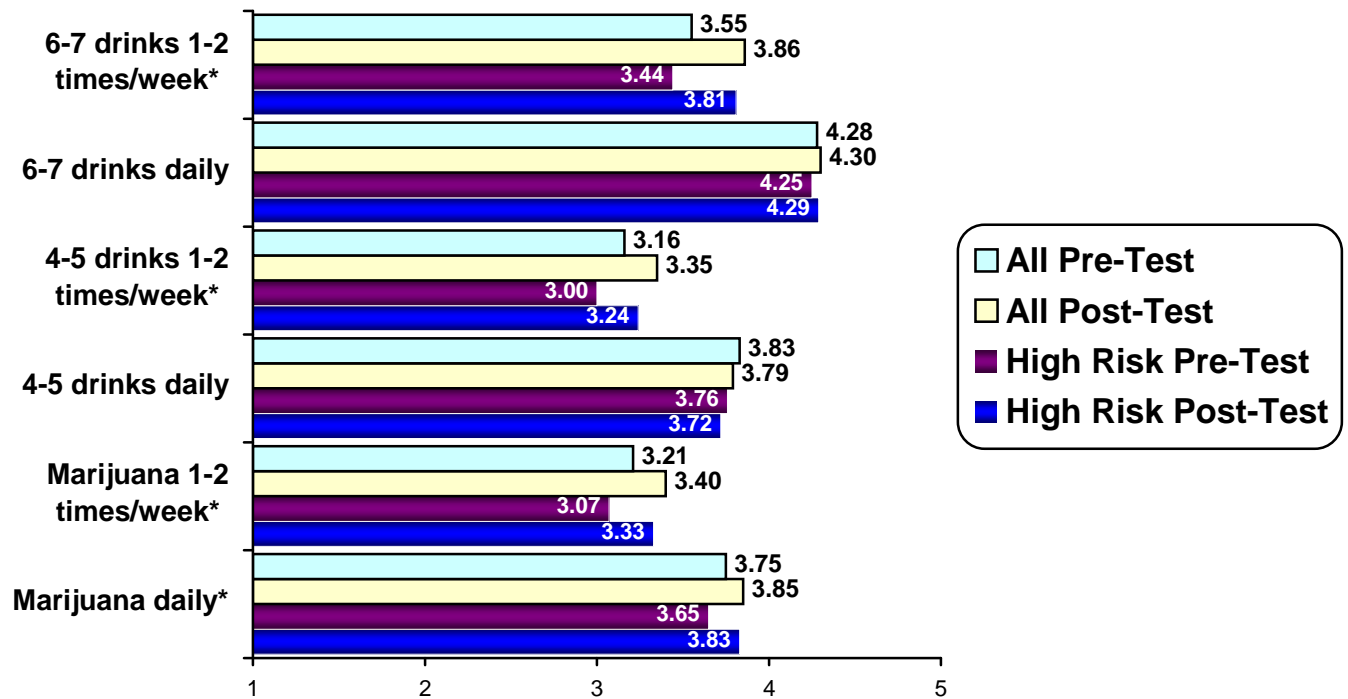
The increases in agreement to the beliefs “I should drink less,” “If I drink as much as in the past, I could develop alcoholism,” and “My current drinking and drug choices could interfere with keeping the things I value” from pre- to post-test were highly statistically significant (.000 level) for each of the three subgroups of self-reported symptoms. As can be seen by examining the slopes of the lines in the above graphs, the increases were greater for those with 1-2 symptoms compared to those with no symptoms, and greatest for those with 3 or more symptoms. The increases among those who reported 3 or more symptoms were greater (at a statistically significant level) than among those who did not report any symptoms. This suggests that PFL impacted people with several symptoms of possible dependence even more positively than those with no symptoms.

Overall, the same positive, highly statistically significant pattern of changes was found for the item “If I use drugs as much as in the past, I could become addicted.” The exception was that the small increase in this belief for those with no symptoms was not statistically significant.

All four of these beliefs also changed for people who reported they have alcoholism or addiction, among those who said they did not, and among those who were unsure. These changes were statistically significant (.000 level) for each of the three subgroups. The greatest changes from pre- to post-test were among those who were unsure about having alcoholism or addiction.

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

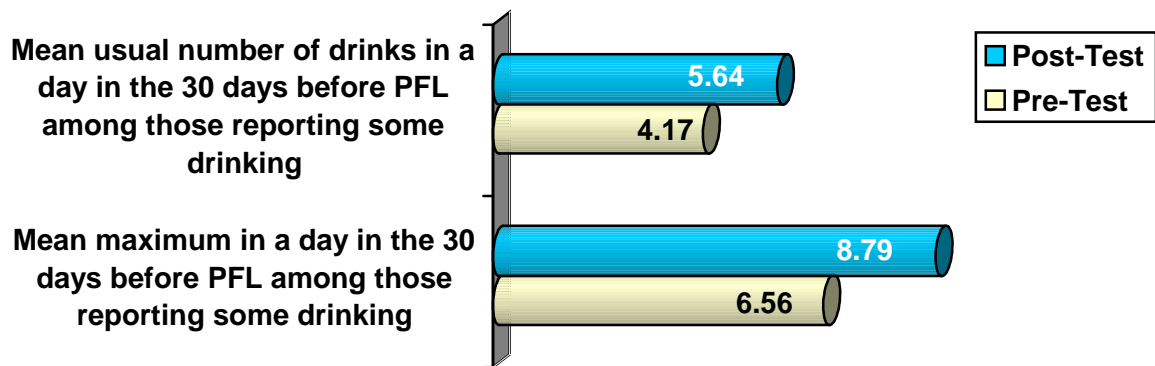
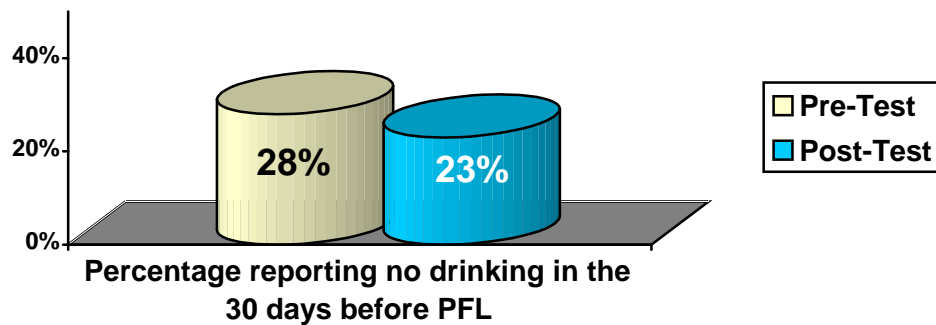
The above graphic portrays changes from pre- to post-test in the perception of risk associated with certain behaviors. Consistent with program content, participants rated 1-3 drinks daily and 1-2 times per week (not shown) as less risky on post-test than at pre-test (2.65 and 2.72 vs. 2.39 and 3.28, respectively).

The four comparisons that were statistically significant in the desired direction at the .05 level or better (paired samples t-test) are marked with an asterisk (*). The two remaining items did not evidence much change, but this may be due in part to the fact that they already indicated a high perception of risk on these items at pre-test.

In general, these data show that participation in PFL is associated with change in perception of risk. This finding is significant because research has found perception of risk to be an important component of cognitive change and a prerequisite to sustained behavioral change.

Compared to those who reported on the post-test that they made low-risk choices in the 30 days prior to PFL, those who reported they made high-risk choices indicated greater positive changes in perception of risk.

Self-Reports: Comparisons Pre- to Post-Test



Key Points

On both the pre- and post-tests, 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 those reporting on the post -test having had 20 or more drinks indicating on the pre-test an average of seven 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 similar differences between pre - and post-tests exist.]

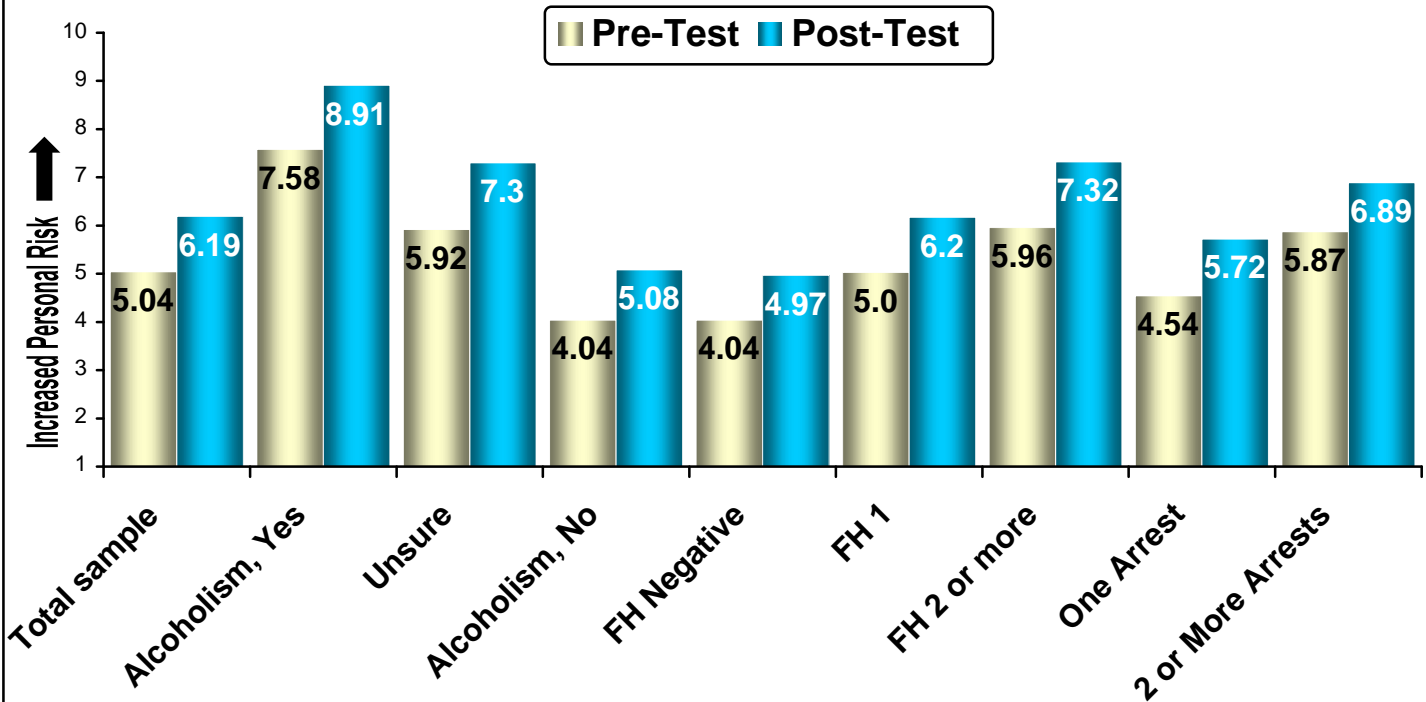
At post-test more participants also reported any marijuana or drug use in the 30 days prior to the program than did at pre-test (23% and 17%, respectively). Near daily use was reported by 5.9% on the post-test and 4.3% at pre-test (a 37% difference).

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.

As described earlier in this report, more participants reported on the post-test that they have alcoholism or addiction than did on the pre-test. Similarly, more participants indicated at post-test ever having had a problem with alcohol or drugs than at did pre-test (40% and 31%, respectively). These findings are 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

All of the changes from pre- to post-test were statistically significant in the desired direction at the .05 level or better. Thus, the entire group and various subgroups indicate an increased understanding of the personal risks involved in their past drinking after participation in PFL.

As shown, those self-reporting alcoholism or addiction indicated having more symptoms than those who did not or who were unsure; the more close blood relatives with a serious alcohol problem (FH) the more symptoms on average; and those with two or more arrests for impaired driving reported more symptoms than those with one arrest.

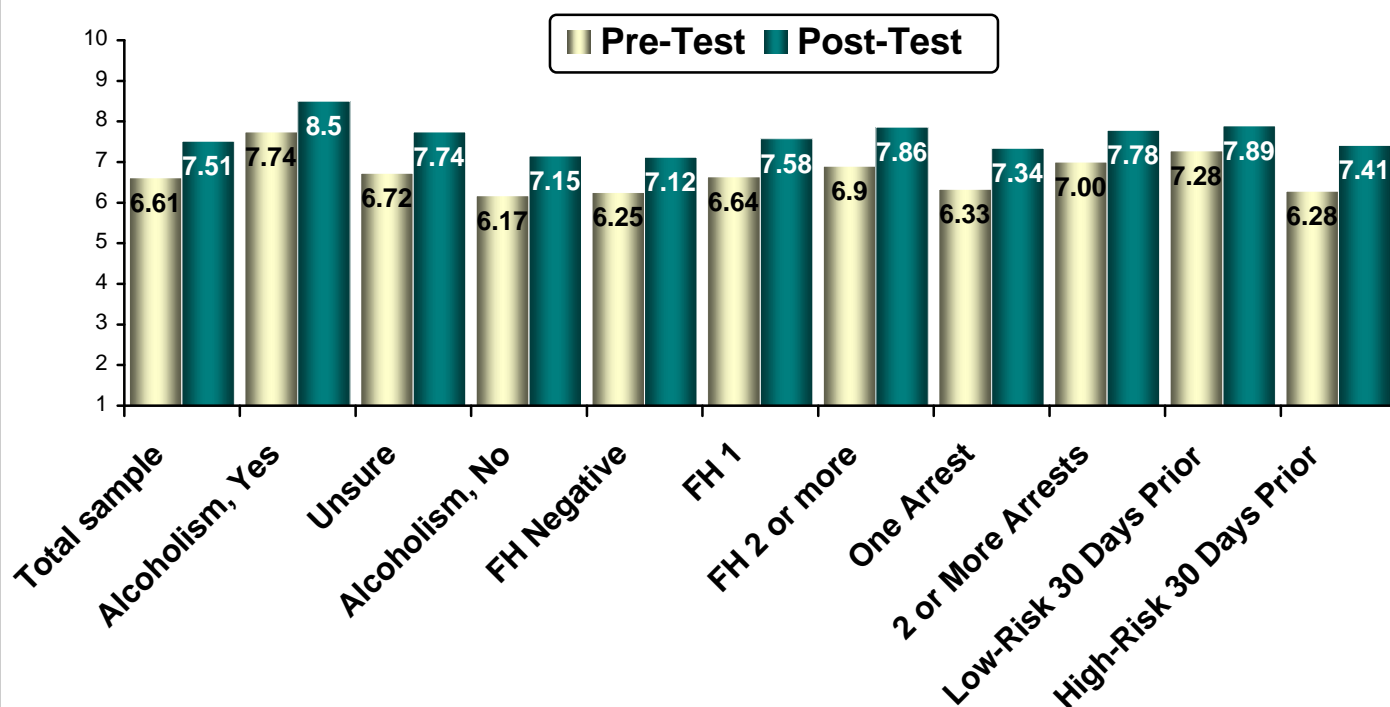
Those who reported three or more symptoms had a higher perception of risk for alcoholism at pre- and post-test than did those with fewer or no symptoms; and those who reported the most drinks they drank in one day in the 30 days before the program was 13-15 drinks had a higher perception of personal risk than those reporting other levels of maximum drinking.

The subgroups portrayed above often begin at different points on the pretest, but appear to evidence gains of a similar magnitude over time.

Research has shown that understanding 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

Statistically significant positive gains in motivation for change were noted from pre - to post-test for the total group and for all subgroups shown above. This pattern is consistent with other indicators of positive change in attitudes, beliefs, and risk perception.

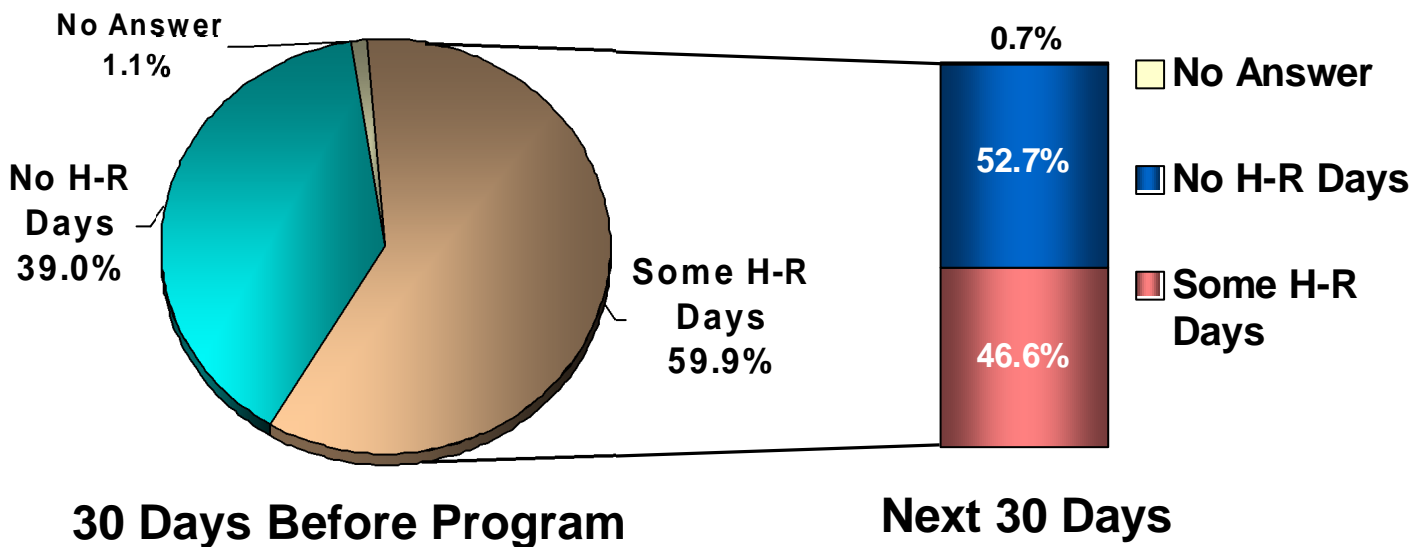
Similar to perceived risk for alcoholism, motivation to reduce use was greater for participants who self-reporting having alcoholism or addiction, those with a family history (FH) of a serious alcohol problem, and those with two or more arrests for impaired driving. The biggest increase in the subgroups shown above was among those who reported on the post -test that they had high-risk choices with alcohol and/or used drugs in the 30 days prior to starting the program. Among those who reported having made high-risk drinking choices in the 30 days prior to starting the program , those who reported they had 10-12 drinks in a day increased the most, from 6.3 to 7.6.

Participants who indicated having none the symptoms of potential dependence measured had increased from an average of 5.79 to 6.43; those with 1 -2 symptoms increased from 6.2 to 7.25 and those with 3 or more symptoms increased level of motivation from 7.15 to 8.06. With in this subgroup, the greatest increase from pre - to post-test was among those with no reported symptoms.

Levels of motivation to change were nearly identical for males and females at pre -test and post-test.

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

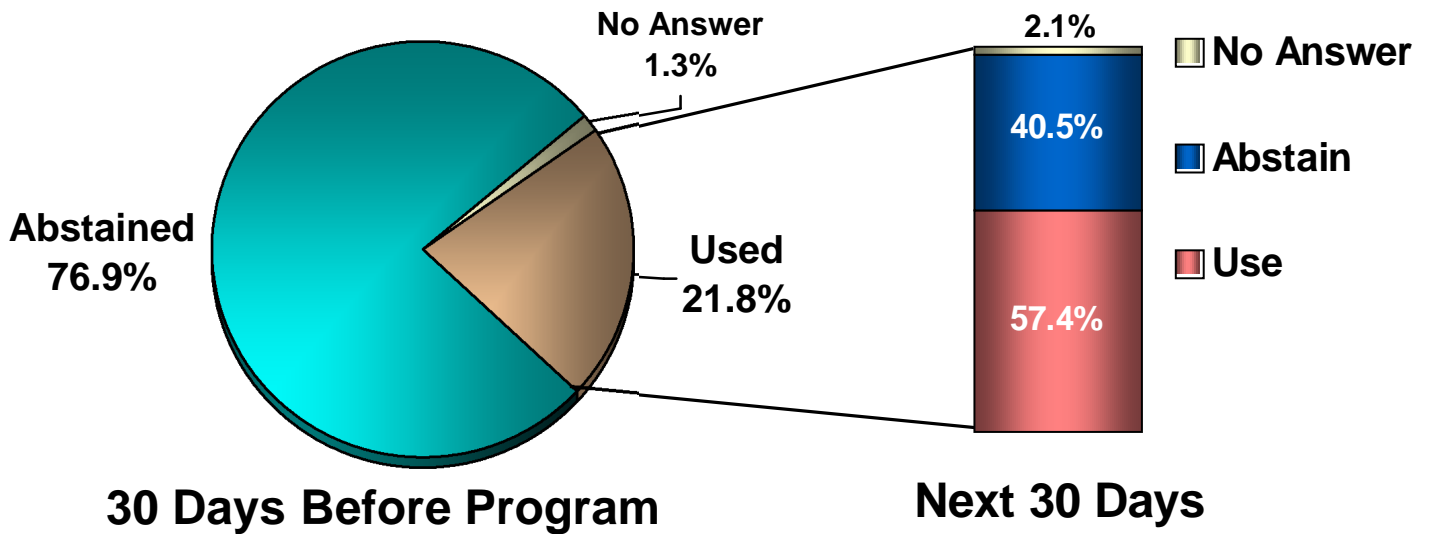
Over half of the sample (59.9%) indicated that they made high-risk drinking choices on at least one day in the 30 days before the program. Nearly 12% of the participants who made high-risk drinking choices in the 30 days before the program indicated the intention to abstain in the next 30 days (after the program). Another 40.8% reported they intend to drink within the low-risk range, thus, in total, 52.7% 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 they intended to drink was 4.37 drinks, which is half that of what was reported for the 30 days prior to the program. The average usual number of drinks in the next 30 days among the intended drinkers was 3.52 drinks, as compared to 5.64 drinks prior to PFL.

There are some variations among subgroups that made high-risk choices before the program with respect to behavioral intention, but most of these do not appear to represent meaningful differences (although some are statistically significant). An exception is intentions to abstain by self-reported alcoholism or addiction. Among those who designated they have alcoholism or addiction and indicated having made high-risk drinking choices prior to the program, 22.5% indicated intentions in the next 30 days to abstain. For those indicating no alcoholism or addiction and those who were unsure the figures are 9.4%, and 11.5%, respectively.

Behavioral Intentions: Marijuana and Other Drugs

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

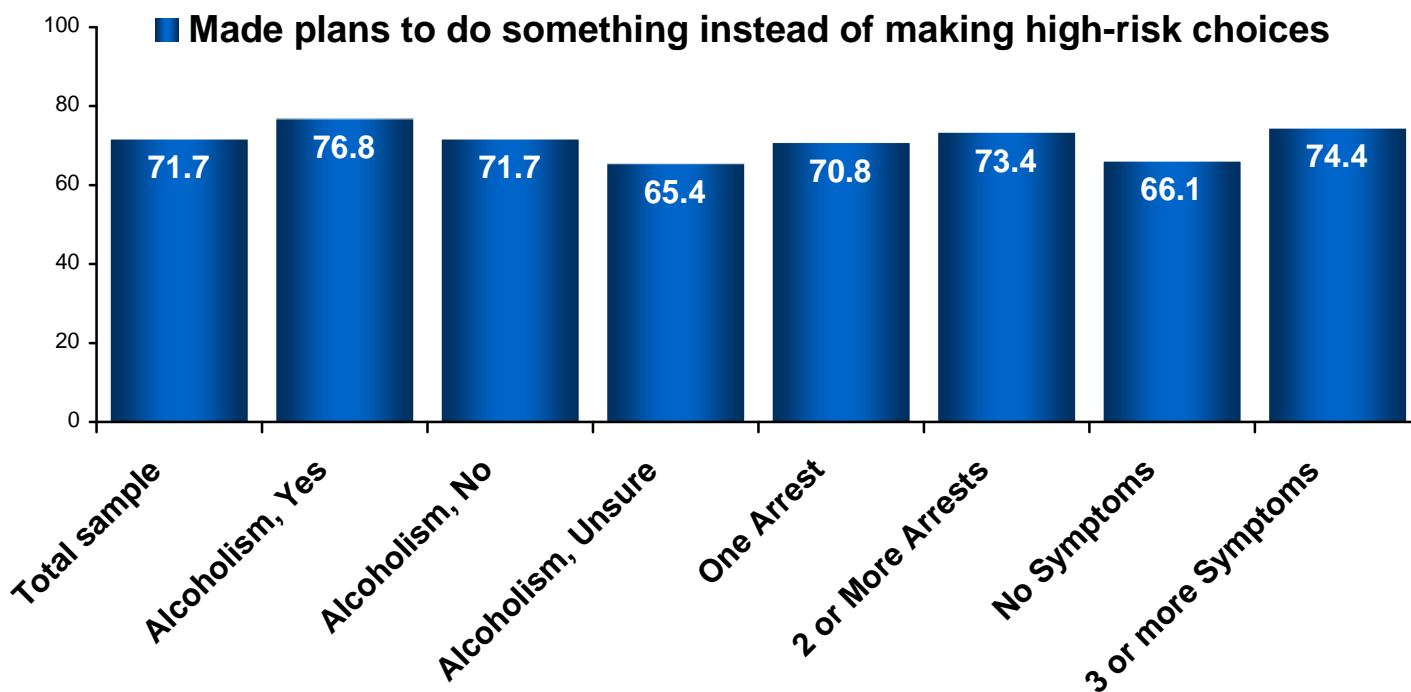


Key Points

Over one-fifth of the sample (21.8%) indicated that they smoked marijuana or used other drugs on at least one day in the 30 days before the program. Of these, over 40% expressed intentions to not make any high-risk choices 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.



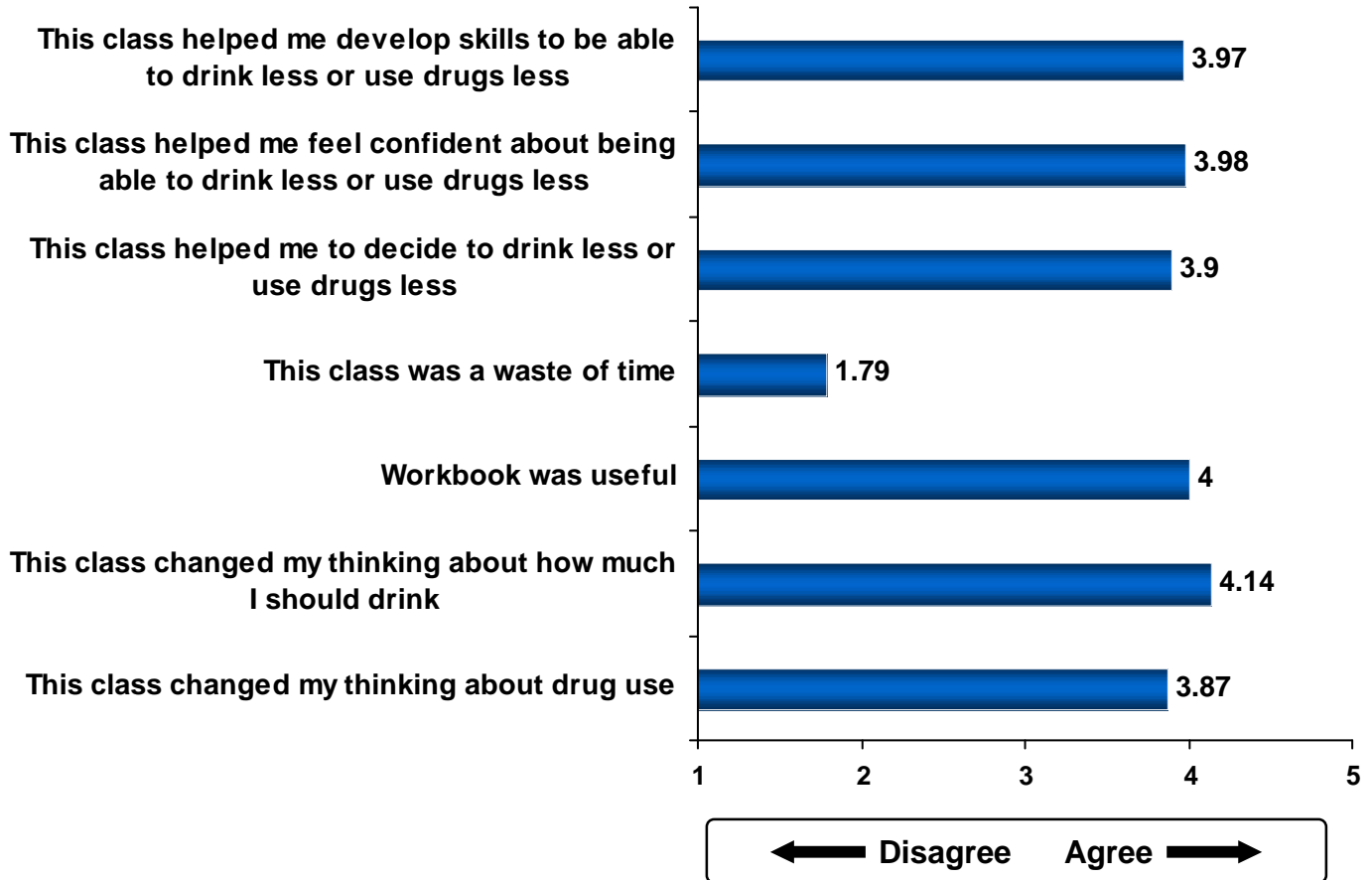
Key Points

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 nearly identical. For simplicity's sake, only the percentages for plans to do something else instead of making high-risk choices are shown above.

Nearly three-fourths of the participants responded that they had made plans in both areas addressed by these questions. There were some variations in the findings for some subgroups, including those with self-reported alcoholism or addiction and persons with at least one prior arrest —each was even more likely to report having made such plans. In addition, those who indicated that they made low-risk choices in the 30 days prior to the program were more likely than those who reported having made some high-risk choices to make these plans.

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 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.

There did not appear to be any meaningful differences in the above findings by gender, family history, self-reported alcoholism, or history of prior arrest.

