Overview

The University of West Florida was awarded funding as a promising program under the U.S. Department of Education’s Models of Exemplary, Effective, and Promising Alcohol or Other Drug Abuse Prevention Programs on College Campuses. *UWF You Have Choices!* was developed as a comprehensive, evidenced-based, integrated program, addressing college student high-risk drinking through universal prevention, early intervention, and specialized treatment. Traditionally UWF college students between the ages of 18 to 24 years were identified as the target population for our intervention efforts that included:

- Campus-wide Social Norms/Health Communication Campaign, a universal prevention strategy, developed to target approximately 6000 students between the ages of 18-24.
- Early intervention program that targeted incoming freshmen students attending Freshman Academic Foundation Seminars;
- Personalized Normative Feedback Workshop, a specialized treatment intervention, implemented to identify and target risky drinking behaviors in undergraduate students;

The *UWF You Have Choices! An Alcohol Prevention Program* goals are twofold: (1) reduce alcohol misuse in UWF students; and (2) reduce the incidence of UWF students who experience negative consequences related to their and/or others’ alcohol consumption. The following narrative provides an overview of all the activities that were completed from July 2009 through June 2011. Program outcomes and performance measures achieved are also summarized for each intervention.

Social Norms/Health Communication Campaign

To enhance our universal prevention strategies, “You Choose”, a campus-wide social norms campaign, was implemented and evaluated in Spring 2011. This intervention targeted students between the ages of 18-24 years old (approximately 6000 students). Based on a 2009 needs assessment, focus groups, and feedback from 45 students in two advertising classes, this campaign highlighted the following normative messages encouraging the use of protective behaviors:

- 4 out of 5 students who sometimes drink, also choose to not drink.
- UWF students who drink less have higher grades.
- 64% of UWF students who drink alcohol avoid drinking games. Students who did participate in drinking games were more than twice as likely to:
  - have unprotected sex
  - forget where they were or what they did
  - have their academic performance negatively affected
  - physically injure themselves

Prior to the implementation of a campus-wide social norms marketing campaign, intercept interviews were conducted across campus with 380 students. After two months of exposure to the campaign, intercept interviews were conducted with another 314 students across campus. The intercept interviews asked five questions about statistics presented on the social norms marketing campaign posters addressing drinking behavior and consequences (average number of drinks consumed per week by students with A average = 2, average number of drinks consumed per week by students with D average = 6.5, percent of students aged 18-24 who drink who also sometimes choose not to drink at parties = 80%, percent of students aged 18-24 who drink but avoid drinking games = 64%, and rate of increased likelihood of negative consequences from drinking by those who play drinking games = twice).

Comparisons of the number of correct answers provided by students who reported that they had or had not seen drinking behavior statistics on campus were examined prior to and following exposure to the campaign.

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<thead>
<tr>
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<th>Pre-exposure</th>
<th>Post-exposure</th>
<th>Total</th>
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<tbody>
<tr>
<td>Have seen statistics</td>
<td>M = 0.81 (SD = 0.78)</td>
<td>M = 1.18 (SD = 0.96)</td>
<td>M = 0.70 (SD = 0.79)</td>
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<tr>
<td>Have not seen statistics</td>
<td>M = 0.71 (SD = 0.82)</td>
<td>M = 0.67 (SD = 0.65)</td>
<td>M = 0.10 (SD = 0.91)</td>
</tr>
<tr>
<td>Total</td>
<td>M = 0.77 (SD = 0.80)</td>
<td>M = 1.11 (SD = 0.94)</td>
<td>M = 0.92 (SD = 0.88)</td>
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The “You Choose” was an effective intervention strategy on the UWF campus in addressing cultural norms related to alcohol intake. After exposure to the campaign, there was a decrease in the number of students that had not seen any information on UWF student drinking rates (43% baseline; 13% follow-up 2 months after posters/table tents distributed around campus). Additionally, students who reported seeing drinking statistics (M = 1.18) were significantly more likely to have a higher score on knowledge of the drinking behaviors and negative consequences statistics that were presented in the social norms campaign, F(3, 693) = 6.275, p = 0.012). Finally, the visibility of the social norms campaign justifies the limited financial and personnel time/costs as compared to other intervention strategies.

Freshman Academic Foundation Seminars (AFS)

This seminar course provided us with the opportunity to increase our early intervention efforts by targeting college freshman, a group of students who are at a higher risk for behaviors associated with alcohol misuse (Ross & DeJong, 2008). We were interested in determining the most effective approach in providing alcohol awareness programming to this group by implementing the following interventions in Fall 2009 and Fall 2010: 1) SMART CHOICES, a 60-minute single-session, face-to-face, leader-facilitated group-level intervention; and 2) Alcohol-Wise, a 60 minute, single-session, on-line intervention. Freshman AFS sections were randomly assigned to one of three conditions:
• **Smart Choices**, a 60-minute classroom-based alcohol prevention program, covering information about the effects of alcohol, both physiologically and psychologically, campus alcohol policies, an interactive standard drink pouring exercise, and promotion of the use of protective factors to reduce the incidence of underage drinking and high-risk drinking.

• **Alcohol-Wise**, a 4-lesson on-line course developed by 3rd Millennium Classrooms, that can be completed in 60-minutes; combines personalized feedback, professional narration and interactive exercises to educate students about the harmful effects of alcohol; curriculum also supports a campus culture that encourages students to make positive personal choices related to underage drinking and alcohol misuse.

• Untreated control condition (intervention delayed until after evaluation was complete).

Assessments were performed at pre-intervention, and one month post-intervention:

<table>
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<tr>
<th></th>
<th>Pre-intervention</th>
<th>Post-intervention</th>
<th>Total</th>
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<tbody>
<tr>
<td>In class</td>
<td>144</td>
<td>128</td>
<td>272</td>
</tr>
<tr>
<td>Online</td>
<td>103</td>
<td>93</td>
<td>196</td>
</tr>
<tr>
<td>Delay</td>
<td>103</td>
<td>98</td>
<td>201</td>
</tr>
<tr>
<td>Total</td>
<td>350</td>
<td>319</td>
<td>669</td>
</tr>
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</table>

To address our program’s goal of reducing alcohol misuse, data analysis focused on freshman participants between the ages of 18 and 24 who reported any consumption of alcohol in the 30 days prior to the pre-intervention assessment. Analysis included students in each of the three conditions across both years of implementation and compared rates of recent binge drinking (in the two-weeks prior) at pre-intervention to rates of binge drinking at one month post-intervention.

Students in the classroom-based intervention demonstrated a 28.8% reduction in the rate of recent binge drinking (89/115 or 77.4% at pre-test compared to 51/105 or 48.6% at post-test) while students in the online intervention demonstrated a 2.3% reduction in the rate of recent binge drinking (60/109 or 55.0% at pre-test compared to 39/74 or 52.7% at post-test), and students in the untreated control group demonstrated an 11.7% reduction in the rate of binge drinking (65/82 or 79.3% at pre-test compared to 50/74 or 67.6% at post-test). Although all three groups demonstrated a reduction in the reported rate of recent binge drinking, the findings suggest that the classroom-based intervention contributed to a meaningful reduction in the rate of binge drinking compared to the reductions seen in the other two conditions.

The second program goal that focused on reducing the incidence of students who experience negative consequences related to their and/or others’ alcohol consumption, there was a 4% reduction in negative consequences across all treatment conditions. The highest rate of decrease occurred in the online group (7.7%) with lowest in the classroom-based intervention. However, it should be noted that the online intervention had the highest rate of attrition (retention for online was 57%, compared to 78% for the class-room based intervention and 73% for the delayed treatment group).

When looking at specific consequences of drinking for students who reported drinking in the prior 30 days, there was an increase in students who reported experiencing an argument or fight as a consequence of drinking across all treatment conditions. However, the rates of increase was slightly lower for the students receiving the classroom-based intervention (+10.2) than students in the online (+12%) and the untreated control group (+11.7%). Likewise, there was also an increase in the number of students who reported being hurt or injured as a consequence of drinking, with students in the classroom-based intervention demonstrating a 3.4% increase in the rate of injury while the online intervention demonstrated a 1.1% decrease in the rate of injury, and the untreated control group demonstrated an 4.7% increase in the rate of injury. Although rates of this consequence appeared to increase for students in the classroom-based intervention, the rate of increase was slightly lower for students receiving the classroom-based intervention than students in the untreated control group.

For protective factors, there was high-level use of designated driver across all treatment conditions. Ratings reflected moderate limit setting in the number of drinks they intend to consume when they party/socialized. However, we did see a decrease across (-0.47) across all treatment conditions. When looking at each treatment condition, the classroom-based intervention, online intervention, and untreated control group all reported decreased ratings (0.18, 0.75, 0.54 point reduction, respectively). However, with a pooled standard deviation of 2.2 points, it is unlikely that these changes represent significant changes in intentions to limit number of drinks consumed and are highly unlikely to represent differential changes between intervention conditions and the control condition. There was an overall decrease in ratings of avoidance across all treatment groups when evaluating the number of students who report avoiding drinking games when they party/socialize (0.11 point reduction). Ratings of students in the classroom-based intervention increased (0.10 points) while ratings by students in the online intervention and untreated control group decreased (0.22 and 0.23 point reduction, respectively). However, with a pooled standard deviation of 1.9 points, it is unlikely that these changes represent a significant change in avoidance of drinking games and are highly unlikely to represent differential changes between intervention conditions and the control condition (Note: the social norms campaign had not been implemented at the time of AFS intervention).

Our overall results indicated that a one dose intervention was not sufficient to determine if a classroom-based intervention is more effective than an online module. It does appear that the class-room based intervention was able to reduce the rate of recent binge drinking (~ 28.8%) compared to the online (~ 2.3%) which does support our programming goals to reduce alcohol misuse. Additionally, with limited resources we do not have the funding to pursue online alcohol prevention programming and will continue to offer classroom-based intervention. Ideally we would like to continue our program evaluation efforts to have formalized multi-dose interventions that target first-semester freshman, however our programming efforts compete with other academic and student-affair issues covered in the freshman seminar course. Our data should support our recommendations to student affairs administrators.
Personalized Normative Feedback Workshop

A Personalized Normative Feedback Workshop was developed to address the need for a specialized treatment intervention for identified UWF students who reported risky drinking behaviors in a baseline survey implemented as a part of the UWF You Have Choices! interventions. An online health behavior survey was originally sent to approximately 1,000 first-year freshmen in November 2009. The survey included validated instruments to assess: (1) high-risk drinking in the past year (AUDIT); (2) perceived stress (PSS-10); (3) past week physical activity (IPAQ-Short Form); and (4) nicotine dependence (mFTQ). Three-hundred and sixty six students completed the survey. Using a pre-established cut-off score, 64 students (18%) were identified as being at high-risk for developing an alcohol problem. These high-risk students were invited to attend this workshop in April 2010 that included incentives offered for participation. The intervention was developed to have approximately 30-45 students attend the workshop and designed to randomize students who meet criteria for being at high risk for alcohol abuse into two educational sessions: 1) personalized normative feedback workshop that included transcripts from interviews conducted with UWF students who role modeled either abstinence or a transition from heavy to controlled drinking; or 2) tobacco educational seminar in order to determine the effectiveness of our intervention. However, only two students committed to attending the seminar so were we not able to hold this program.

As outlined in our no cost extension narrative, we implemented this survey again at the end of September 2010 to the new incoming class of first-year freshmen (approximately 1300 students) with 271 respondents of which 18 students (6.5%) were identified as being at high-risk. We also planned to work with judicial affairs administration to have students that received sanctions for alcohol violations attend the intervention. Unfortunately, we experienced the same low interest rate with the 2010 freshmen cohort. Additionally, the individual responsible for judicial affairs left at the beginning of fall semester and was not replaced during the 2010-2011 academic year.

In our third attempt to implement this intervention (with IRB approval), we recruited students during the Spring 2011 semester from two undergraduate classes where alcohol programming was relevant to the course curriculum. A crossover design was used to compare a personalized normative feedback session (PNFS) with a didactic informational session (IS) regarding alcohol use. These sessions were held during the second and seventh week of the semester. Students from each class were randomly assigned to complete the personalized normative feedback session first (Group 1), and the other half being randomly assigned to complete the informational session first (Group 2). Pre- and post-intervention surveys were completed for each session. While we were able to complete the PNFS and IS sessions for Group 1, Group 2 only completed the IS session since classes were cancelled the day of the PNFS intervention on account of tornado warnings.

Our experiences illustrate the difficulties of implementing an experimental design when working with high risk students despite providing incentives to increase participation. We felt compelled to work on this effort since there was a need for intervention options for this target population on our campus and to also contribute to scholarship in this area of prevention programming. We believe that our efforts in this area can move forward with the hire of a new Associate Dean whose responsibilities include overseeing judicial sanctions relating to alcohol violations.

Conclusion

When reviewing the outcomes of the three interventions, we did not have adequate data to determine how our interventions contributed to our project’s goals. We attributed this to the short duration of our interventions and logistical issues related to campus-based alcohol prevention efforts. When we were awarded a 12-month funding cycle in July 2009, we scrambled to implement our alcohol prevention programming in the Freshman Academic Foundation Seminars (AFS) since our target population was incoming freshman. This did not provide us with enough time to determine how our original program implementation timeline would be effected especially since the grant was originally submitted in May 2008 and was not funded in the first year. At that time, we had planned to use the Fall 2008 CORE (funded by the UWF Department of Student Affairs) as baseline data, implement the UWF You Have Choices! An Alcohol Prevention Program, and follow-up with the CORE Alcohol Survey in 2010 (funded by the UWF Department of Student Affairs). When we received funding the following year, the planned interventions in the UWF You Have Choices! An Alcohol Prevention Program did not fall into the timeline of the UWF funded Core Alcohol Surveys which impacted program evaluation efforts. Thus we are not able to use CORE Alcohol Survey data as originally outlined in our evaluation plan.

Despite these facts, we do feel that our grant funding has provided us with valuable lessons learned in the implementation and evaluation of alcohol prevention programming. We will continue to contribute to scholarship in the area of social norms with our campus-wide “You Choose” campaign (manuscript in development phase) and research efforts on protective factors related to promoting healthy lifestyle behaviors in first-year university students with data from the baseline surveys collected for the Personalized Normative Feedback Workshop (Poster presentation at the International AIESEP 2011 Conference in Limerick, Ireland, June 22-23, 2011).