NASPA Excellence Awards 2008

Nomination Materials

The STEPS Alcohol Screening and Brief Intervention Program University at Albany, State University of New York

Program Title:

The STEPS Alcohol Screening and Brief Intervention Program

Award Category:

Student Health, Wellness, Counseling, and Related Areas

Program Contact:

M. Dolores Cimini, Ph.D., Project Director
Licensed Psychologist
Assistant Director for Prevention and Program Evaluation, University Counseling Center
Director, Middle Earth Peer Assistance Program
Adjunct Clinical Professor, School of Education
University at Albany, SUNY
400 Patroon Creek Boulevard, Suite 104

Albany, NY 12206 Phone: 518-442-5800 Fax: 518-442-3096

Email Address: dcimini@uamail.albany.edu

Web Address: http://www.albany.edu/counseling_center/

Executive Summary:

Developed, implemented and rigorously evaluated at the University at Albany for the past three years, the STEPS Program is a comprehensive Screening and Brief Intervention (SBI) strategy based on the NIAAA Tier I Brief Alcohol Screening and Intervention for College Students (BASICS) model and is designed to: 1) reduce alcohol use frequency and quantity, and 2) reduce associated negative consequences by adapting interventions to meet the very distinct and complex needs of three target populations of high-risk drinkers: first-year students, studentathletes, and students seeking primary health and mental health care on campus. Guided by BASICS program developers Drs. Mary Larimer and Jason Kilmer from the University of Washington's Addictive Behaviors Research Center, target-population specific, relevant, and responsive interventions tailored to each target group have been systematically and strategically tested and integrated into our broader STEPS model, reaching more than 13,000 students to date. In addition to statistically significant reductions in alcohol use and associated negative consequences across each target population intervention components on a total of more than 25 indices, the STEPS Program has developed, implemented, and tested two groundbreaking strategies: a Web-delivered brief alcohol intervention and a team-delivered student-athlete specific brief alcohol intervention. Based on evidence of its effectiveness, the STEPS Program has been nominated by the White House Office of National Drug Control Policy for consideration as part of the President's 2009 National Drug Control Strategy. Further, along with White House staff, our project staff has played a national role in moving SBI forward to be recognized in late 2007 as an insurance-reimbursable service for both our 17 million U.S. college students as well as the general public. Planned project enhancements will focus on developing, integrating and evaluating fraternity and sorority-specific and responsive individual, organization, and Web-delivered SBI strategies within our STEPS Program model, in collaboration with BASICS program developers Drs. Larimer & Kilmer and our Office of Fraternity/Sorority Affairs.

Program Description:

The STEPS Program and Its Role within the University-Wide Prevention Framework

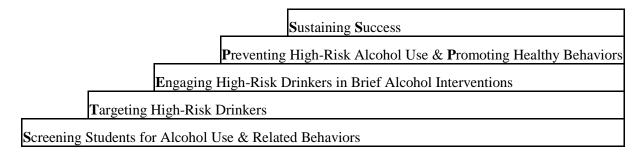
The University at Albany, State University of New York (UAlbany) is a public institution within the 64-campus State University of New York system. The University, one of four SUNY University Centers, is classified as a Research II and NCAA Division I institution. Education is offered to its 17,000 students at both an undergraduate (12,000 students) and graduate (5,000 students) level, with most undergraduate students being between the ages of 18 and 22 years. The University is coeducational and very diverse in terms of race, ethnicity, gender, disability, and sexual orientation. Sixty percent of our students live in on-campus residence halls or apartments, and forty percent live in the surrounding Capital District community. Since 1990, the University has mounted and institutionalized a Comprehensive Alcohol and Other Drug Abuse Prevention Program; two of the University's prevention programs, the *Middle Earth Peer Assistance Program* and the *Committee on University and Community Relations*, both recipients of U.S. Department of Education recognition as model programs, have served as national models in the area of alcohol and other drug abuse prevention for colleges and universities. The University's prevention program is broad-based and multifaceted in scope, and interventions

have been structured based on the Comprehensive Program Model of the Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention. During the past three years, as part of its prevention program, the University has developed a new and groundbreaking comprehensive, target population-specific alcohol screening and brief intervention strategy, the *STEPS Program*. In the fall of 2007, based on evidence of its effectiveness, the STEPS Program was put forward by the *White House Office of National Drug Control Policy* (ONDCP) for consideration as part of the *President's 2009 National Drug Control Strategy*. Further, informed by outcome data from the STEPS program, project staff was invited by the White House ONDCP as the only college in the nation to participate in Congressional briefings to move SBI work forward as a routine, insurance-reimbursable service. Adopted by the American Medical Association in late 2007, and supported by outcomes from our project, this change in the national insurance-reimbursement landscape has helped SBI to be regarded as an integral intervention for both our 17 million U. S. college students and the general public.

About the STEPS Program

In existence at UAlbany since January of 2005, the STEPS Program is comprised of five building blocks: 1) Screening specific target populations of UAlbany students defined in the literature as at-risk (e.g. first-year students, student-athletes, and students receiving primary health and mental health care at our University Health Center and University Counseling Center) for alcohol use and related risk behaviors; 2) Targeting of students at risk of or already engaging in high-risk drinking and related negative consequences; 3) Engaging students identified as high-risk drinkers to participate in a target population-specific, responsive, and relevant BASICS¹ intervention – individual, group, team-delivered, or web-delivered – based on the needs and specific cultures of the target populations; 4) Preventing high-risk drinking and promoting healthy behaviors by following these students at 3 and 6 months post-intervention; and, 5) **Sustaining** success by identifying changes in our target populations at the group level as well as monitoring individual changes on a number of dimensions, including indicators of alcohol use frequency and amount, use of protective behaviors upon the student's drinking patterns and retention as a successful student at the university, and institutionalizing these effective strategies into the UAlbany infrastructure. The following table illustrates the STEPS intervention phases and outlines the action steps for each program phase:

The STEPS Brief Screening and Intervention Model



More specifically, each stage of the STEPS intervention focuses on the following action steps:

¹ Brief Alcohol Screening and Intervention for College Students (BASICS) Model (Dimeff, Baer, Kivlahan, & Marlatt, 1999)

| Project Phase | Action Steps |
|---------------------------|--|
| Screening Students | UAlbany students participate in a confidential screening for alcohol use and related behaviors. All |
| for Alcohol Use and | students completing screening receive information on alcohol and its effects, healthy alternatives |
| Related Behaviors & | to alcohol use, campus norms and campus prevention resources. |
| Consequences | The first term of the first te |
| Targeting High-Risk | All students identified as engaging in, or at risk for engaging in, high-risk alcohol use and/or |
| Drinkers | associated negative consequences, participate in an individual in-person, group, team, or Web- |
| | delivered BASICS intervention. Each intervention is adapted to address the specific and unique |
| | needs and cultures of the target populations and is delivered by trained University Counseling |
| | Center psychologists. |
| Engaging High-Risk | With their informed consent, all targeted students participate in in-person (individual or |
| Drinkers in Brief | group/athletic team) or Web-delivered BASICS intervention as determined by random assignment |
| Alcohol | to the designated intervention. If, during that intervention, students are identified as showing signs |
| Interventions | of alcohol dependence and are thus not responsive to the BASICS intervention model, they are |
| | referred to the St. Peter's Addiction Recovery Center in Albany, New York for more intensive |
| | alcohol treatment. |
| Preventing High- | All students who agree to participate in the in-person, group/team, or Web-delivered BASICS |
| Risk Alcohol Use & | intervention are asked to complete an online battery of surveys at 3 and 6 months to assess for |
| P romoting Healthy | changes in alcohol use and related risk behaviors. All students who elect not to participate in |
| Behaviors | BASICS interventions are, with their consent, followed and asked to participate in a structured |
| | interview to help determine in what ways they are similar to and different from those students who |
| | successfully complete the BASICS intervention. Further, collateral campus data, such as police |
| | reports and judicial referrals, are tracked, and annual random in-class campus-wide NCHA surveys |
| | are administered to assess broader campus climate changes across time. |
| | For all UAlbany students, reduction of alcohol use and increased use of protective behaviors is |
| | encouraged and reinforced through continued implementation of existing campus-wide |
| | comprehensive AOD abuse prevention program elements. |
| Sustaining Success | All STEPS Program enhancements are institutionalized at UAlbany after effectiveness is |
| | demonstrated using rigorous outcome evaluation criteria, and an Institutionalization Plan is |
| | submitted to University senior administrators during the spring semester prior to the |
| | institutionalization target date. |

Within the above intervention and evaluation framework, the STEPS Program is comprised of three specific components – *Project First STEPS*, *Project Healthy STEPS*, and *Project Winning STEPS* - which have served over 13,000 UAlbany students to date. Each component has been systematically developed and institutionalized subsequent to a campus-wide needs assessment and strategic planning process conducted by our President's Advisory Council on the Prevention of Alcohol Abuse and Related Risk Behaviors The table below outlines the three STEPS Program components:

Table 1. Overview of UAlbany STEPS Program Components

| Program Component | Target Population | Start Date | Total Students Served to Date | Source of Start-Up Support |
|------------------------------|--|------------|----------------------------------|--|
| Project First STEPS | First-Year Students | June 2005 | 5,134 | U. S. Dept. of Ed. |
| Project Healthy STEPS | Students Seeking Primary Health/Mental Health Care on Campus | July 2005 | 8,513 | Substance Abuse & Mental Health Services Administration-Center for Substance Abuse Treatment |
| Project Winning STEPS | Student-Athletes | March 2006 | 478 | U. S. Dept. of Ed. |

At its core, the STEPS Program implements and evaluates the effectiveness of target-population-specific modes of delivery of the BASICS intervention – interventions that are relevant and responsive to population needs, campus contexts, and student cultures – guided by consultation with the BASICS intervention program developer from the University of Washington Addictive Behaviors Research Center (Dr. Mary E. Larimer) to ensure intervention fidelity. Moving beyond the standard implementation of the BASICS intervention conducted by most college campuses, the UAlbany STEPS program model is unique in that it has implemented and evaluated the effectiveness of two groundbreaking intervention strategies: a newly developed, innovative Web-delivered version of BASICS personalized feedback, and the individual and team-based delivery of athletic performance-focused BASICS with our student-athletes. Both of these evidence-based innovative adaptations hold significant and critical implications for the efficient and cost effective delivery of best practices in the field.

Program Implementation and Outcome Data:

As mentioned previously, the STEPS Program is comprised of three components – *Project First* STEPS, Project Healthy STEPS, and Project Winning STEPS. Each of these components has been strategically and systematically integrated into our comprehensive target populationspecific screening and brief intervention model. The following paragraphs describe the goals, methods, and outcomes of studies related to each of the three STEPS Program components. Because strong, experimentally determined evidence of the effectiveness of the BASICS program already exists and the interventions have been implemented on the UAlbany campus with fidelity to the research under the guidance of the BASICS program developers, and due to ethical considerations related to withholding such an evidence-based intervention from our highrisk drinkers, we have used quasi-experimental designs to evaluate program effectiveness. All designs included random assignment to treatment conditions and evaluation of outcomes using repeated-measures MANOVA (Multivariate Analysis of Variance) to assess for differences between baseline and each follow-up point and additional analyses as appropriate to assess for effects of intervention condition (e.g.- individual face-to-face delivery, team-based delivery, Web-based delivery), and correlations between reductions in drinking and factors such as corrections in norm misperceptions and increased use of protective behaviors.

Program Component 1: Project First STEPS. The purpose of this STEPS Program component was to meet the unique and complex needs of first-year student high-risk drinkers by applying the BASICS intervention to first-year students referred through online screening conducted within their first month at UAlbany. The objectives of the project were to 1) reduce student alcohol use, and; 2) reduce "harms" or negative consequences that result from excessive use. More specifically, this project clarified how well face-to-face and groundbreaking new Web-delivered BASICS interventions work with college students identified and referred very early in their college careers via initial online screening and follow-up at the beginning of the student's academic career.

Procedure. All UAlbany first-year students were screened within their first month of college via email using a Web-based version of the Alcohol Use Disorders Identification Test (AUDIT: Saunders et al., 1993). Those students exceeding our screening criteria (> 8 for men; > 7 for women) were invited to participate in the intervention phase of the project. Those students enrolling in this phase were randomized to receive either a one-session, face-to-face BASICS

intervention (Dimeff et al., 1999) or Web-delivered BASICS-derived personalized drinking feedback (PDF)-only intervention. At the study enrollment meeting the study was described, informed consent was provided, and baseline data were collected via a Web-based survey. This data was used to create the personalized feedback sheet for the BASICS face-to-face or Web-delivered intervention. This feedback sheet included information such as daily drinking patterns, self-reported alcohol problems, social norms comparisons, beliefs about the effects of alcohol, and use of protective behavioral strategies. Assessment data was collected at baseline, 3-month, and 6-month follow-up points.

Results. Of those first-year students screened, a total of 160 students (113 female, 46 male, 1 no response) participated in the baseline assessment and all follow-up assessments. The mean age for the sample was 18.20 (SD=.45). The majority of participants self-reported their racial group membership as White (n = 129), Latino/a (n = 16), African American/Black (n = 6), Asian/Pacific Islander (n = 2), other (e.g., Middle Eastern, Native American/Caucasian, Greek/Hispanic, Italian) and one participant did not respond.

The table below provides a summary of 6-month follow up outcome measures illustrating reductions in drinking rates and associated negative consequences and increases in protective behaviors in our overall first-year student sample:

Table 2. Project First STEPS: Reductions in Alcohol Abuse and Associated Negative Consequences among UAlbany First-Year Students at 6-Months Post-Intervention

| Variable | Baseline | Follow-Up 6 Months | p | Percent Change | | |
|--|----------|-----------------------|-------|-------------------|--|--|
| Reductions in Alcohol Use Frequency and Quar | | | | | | |
| Drinks Per Week | 17.84 | 13.57* | <.003 | 24% reduction | | |
| Peak Drinking, Past 30 Days | 9.65 | 8.18* | <.006 | 15% reduction | | |
| Peak BAC | .19 | .16* | <.047 | 15% reduction | | |
| Reductions in Negative Consequences | • | | | | | |
| Problems Related to Alcohol | 1.43 | 1.34 | <.054 | 6% reduction | | |
| Alcohol-Related Sexual Activity | 2.52 | 2.44 | <.519 | 3% reduction | | |
| Antisocial Behavior | 1.77 | 1.57* | <.038 | 11% reduction | | |
| Difficulty Studying | 1.46 | 1.39 | <.427 | 5% reduction | | |
| Increases in Use of Protective Behaviors | | | | | | |
| Change in Manner of Drinking (pacing drinks, | 3.19 | 3.21 | <.815 | 1% increase | | |
| alternating alcoholic and non-alcoholic drinks, | | | | | | |
| etc.) | | | | | | |
| Correction in Misperceptions of Campus Alcohol Use Norms | | | | | | |
| Perception of Drinks per Week, Typical Student | 26.15 | 18.64* | <.010 | 29% change | | |
| Perception of Peak Drinks, Typical Student | 9.84 | 8.17* | <.017 | 17% change | | |

NOTE: * Indicates statistically significant outcome

Additional Findings. At six month follow up, participants who engaged in protective behavioral strategies also demonstrated a significant reduction in alcohol consumption. For example, significant negative relationships were found between the limiting/stopping drinking behavioral strategy and total number of drinks in a typical week (r = -.30, p < .010), frequency of five or more drinks (on one occasion) over the past two weeks (r = -.26, p < .012), peak number of drinks in the past 30 days (r = -.40, p < .001) and problems related to alcohol (r = -.26, p < .029).

Increased protective strategies around manner of drinking (e.g.-alternating alcoholic and non-alcoholic drinks, etc.) was associated with reductions in total number of drinks in a typical week (r = -.49, p < .000), peak number of drinks in the past 30 days (r = -.47, p < .010), frequency of five or more drinks (on one occasion) over the past two weeks (r = -.46, p < .000), and problems related to alcohol (r = -.35, p < .004). In addition, manner of drinking strategy was associated with a more accurate perception of (a) total number of drinks the typical student consumes in a week (r = -.29, p < .012), (b) typical student's peak number of drinks on one occasion (r = -.25, p < .030), and (c) the frequency that a typical student has five or more drinks on one occasion (r = -.36, p < .002).

When we look at the comparative affectedness of the individually-delivered, face-to-face BASICS intervention vs. the Web-delivered PDF intervention, we are encouraged to note that both interventions are effective at 6-months post-intervention, though the face-to-face intervention seems to demonstrate greater effectiveness. This finding has significant implications for implementation in circumstances in which staffing resources are limited.

Table 3. Project First STEPS: Reduction in Alcohol Consumption by Treatment Condition (Individual Face-to-Face BASICS vs. Web-Based Personalized Drinking Feedback) at 6-Months Post-Intervention

| Outcome | Face-to-Face BASICS (% Reduction) | Web-Based PDF (% Reduction) |
|--|---|-----------------------------------|
| Reduction in alcohol consumption during typical week | 43% | 11% |
| Reduction in peak number of drinks during last 30 days | 22% | 10% |

Program Component 2: Project Healthy STEPS. The purpose of this STEPS program component was to assess the efficacy of face-to-face, individually-delivered BASICS, among our UAlbany students in the context of a naturally existing university-based primary health and mental health care setting: the University at Albany Health Center and the University at Albany Counseling Center. As with Project First STEPS, objectives were to 1) reduce student alcohol use, and; 2) reduce "harms" or negative consequences that result from excessive use.

Procedure. All students who presented for primary care services at the University Health Center or University Counseling Center were invited to fill out the AUDIT when they arrived for their appointments. Students meeting our screening criteria (> 8 for men; > 7 for women) were invited by their primary care provider to enroll in the study. If the student agreed to participate, he or she was either walked over to the project office (located in the Health Center in the same hallway as the physicians) or contacted by email or phone to set up a meeting time to enroll into the study. At this enrollment meeting the study was described, informed consent was provided, and baseline data were collected via a Web-based survey. This data was used to create the personalized feedback sheet for the BASICS intervention. This feedback sheet included information such as daily drinking patterns, self-reported alcohol problems, social norms comparisons, beliefs about the effects of alcohol, and use of protective behavioral strategies. Participants were then scheduled for a face-to-face BASICS intervention with a Counseling Center provider the following week. Assessment data was collected at baseline, discharge, 6-week, and 6-month follow-up points.

Results. At baseline assessment, the group that qualified for individual BASICS interventions within this project was significantly engaged in high-risk drinking. The peak number of drinks consumed on a single occasion averaged 10 (SD=5.7). The average number of drinks consumed per week was 19.5 (SD=17.3). The number of heavy episodic drinking days in the previous two weeks (defined as 5 or more drinks consumed in a single occasion for men and 4 or more drinks consumed on a single occasion for women) was 2.7 (SD=2.6). Perceived norms for peers' drinking were dramatically higher than the true drinking norms for the University at Albany campus. On average, these students believed the typical student consumed 26.2 drinks (SD=13.9) per week, almost 7 drinks greater than the actual average for this sample.

The table below provides a summary of 6-month follow up outcome measures illustrating reductions in drinking rates and corrections of alcohol use misperceptions among a sample of 167 students participating in the BASICS intervention who have completed 6-month follow-up assessments to date (data collection is ongoing):

Table 4. Project Healthy STEPS: Reductions in Alcohol Abuse among UAlbany Students Seeking Campus Health Care Services at 6-Months Post-Intervention

| Variable | Baseline | Follow-Up 6 Months | P | Percent Change |
|--|----------|-----------------------|-------|-------------------|
| Reductions in Alcohol Use Frequency and Quantity | | | | |
| Drinks Per Week | 20.2 | 17.1* | <.05 | 15% reduction |
| Heavy Episodic Drinking Episodes, Past 2 Wks. | 2.7 | 2.4 * | <.10 | 11% reduction |
| Peak Drinking, Past 30 Days | 10.1 | 8.8* | <.05 | 9% reduction |
| Peak BAC | .18 | .15* | <.05 | 17% reduction |
| Correction in Misperceptions of Campus Alcohol Use Norms | | | | |
| Perception of Drinks Per Week, Typical Student | 25.3 | 17.0* | <.001 | 29% change |

NOTE: * Indicates statistically significant outcome

In addition to statistically and clinically significant reductions in a number of indices of alcohol use, perceptions of peers' drinking norms improved significantly as well, dropping from 25.3 to 17.0 drinks per week. The perception of norms appeared to be an important contributor to drinking, correlating significantly (r=.21) with drinks consumed per week.

<u>Program Component 3: Project Winning STEPS.</u> The purpose of this project component was to meet the unique and complex needs of student-athletes by providing them specific feedback on the relationship between their drinking and athletic performance. The objectives of the project were to 1) reduce student-athlete alcohol use, 2) reduce "harms" or negative consequences that result from excessive use; and, 3) assess the relationship between student-athlete alcohol use and athletic confidence and performance. More specifically, this project clarified how well face-to-face individual and groundbreaking new athletic team-delivered SBI interventions work with student-athletes.

Procedure. All UAlbany student-athletes were screened while they were out-of-season using a Web-based version of the Alcohol Use Disorders Identification Test (AUDIT) that they completed during their first team business meeting of the semester (this meeting was held in a campus computer room to offer easy access to baseline assessment). Those student-athletes

exceeding our screening criteria (> 8 for men; > 7 for women) were invited to participate in the intervention phase of the project. Those student-athletes enrolling in this phase were randomized to receive either a one-session, face-to-face BASICS intervention (Dimeff et al., 1999) containing alcohol use and athletic performance-specific personalized feedback, or a team-delivered BASICS intervention containing alcohol use and athletic performance-specific personalized feedback for both the individual student-athlete and composite feedback for the entire athletic team. Data were collected at baseline, 3-month, and 6-month follow-up using the battery of assessment measures used for Project First STEPS and Project Healthy STEPS, along with an additional measure, the Athletic Coping Skills Inventory-28, to assess athlete-specific performance dimensions, such as athletic confidence and performance anxiety and a student-athlete-modified version of the Rutgers Alcohol Problems Index.

Results. Baseline data for the full student-athlete sample revealed that most UAlbany student-athletes within this sample drink only occasionally and with no negative consequences. For example, over half (57%) report that they consume alcohol no more than one night per week. Nevertheless, outliers who consume alcohol often, in large amounts, and with negative consequences, were also present in the sample and met criteria to receive our intervention. Specifically, student-athletes who reported problematic drinking, such as two heavy episodic drinking periods in the previous month (defined as 5 drinks on a single occasion for males and 4 drinks on a single occasion for females), were invited to participate in individualized BASICS interventions. Team-based BASICS interventions were conducted with intact athletic teams, which included both students scoring as high-risk drinkers at baseline and team members who engaged in moderate or low-risk alcohol use. The use of intact teams for the team-based interventions was essential to assess the true effectiveness of this modality and to not publicly identify or stigmatize the members of the team engaging in high-risk drinking.

The table below provides a summary of 6-month follow up outcome measures illustrating reductions in drinking rates and associated negative consequences and increases in protective behaviors among our student-athlete sample engaging in baseline high-risk drinking:

Table 5. Project Winning STEPS: Reductions in Alcohol Abuse and Associated Negative Consequences among UAlbany Student-Athletes at 6-Months Post-Intervention

| Variable | Baseline | Follow-Up | P | Percent |
|--|--------------|-----------|------|---------------|
| | | 6 Months | | Change |
| Reductions in Alcohol Use Frequency and Quantity | | | | |
| Drinks Per Week | 18.9 | 16.1* | <.05 | 15% reduction |
| Heavy Episodic Drinking Episodes, Past 2 Wks. | 4.4 | 3.4* | <.10 | 23% reduction |
| Total Score, Rutgers Alcohol Problems Index | 9.9 | 8.1 | NS | 18% reduction |
| Peak BAC | .19 | .14 | NS | |
| Reductions in Negative Consequences | | | | |
| Blackout | 44% | 32%* | <.05 | 12% reduction |
| Alcohol-Related Injury | 22% | 11%* | <.05 | 50% reduction |
| Failed to Meet Responsibility due to Alcohol Use | 21% | 9%* | <.05 | 12% reduction |
| Drunk/Hung Over at Athletic Practice or Game | 18% | 13%* | <.10 | 5% reduction |
| Drunk/Hung Over in School | 14% | 9%* | <.10 | 5% reduction |
| Increases in Use of Protective Behaviors | | | | |
| Percent Athletes Reporting Use of at Least 1 PB | 53.8 | 57.8* | <.10 | 7% increase |
| Correction in Misperceptions of Campus Alcoho | ol Use Norms | l | | · |
| Perception of Drinks Per Week, Typical Student | 23.6 | 19.8 * | <.05 | 19% change |

6-month follow-up outcome data revealed statistically and clinically significant reductions in alcohol use and associated negative consequences and increases in use of protective behaviors among our student-athletes. The number of heavy episodic drinking episodes per month decreased by 23% (from 4.4 to 3.4). There was a decrease in scores on the Rutgers Alcohol Problems Index (RAPI) of 18%, which qualified as a statistical trend (p < .10) but did not reach significance because of large variance at follow-up. A measure of student-athlete use of protective behaviors increased by 7%, from 53.8 to 57.8, which reached statistical significance as well. This increase is reassuring and was probably not larger because of ceiling effects for the items assessed on this measure. Over 80% of these student-athletes used at least 1 protective behavioral strategy at baseline; at follow-up, all student-athletes (100%) used at least 1 strategy, an increase of 20%.

Other key indicators of alcohol problems also decreased significantly (both statistically and clinically) after the intervention. An alarming 44% of the student-athlete intervention sample reported experiencing a blackout in the previous 30 days at baseline, but this percentage dropped to 32% at follow-up. Twenty-two percent of the participants had experienced an alcohol-related injury at baseline, which was cut in half (to 11%) at follow-up. At baseline, 21% reported that they had failed to meet a responsibility because of alcohol, which dropped to only 9% at follow-up. Eighteen percent reported attending an athletic competition or practice while intoxicated or hung over, which dropped to 13%; 14% have attended a class while intoxicated or hung over at baseline, which dropped to 9%.

When we look at the comparative affectedness of the individually-delivered, face-to-face BASICS intervention vs. the Web-delivered PDF intervention, we are encouraged to note that both interventions are effective at 6-months post-intervention, though the face-to-face intervention seems to demonstrate greater effectiveness. The table below outlines these findings:

Table 6. Project Winning STEPS: Reduction in Alcohol Consumption and Changes in Use of Protective Behavioral Strategies by Treatment Condition (Individual BASICS vs. Team-Delivered Intervention) at 6-Month Follow-Up

| Outcome | Face-to-Face BASICS (% Reduction) | Team-Delivered Intervention (% Reduction) |
|--|---|---|
| Reduction in alcohol consumption during typical week | 15% | 11% |
| Heavy Episodic Drinking Episodes, Past 2 Wks. | 23% | 9% |
| Total Score, Rutgers Alcohol Problems Index | 18% | 9% |
| Use of Protective Behavioral Strategies | | |
| Outcome | Face-to-Face BASICS | Team-Delivered Intervention |
| | (% Increase) | (% Increase) |

Use of Protective Behaviors

<u>Toward a Broader Campus Culture Change: Collateral Indices of Campus-Wide Reductions in High-Risk Drinking.</u>

As part of UAlbany's ongoing evaluation efforts, a random in-class administration of the National College Health Assessment (NCHA) of the American College Health Association is conducted bi-annually with the guidance of the University's Office of Institutional Research and Planning. With a very large base of national norms, the NCHA allows the surveyor to generate prevalence and changes over time for a variety of health issues, including alcohol use and related consequences. In Spring 2008, the NCHA was administered to an in-class random sample of more than 1,000 undergraduate students at UAlbany for comparison with data collected in prior years. As compared to the 2004 NCHA administration which was completed prior to the start of our SBI program. survey results indicated the following:

- ➤ 17% reduction in number of students who think the typical UAlbany student drinks daily
- > 32% increase in number of abstinent students
- ➤ 14% increase in number of students who drink once a week or less
- ➤ 25% increase in number of students who abstain from heavy episodic drinking (5+ drinks on one occasion)

These data suggest that there is some evidence of a broader, campus-level effect of our prevention and intervention programs, of which each of the STEPS Project components is a major part.

In summary, this section has outlined findings from each of our STEPS Program components, demonstrating reductions in alcohol use and associated negative consequences as well as increases in use of protective behaviors across more than twenty-five indices. The data are significant in that they support the success of interventions aimed at our highest-risk drinkers using non-confrontational, evidence-based strategies delivered within a comprehensive and coordinated set of contexts within the university setting. These interventions have reached many students who would not otherwise have sought out interventions to address their high-risk alcohol use; as a result, these students have been able to look critically at their drinking and make progress toward healthy and meaningful behavior change.

Program-Related Journal Publication:

Martens, M.P., Cimini, M.D., Barr, A.R., Rivero, E.M., Vellis, P.A., Desemone, G.A. & Horner, K.J., Implementing a Screening and Brief Intervention for High-Risk Drinking in University-Based Health and Mental Health Care Settings: Reductions in Alcohol Use and Correlates of Success, *Addictive Behaviors* (2007), doi:10.1016/j.addbeh.2007.05.005. November 2007.