Evaluation of the Development and Implementation of
Brief Alcohol Screening and Intervention for College Students (BASICS)
for First-Year Student-Athletes at Drexel University

by
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DEDICATION

For Mom, Dad, Fred & Mark, thank you for being exceptional role models.

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I would like to thank the people who worked closely with me on this project. With your help I was able to reach the top of this mountain they call a community based masters project. The journey was steep, and I took some long and winding trails, making it all a bit treacherous at times, but with a little help and a shoulder to lean on I was able to succeed. Looking down the mountain from where I stand now I can clearly see that taking a few detours along the way provided me with experiences beyond what I thought this project would offer. I might not have accomplished what I set out to do, but what I did learn will stay with me as I start on new trails leading up all the mountains in my future. I would like to thank Randy Sell, my faculty chair for listening and sharing your personal experiences with this process; John Watson for opening up your space and programs to me and the School of Public Health; and Jessica for your endless love and support.
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ABSTRACT

Evaluation of the Development and Implementation of BASICS (Brief Alcohol Screening and Intervention for College Students) for First-Year Student-Athletes at Drexel University

Kristen Buglione
Randall Sell

There is too much high-risk alcohol use among high-risk groups such as student-athletes and first-year students. The objectives of the evaluation of the development and implementation of BASICS include: (a) to aid in the development of program goals and objectives, (b) to review the literature pertaining to BASICS implementation at other colleges and universities, (c) to create program documents and disseminate program information to program members, (d) to collaborate with Drexel staff on program development, planning and advertisement, and (e) to provide recommendations for future programs, research, evaluation and policies relating to alcohol education for students.

The methods of this project included literature reviews, research, creation of program documents, disseminating information to project members, and participation in developmental meetings with program members.

BASICS was developed and implemented for first-year student-athletes. BASICS was unsuccessful in gaining an appropriate number of student-counselors to conduct more than 2 sessions per week. BASICS was also unsuccessful in gaining participation among Drexel first-year student-athletes. However, BASICS was successful in gaining approval by key members of the University including: Dr. Eric Zillmer, Athletic Director, Kathleen O’Brien, Assistant Director of Academic Services in the Athletic Department, and Dr. Robert Chapman, Clinical Associate Professor and Associate Director of the Behavioral Health Counseling program at Drexel University. BASICS has been identified as a potentially effective program when students who have identified problems or concerns with alcohol are required or highly recommended to participate. More support among potentially influential individuals on campus and new pathways for recruitment should occur before future implementation of BASICS.

BASICS has the potential to be an effective alcohol prevention, screening and education program at Drexel. Drexel student-athletes experience unique time constraints due to the 10 week quarter system; therefore, BASICS may not be the most efficient program for student-athletes. There are other factors to take into consideration for implementing BASICS in the future. Currently Drexel is preparing to implement a Medical Amnesty Policy (MAP). MAP has the potential to open opportunities for alcohol education and prevention programs, due to the requirement of the policy for students to be entered into an alcohol education program.
INTRODUCTION

There is too much high-risk alcohol consumption on college campuses specifically among high-risk groups such as first-year students and student-athletes. Wechsler (2002) reported findings from 4 Harvard School of Public Health Alcohol Studies which found that 44% of college students reported high-risk alcohol consumption. High-risk drinking, a term that has recently replaced binge drinking is defined as 5 or more drinks during one night of drinking (Brenner, 2007). Unfortunately high-risk drinking has become a social norm on college campuses. Researchers have identified a number of contributing factors to the high rate of high-risk consumption. Being away from home, often for the first time, contributes to behavior that mimics other students, or is contrary to how students behaved while in high-school (Brenner, 2007). Misperceptions among college students are rampant, from sexual activity to alcohol consumption, across the country students believe that their peers are having more sex and drinking more alcohol than is actually true (ACHA, 2007a). Research shows that students believe their peers are drinking twice to three times the amount that they are actually consuming, which contributes to the link between perceived expectations and drinking patterns, more commonly referred to as the effect of peer pressure (ACHA, 2007a). Among student-athletes the amount who engage in high-risk drinking, especially during their non-traditional or off season, out paces non-student-athletes by almost double (Brenner, 2007).

Although there is a lack of data specifically pertaining to Drexel first-year student-athletes a need was identified from national and local trends to develop and
implement an education and prevention program for this population. BASICS, an existing alcohol education and prevention program, was chosen to modify, develop and implement at Drexel. The following is a presentation of the results of research and findings throughout the process of development and implementation of BASICS at Drexel.

SPECIFIC AIMS

The specific aims of this project were to observe and assist in the development and implementation of BASICS for first-year student athletes. As a result I have collected and presented here a review of the literature pertaining to high-risk alcohol use among college students, specific high-risk populations and the theoretical background of BASICS. I have also prepared an analysis of the process of developing and implementing BASICS at Drexel along with recommendations for future implementation, research and evaluation.

RESEARCH PROCEDURES

Subjects and Data Collection

Although the original plan for this project was to evaluate the effectiveness on BASICS, therefore collecting data on first-year student-athletes participating in BASICS, due to the time restrictions and change in project aims no subjects were used in this evaluation and therefore, no data was collected.
Study Variables and Methods

The methods used for this project were research and organizational in nature. A review of the literature was used to aid in the development of the program plan and implementation as well as to inform future suggestions and research questions. Collaborative meetings with Drexel staff were held to establish the program plan and observe program development and implementation. Communication between departments was done to assist in raising awareness of the program's existence and enhance recruitment. My main activities included assisting in creation of program goals, objectives and ultimately the program plan, creation of program documents and disseminating program information to counselors, as well as analyzing my observations of the creative process and program implementation.

Justification for Study

College administration, faculty and staff struggle with controlling, preventing and reducing harm due to alcohol consumption among their students, especially for those under the age of 21. Some college officials have recently suggested the drinking age be reduced to 18 to allow students to learn responsible drinking patterns preferably from their parents before they are influenced by their peers in college (Go, 2008). Alcohol, according to some college officials, is the forbidden fruit that college students are more apt to experience while surrounded by their peers in ways that could harm them and
others (Go, 2008). Unfortunately statistics show that college students are not immune to the negative consequences associated with alcohol consumption. According to the Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention (2007a) 600,000 students suffer nonfatal injuries as a result of alcohol use, and 1,700 students die from alcohol-related causes, of which 1,300 are related to drinking and driving accidents. While the patterns and negative consequences of high-risk drinking are a major public health concern, the campus culture and social norms among students are issues that need to be addressed. Responsible drinking habits are a topic that should be continuously addressed on college campuses, regardless of the drinking age. College officials know that those under the age of 21 are drinking, even on campuses that do not allow alcohol on the premises, even for students over the age of 21 (also referred to as a dry campus). Students are attending happy hours at local bars and going to parties where $5 red cups gain access to unlimited kegs of beer. College officials are addressing these issues by drawing national attention to the health concerns associated with alcohol consumption and the high rates of alcohol related injuries and deaths among the 18-24 age group. However, college officials should be discussing changes to their policies, systems of resources and education (Ross, 2008). Campus drinking policies, regulations, counseling and education should reflect the public health problems students are facing (Ross, 2008).

Drexel University is facing some of the same issues. According to ACHA’s National College Health Assessment of Drexel University (2007) 19.1% of students who responded (n=371) reported high-risk consumption (5 or more drinks), which occurs among 20.3% of students at least once a week. The average time students are spending
consuming alcohol averages 3.46 hours, which combined with the amount of alcohol most students are consuming, 5-6 beverages, leaves little doubt that Drexel students are engaging in high-risk drinking and most likely feeling the effects of their behavior (ACHA, 2007). According to ACHA’s Assessment (2007) Drexel students are not immune from the negative consequences associated with drinking, 28.5% reported doing something they later regretted during or after consuming alcohol. With approximately 42% of students at Drexel participating in intercollegiate athletics high-risk consumption may be related to the social norms being perpetuated among team members as well as members in other close-knit organizations where traditions and peer pressure among peer groups may account for the quantity of alcohol being consumed.

Institutional Review Board Considerations

The original research project was presented for expedited review to the Institutional Review Board (IRB) in December. The application was returned in January by IRB for multiple corrections and a request was made for full review in February. Unfortunately due to time restrictions we were unable to make the changes and submit the application for a full review. At that point we decided to pull our application for evaluation of the effectiveness of BASICS and resubmit a proposal for evaluating the development and implementation of BASICS. We were accepted and given a release letter (see Appendix D).

The application process through IRB was unfortunately the biggest hardship for me and significantly delayed progress on this project. Although the Office of Alcohol
Other Drug and Health Education was able to move on with implementing the program
the process was significantly hindered by changes in my ability to be involved. In the
future any applications should be turned in six months to one year prior to program
implementation and evaluation.

Data Analysis Section

Although the original plan for the evaluation was to collect data on first-year
student-athletes participating in BASICS, due to the time restrictions and change in
project aims no data was collected, and therefore no data was analyzed.

Analysis was done on the information gathered and observed through the
developmental process. The information gathered through the literature review,
comparison research and observation was gathered and analyzed for value of use in the
development, implementation, and assessment of BASICS now and in the future.

LITERATURE REVIEW

Introduction

Since 1993 various studies, including the Harvard School of Public Health
College Alcohol Study, the National College Health Risk Behavior Survey and the
National Survey on Drug and Health, have corroborated on high-risk drinking behavior
among college students. Of all college students surveyed 44% report high-risk drinking
behavior (Wechsler, 2008). The most notable changes in alcohol consumption between 1993 and 2001 were the apparent divergence in drinking behavior. While the number of abstainers increased the number of frequent high-risk drinking also increased. Drinking behavior or drinking style can be defined as, “one of excess and intoxication” (Wechsler, 2008). According to Wechsler (1999, 2002) getting drunk was reported as an important reason to drink, the frequency of intoxication averaged 3 or more times a month and of the 68% of alcohol consumed by students 98% was consumed by high-risk drinkers.

With research showing that most alcohol is being consumed by high-risk drinkers, we can assume that most of the negative consequences associated with alcohol consumption: drinking and driving accidents/deaths, hangovers, alcohol poisoning, academic troubles, social issues, and physical and mental ailments, are also occurring among these students (Wechsler, 1999, 2002). Research has also shown that many of the students participating in high-risk alcohol consumption are members of specific groups on campus: athletes and first-year students, among others (Core Institute, 2005; Brenner, 2007). Despite research indicating increased use among athletes and first-year students few prevention programs properly target these groups (Johnston, 2005).

**Consequences of High-Risk Alcohol Consumption**

High-risk alcohol consumption has resulted in significant negative consequences on the students who participate or are exposed to high-risk drinkers in their dorms and on campus. Social relationships, academic performance, and health have been cited as the areas of most severe impact due to high-risk alcohol consumption (Wechsler, 2008).
High-risk behaviors in general are seen to increase when students participate in high-risk drinking, drinking and driving, unprotected sexual encounters and violent actions are some of the more common side-effects from intoxication due to high-risk drinking (Wechsler, 2008). Some of the specific results from high-risk drinking include: falling behind in schoolwork, lower grade point average, missing class, failing to use protection during sex, unplanned sexual encounters, vandalism, run ins with police/arrests, and driving while intoxicated (Powell, 2004; Wechsler, 2002).

According to The Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention (2007a) and the NIAAA (2002) there are: 600,000 non-fatal injuries, nearly 500,000 instances of unprotected sex, more than 100,000 students reporting not knowing if they consented to sexual intercourse because of their level of intoxication, more than 150,000 health problems related to alcohol consumption, 11% of students report instances of property damage, 1,700 deaths from alcohol-related causes, 1,300 deaths involving drinking and driving, 1.2-1.5% suicide attempts due to alcohol or other drug use, and 2.8 million students driving while under the influence. Not only do students suffer from these consequences but other students (roommates, friends/others who abstain), schools and neighborhoods also feel the effects of student drinking. Institutions gain reputations such as party schools, retention rates drop, expenses from vandalism increase and other alcohol-related problems occur (Kapner, 2008). Students report lack of sleep and stress from living with or near students who drink heavily and cause noise, loss of property and unwanted sexual advances, assault or rape. According to Koss (1993), alcohol was found to be one of the most significant contributors to sexual aggression among male college students. With 44% of students across the nation
engaging in high-risk alcohol consumption and more than 97,000 sexual assaults occurring each year, it might be assumed that by reducing high-risk alcohol use there might also be a drop in the cases of sexual assault as well (Borsari, 1999; Wechsler, 2002).

According to the American College Health Association’s National College Health Assessment for 2006, (ACHA, 2007a) the top three concerns among students are sleep, stress, and cold/flu, while alcohol use came in at number 10. Many students may not link their lack of sleep, high amounts of stress and susceptibility to cold and flu to their alcohol consumption. While to students staying out into the morning hours, drinking excessively and dealing with hangovers would link clearly with concerns mentioned above, college students see these activities as normal college behavior (Ross, 2008). Most Drexel students reported stress, lack of sleep, cold/flu, relationship problems and concerns for friend/family member as reasons for reduced academic achievement (ACHA, 2007b). According to the NIAAA (2002) 25% of college students believe alcohol is playing a part in their academic problems: learning lower grades, doing poorly on exams or missing classes. Students may not be aware of the way in which alcohol affects their sleeping patterns, stress levels, immune systems and relationships. Student-athletes may also not be aware of the affect alcohol consumption has on academic and athletic performance (Brenner, 2007). The issue of guidance and control comes to light when investigating alcohol consumption among student-athletes. Brenner (2007) found that student-athletes were more likely to engage in high-risk drinking during their non-traditional season and cited less time spent in direct supervision of coaches and a lack of out-of-season team alcohol policies as potential reasons for the increased high-risk
alcohol use. Wechsler (2007) reported that levels of a student's high-risk drinking varied according to the level of supervision.

**Social Norms / Misperceptions**

College students generally look to their peers for validation of feelings and behaviors (Neighbors, 2006). Perceptions of others’ beliefs will manifest in behaviors such as alcohol consumption, and can determine student’s impressions of what is or is not socially accepted behavior (Neighbors, 2006). Due to the nature of college life students are likely influenced by their beliefs of what others are thinking and doing. Fitting in, making friends and being accepted by others is highly desired by college students, especially those away from home. Connecting and feeling understood are feelings important to integrating positively into the social framework of college environment and enjoying the college experience (Neighbors, 2006). However, perceptions of others’ beliefs may not always be consistent with reality. According to Neighbors (2006) “misperceptions of peer drinking norms have been well documented among college students, such that students consistently believe that their peers drink more and are more supportive of heavy drinking than is actually the case.” It has also been found that the more a student believes others drink the more that student will participate in heavy drinking (Neighbors, 2006). Misperceptions of campus norms have been linked to an increase of alcohol-related behavior such as high-risk drinking or drinking and engaging in high-risk behavior (Fisher, 2007).
According to the 2007 National ACHA survey 22.8% of students (n=20,328) reported never using alcohol. However, in the same study only 4.8% of students (n=20,293) thought that the typical student never used alcohol. When asked how many alcoholic drinks were had in a typical night students responded the highest to 0 (28.2%) and 3-4 (19.1%). Similarly when students had to estimate the number of drinks a typical student had in one night of partying/socializing students responded the highest to 5-6 (35.7%), 3-4 (22.1%) and surprisingly 7-8 (15.2%). The amount of students who actually responded yes to 7-8 drinks in the previous question about their own alcohol consumption was 8% almost half the amount of students that others expected would be drinking excessively (ACHA, 2007a). ACHA used results from the 2006 survey to estimate the Blood Alcohol Content from the students reported last drinking occasion. Female students were averaging 0.070% and males 0.067% not only were females consistently higher than males but both males and females averaged just under 0.08% which is consistent with DUI laws in the United States (ACHA, 2007a). In November 2004 the National Institute on Alcohol Abuse and Alcoholism’s National Advisory Council created their definition for binge drinking which again is consistent with the average BAC seen in the 2006 survey, as well as DUI laws: “a pattern of drinking alcohol that brings blood alcohol concentration (BAC) to 0.08% or above which” (ACHA, 2007a).
**High-Risk Groups**

All college students face challenges that may influence high-risk alcohol consumption such as: being away from home, peer pressure and misperceptions of others alcohol patterns (Fisher, 2007). Student-athletes not only face those same challenges but others that may further influence them such as: mimicking alcohol use to fit in, the camaraderie of being part of a team and the traditions or social norms of the team, increase in social opportunities and availability of alcohol, and experience and enhancement achieved from use (Brenner, 2007; Turrisi, 2006). According to the National Collegiate Athletic Association’s Study on Substance Use Habits of College Student Athletes 79% of student-athletes reported alcohol consumption in the past year; the team range for men was 68.6-94.8% and women 75.3-95.9% (Green, 2001). In regard to negative consequences: 65.4% reported having a hangover, 52.4% nausea or vomiting, 43.7% doing something they later regretted, 43.2% missing a class, 35.1% got into an argument or fight, 33.3% did poor on a test, 29.7% drove a car while under the influence, 29.3% had memory loss, 20% had been hurt or injured, 17.5% had been in trouble with police, or college authorities, and 11.5% had been taken advantage of sexually (Green, 2001). Research shows that athletes are engaging in high-risk drinking more often than non-athletes, 60% of male and 50% of female student-athletes reported high-risk alcohol consumption (Brenner, 2007). Driving while under the influence, drug use, a greater number of sex partners, more physical fights, and low contraception use are examples of riskier behavior athletes have been found to engage in more often than non-athletes (Turrisi, 2006).
These factors have led athletes to be identified as a high-risk sub-population on college campuses across the nation (Brenner, 2007). Those in leadership positions among groups such as athletes and Greek members also tend to drink more frequently than other members, which may promote misperceptions of social norms especially among impressionable freshman looking to fit in (Brenner, 2007). Student-athletes especially those in leadership positions within teams, or viewed as leaders of the team for their athletic talent are often more visible on campus (Brenner, 2007). Visibility of alcohol use by student-athletes can assist in the process of modeling behavior among both members and non-members of athletic groups (Brenner, 2007). According to Brenner (2007) peer associations have been found as a strong predictor of high-risk and heavy episodic drinking among student-athletes. Peer associations, modeling and peer influences as well as the acceptance of alcohol consumption as a social norm may create a campus culture where high-risk drinking occurs more commonly than not.

College students, especially freshman, are greatly influenced by the environment they are experiencing while at college. According to Fisher (2007) “freshman year marks a developmental transition to new responsibilities and freedoms in the absence of a well established network of social support” (p217) As students adjust and attempt to acculturate to their new surroundings perceived campus norms such as drinking, sexual activity and academic participation may affect risk-taking behaviors (Fisher, 2007). Harvard’s School of Public Health Alcohol Study has shown that one-fifth of first-year students typically increase their alcohol consumption once they begin college. Results also showed that high school seniors, who consume alcohol regularly, seek out college environments that will enable or encourage alcohol consumption (Wechsler, 2008).
These same students may also be predisposed to join high-risk groups once on campus, such as fraternities or sororities (Hingson, 2005).

Resident Assistants (RA’s), while students themselves, set the tone for alcohol consumption in residence halls. RA’s are often encountering alcohol consumption and dealing with offenders who they have to report to judicial affairs on campus. A lenient RA who is not consistent in promoting a no tolerance message will be in essence promoting alcohol use that is out of sight, out of mind (Fisher, 2007). Parent’s attitudes and behaviors in reference to alcohol use have been found to significantly affect the choices their children make. Fisher (2007) found that parents are viewed by high school students as some of the few individuals who could effectively enforce or control alcohol use. Although students may be knowledgeable of the risks associated with heavy drinking, the positive benefits of drinking which have included: stress reliever, making friends, personal control, and romantic/sexual experiences may be perceived as reasons to drink and therefore outweigh negative consequences (Fisher, 2007). RA’s have the ability to step in as the authority figure in a student’s college life and take over where their parents influence left off. For good alcohol policies to be effective follow through by those enforcing the rules is extremely important.

Teenagers and young-adults are often categorized as risk takers due to their beliefs that bad things can’t happen to them (Ross, 2008). Therefore, high-risk alcohol consumption during college is often seen as a phase, where activities such as drinking and driving, alcohol influenced unplanned sexual encounters and drinking games are left behind when graduation rolls around (Ross, 2008). Unfortunately high-risk alcohol consumption can lead to alcohol abuse and alcoholism (Wu, 2007). Each of these
disorders can result in major health complications and death; unfortunately addiction is not a phase that will easily end on a set date or time. Prevention and reduction of these behaviors need to be addressed by college officials before students step foot on campus, changing social norms and misperceptions on alcohol consumption is a start (Ross, 2008). Other approaches are discussed in the next section.

**Harm Reduction, Prevention and Intervention on College Campus’**

According to the Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention (2007b) there are three main ways college administrators, faculty and staff approach alcohol prevention and harm reduction:

1. changing people’s knowledge, attitudes, and behavioral intentions regarding substance use (e.g., awareness programs, peer education);
2. protecting students from short-term consequences (“health protection strategies, such as safe ride or designated driver programs); and
3. intervening with and treating students with substance use problems.

The main goal for alcohol prevention and intervention programs is to reduce alcohol abuse and reduce harm due to alcohol use, often called harm reduction strategies. Early intervention programs are one of the basic ways colleges are attempting to reduce abuse (Higher Education Center, 2007b). Awareness activities such as health campaigns,
speakers, workshops and general information are other ways colleges are trying to influence alcohol use on campus.

The Higher Education Center (2007b) however, recognizes that the three approaches listed above do little to affect the campus culture, and suggests using an ecological approach to influence the environment to reflect the policies of the institution. A main goal of this approach would be to reduce the appeal and availability of alcohol and other drugs. Therefore, a comprehensive approach, which takes into consideration campus norms and environmental factors would include an ecological framework that incorporates the three goals listed above. According to the Higher Education Center (2007b) an ecological approach should:

- offer and promote social, recreational, extracurricular, and public service options that do not include alcohol and other drugs; (2) create social, academic, and residential environment that supports health-promoting norms; (3) limit the availability of alcohol and other drugs both on and off campus; (4) restrict marketing and promotion of alcohol and other drugs; (5) and develop and enforce campus policies and enforce local, state and federal laws (Sec2:8-10).

An example of addressing environmental factors would be investigating the ways in which local bars and alcohol distributors advertise to students. Events like happy hours with drink specials and drinking game contests are ways in which bars promote their establishments as well as assist high-risk consumption. According to Wechsler
access and cost correlate strongly with high-risk drinking. Colleges with nearby bars offering reduced price specials and easy access to alcohol are associated with high-risk drinking among college students. Reducing happy hours, drink specials and drinking game contests in bars located in close proximity to colleges may help to reduce the number of high-risk consumption as well as negative consequences.

Weitzman (2003) found that “student affiliations and their surrounding environments were important determinants of initiating drinking behavior in college.” Members of fraternities, sororities, athletic teams and other affiliations on campus are more likely to drink to fit in and gain easy access to low-cost alcohol (Wechsler, 2008). This information suggests that by tailoring prevention programs to members of high-risk groups, such as athletes and Greek members, a significant impact on campus drinking culture could occur.

Intervention programs tend to be tailored for alcohol offenders of campus judicial systems. One-on-one or group meetings with students who have been caught violating a campus or local alcohol law(s) are common on college campuses to identify high-risk behavior and intervene before the student does any further harm to themselves or others (Higher Education Center, 2007b). Common meetings entail assessments of drinking patterns, educational information on the risks and consequences of alcohol consumption, referral to further medical services or counseling, and motivational interviewing techniques that aim at influencing behavior change that is student initiated. What interventions lack are larger effects on the campus environment (Higher Education Center, 2007b). One example of an intervention program (BASICS) is detailed below. For the proposed project BASICS will be used as a prevention program tailored to the
first-year student-athlete population who may or may not be already experiencing alcohol related problems.

**BASICS – Brief Alcohol Screening and Intervention for College Students**

The Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention suggests that first-year students will benefit from a program such as BASICS where brief motivational interventions provide students with assessment and feedback on their drinking behaviors to facilitate reductions in high-risk drinking patterns (Ross, 2008).

BASICS was developed as part of an Alcohol Skills Training curriculum aimed at reducing harmful drinking and negative consequences from alcohol consumption (Dimeff, 1999). It is a flexible, personalized, non-confrontational, non-judgmental, non-labeling program designed to initiate a constructive discussion with students on their alcohol consumption patterns. Assessment, feedback and discussion are conducted over two 50-minute sessions with enough time between the two sessions for the student to reflect on their assessments and record a daily drinking inventory, the time between the sessions is usually at least one week. In the first interview a trained BASICS practitioner or counselor assesses the student’s consumption patterns using tools such as a survey or online assessment such as E-chug. Homework is generally given in the form of the Daily Drinking Questionnaire. During the second session the practitioner and the student might discuss the student’s negative consequences stemming from their alcohol use. General health and wellness may also be discussed in relation to the student’s academic
performance, stress levels and social life. Personalized feedback is then given, based on the assessments the student has completed, and specific advice and discussion on ways to reduce further risk are reviewed. Other aspects discussed might be referral to services on or off campus that may be of assistance to the student, setting up another appointment to continue discussion if needed, either with the BASICS practitioner or a counselor on or off campus, or referral to other services to deal with problems that may have been brought up during the sessions, perhaps regarding academic or residential issues (Dimeff, 1999).

Specific cognitive-behavioral strategies were used in BASICS’ program design. BASICS uses the bio-psychosocial habit model to emphasize the students ability to learn effective coping strategies in addressing high-risk alcohol consumption and its consequences (Dimeff, 1999). Using this model the student is seen as possessing the capabilities to make positive changes in behavior, and not as personally responsible for the cause of the problems. Without placing blame or fault the practitioner should foster changes in student behavior by building proper decision making skills in regard to alcohol consumption (Dimeff, 1999).

Motivational interviewing (MI) is a very important piece of BASICS (Dimeff, 1999). The premise for MI is that motivation is dynamic, not a trait someone either has or does not have, and is likely a behavior that will wax and wane. When motivation is viewed as something to be inspired, the practitioner has a clear goal to encourage students to build their own motivations to make positive behavior changes (Dimeff, 1999). MI works directly with the theoretical framework that BASICS is built upon, Prochaska and DiClemente’s Transtheoretical model. MI is used to match the
intervention with the stage of change the student is in at the start of the session. As the
sessions move forward, so might the readiness for change, and so the stage of change the
student is in. The five stages in the stages-of-change model are: pre-contemplation,
contemplation, preparation, action and maintenance. Each stage has its own
characteristics that can be matched to the student’s expressions of his or her drinking
habits. Depending on the way in which the student reacts to the assessments and
feedback the practitioner provides, will determine their level of readiness to change.
When interacting with students the main goal is to encourage some type of positive
change, but not necessarily giant steps from pre-contemplation to maintenance. Small
steps such as thinking about changing, or recognizing how alcohol is in fact negatively
affecting their academics or social life would be a success. The primary task for the
practitioner is to help the student see the best routes for change depending on the stage at
which the student stands (Dimeff, 1999).

BASICS also uses the cognitive-behavioral approach to high-risk behaviors
(Dimeff, 1999). Using the cognitive-behavioral approach for alcohol consumption, two
main points must be addressed, “(1) identifying the behavior(s) to change, and (2)
understanding the functional relationship between the individual’s behaviors and the
context in which the behaviors are embedded” (Dimeff, p39). Practitioners should work
with the student to do the following:

(1) identify high-risk drinking situations, (2) provide accurate information
about alcohol, (3) identify personal risk factors, (4) challenge myths and
positive alcohol expectancies, (5) establish more appropriate and safer
drinking goals, (6) manage high-risk drinking situations, (7) learning from
mistakes, (8) increasing self-efficacy, and (9) attaining lifestyle balance (Dimeff, p39-42).

By using assessment tools that will give the student an idea of how much they are drinking over a time period (weekly, monthly, etc) and how often they drink, as well as other factors that may cause the student to question their drinking habits such as: how much money they spend on alcohol, how many calories they ingest and how alcohol affects health, wellness and academics (Dimeff, 1999). Teaching students accurate and practical information about alcohol such as how to determine their blood alcohol level may encourage the adoption of safer drinking habits and challenge myths they might have held as true. Many students learn their drinking habits, knowledge and patterns from other peers, which lead students to accept social norms and misperceptions as standard. By challenging those myths and norms, identifying personal risk factors such as family history the student may be more willing to set appropriate goals, feel confident in managing high-risk situations and learn from their mistakes. All of these factors will hopefully lead to maintenance of lifestyle balance where students will feel comfortable abstaining or drinking in moderation (Dimeff, 1999).

Research has shown that high-risk students who participated in BASICS were able to significantly decrease their alcohol consumption and negative consequences related to alcohol use compared to a control group (Dimeff, 1999). Dimeff (1999) has hypothesized that BASICS may also be as effective implemented as a prevention program for college students. Wu (2007) found that among students with alcohol use disorders, very few (1.9%) used treatment services such as self-help groups, counseling, family physicians, or alcohol rehabilitation facilities. Also, very few students who met
the criteria for an alcohol use disorder reported not using treatment services because they did not perceive the need for such treatment. Reasons cited by Wu (2007) for students not seeking out treatment services were: lack of motivation and denying there is a problem. Students who did seek treatment reported waiting until their alcohol use created major problems in their lives (Wu, 2007). By implementing prevention programs on campus students may be more likely to develop healthier habits in relation to alcohol use, and may be more likely to seek or respond to treatment if pathways and resources are elucidated. However, research has shown that students who receive written requests to participate in a brief psycho-educational intervention to examine their alcohol use often do not, whereas those who do so when required will participate consistently and often reduce the recurrence of negative consequences due to high-risk alcohol use (Lewis, 2006; and Longabaugh, 2001).

**Medical Amnesty Policies**

To prevent alcohol use, specifically for those under the legal drinking age, colleges and universities have instituted policies, practices and initiatives that address student conduct related to alcohol use. Research however, has shown that traditional policies may actually deter students from seeking medical assistance in dangerous situations due to alcohol use, because of the fear of the judicial consequences on campus (Lewis, 2006). This fear extends to the Good Samaritan who may hold off from seeking help for an intoxicated friend, either because they do not realize how sick the friend is or for fear of the consequences they may face for their own drinking violations (Lewis,
In the past decade institutions of higher education have been developing and implementing Medical Amnesty policies that act against this fear and work to increase the chance that students will seek medical treatment for themselves, a friend or fellow student (Lewis, 2006). Medical Amnesty policies eliminate or reduce consequences from judicial affairs for the students who are involved in seeking medical attention. Often the policy includes consequences, in the form of mandatory participation in an alcohol screening, education and or counseling class or one-on-one session such as BASICS (Lewis, 2006). A survey done at Cornell University found that although 19% of students thought about getting medical assistance for someone who was intoxicated, only 4% actually reported calling for help (Lewis, 2006). 9.3% of students reported being unsure if the person was sick enough to warrant medical assistance as the most frequently reported reason for deciding not to call. 3.8% of students responded that they did not want to get the intoxicated person in trouble as the next highest reason for deciding not to call. The goals of a Medical Amnesty Policy generally include: (a) increasing the likelihood for students to call for medical help if themselves or another student are experiencing an alcohol-induced emergency, ant (b) to develop a pathway for recruitment of follow-up psycho-educational interventions for those students who receive medical attention due to their alcohol use (Lewis, 2006). According to Lewis (2006) a survey of Cornell students before and after the implementation of MAP showed an increase in the number of students who called for help for a person in need of medical attention due to intoxication, from 4.5% in 2000 to 6.8% in the 2002-2003 school year. Importantly, it was noted by Lewis (2006) that the number of students who reported not calling due to fear of getting the person in trouble decreased from 3.8% to 1.5% during the 2003-2004
school year. Although one might argue that seeing an increase in medical assistance for intoxicated students would suggest a worsening alcohol problem on campus the concurrent data collected on alcohol use among students stayed relatively close and showed no increasing trends of alcohol use (Lewis, 2006). It can be assumed that the increase in students calling for assistance is due to MAP, the difference in students calling therefore represents the number of students who prior to MAP would have received no medical assistance and suffered potentially life threatening consequences.

One of the most important findings from Cornell’s MAP assessment was the amount of students who responded that they did not call for medical assistance because they did not know how sick the intoxicated person was (Lewis, 2006). This information raises a red flag and should be addressed when developing and implementing any type of alcohol education or prevention program. Information regarding recognizing the warning signs of alcohol poisoning is essential to impart of college students (Lewis, 2006). Therefore, it can be said that even if a student is a non-drinker participating in an alcohol prevention program can still be essential to preventing negative consequences due to alcohol use on college campuses. Those who stay sober, or drink in moderation may be the students who most often are encountered with the situation of having to call for medical assistance for someone who may or may not be suffering from alcohol poisoning. It is imperative that all students be able to recognize a student in need. Cornell’s MAP assessment also showed that the number of students involved in the required alcohol education and screening sessions more than doubled from 22% in 2001 to 52% during the 2003-2004 school year (Lewis, 2006). This information as well as the need for all students to be educated on recognizing a student in need can have significant
implications for colleges and universities. Having the staff and resources to attend to those students is essential to implementing MAP effectively and providing proper alcohol education, prevention and resources to the college community.

Conclusion

The current trends in alcohol use suggest that high-risk alcohol use and its consequences are not disappearing and simply lowering the drinking age will not solve the problem. High-risk alcohol use occurs for many reasons, the most concerning influencing factors are: the lack of proper role modeling by influential adults, misperceptions among peers of alcohol consumption, and the environment created by social norms that accept high-risk alcohol use and encourage the expectations for high-risk alcohol use to occur. High-risk groups are prevalent on almost every campus across the nation. These groups dynamics not only affect the group members but the entire campus as they serve as role models that set the tone of the drinking environment. Harm reduction techniques including alcohol and student conduct policies and regulations must be evaluated for effectiveness and their ability to protect students from the negative consequences related to alcohol use, educate students on alcohol’s effect on their lives, harm reduction techniques and recognizing a student in need, as well as encourage seeking medical and psychological assistance if concerned with alcohol use. Institutions of higher education have the responsibility to address the issues that face the population they are catering to, this includes issues that affect body, mind and spirit in and outside of the classroom, and that will shape their future lives and wellbeing.
RESULTS

Program Development and Implementation

Program development started during the 2007-2008 school year when Dr. Robert Chapman of the Behavioral Health Counseling program at Drexel, Kathy O’Brien of the Academic Advising Office in Athletics at Drexel and John Watson of the Office of Alcohol Other Drug and Health Education, discussed the possibility of implementing an alcohol education and prevention program for first-year student-athletes at Drexel. Collaborative meetings and communication occurred at the start of the Fall 2008 quarter. It was decided that BASICS would be used as the program of choice, due to Dr. Chapman’s and John Watson’s knowledge of the program. A BASICS training session occurred in September that was attended by students in the Behavioral Health Counseling program and myself. During the Fall I conducted a literature review that enabled me to inform the development of BASICS at Drexel using research from other institutions that have used BASICS and conducted similar alcohol education programs for student-athletes and first-year students. The literature, however, brought to my attention the lack of baseline data Drexel has for their student-athletes, as well as poor communication between student-athletes and the Office of Alcohol Other Drug and Health Education. A needs assessment would have been beneficial to inform the process of developing and implementing the program in congruence with the needs and wants of the student-athletes.

In the Fall a program implementation and evaluation plan were created as collaborative sessions continued, and revised as needed throughout the development
process (see Appendix A for most up-to-date theory of change). Throughout the Fall of 2008 the logistics of implementing the program were put in place, IRB paperwork was written and submitted, approval from the Dr. Zillmer, Drexel’s Athletic Director was given (see Appendix B), recruitment scripts were created, which were revised in February to reflect the changes to the project (see Appendix C). Unfortunately, due to some roadblocks, the IRB submission was not reviewed until January 2009 and returned with a request for a full review in February 2009. Due to time restrictions we did not go ahead with the full review and submitted request for a release letter (see Appendix D). The project, however, continued as planned.

During the developmental meetings discussions concerning availability of student-counselors and student-athletes were at the fore-front. Concerns over attracting participants lead to the development of a program description letter to Dr. Zillmer, Drexel’s Athletic Director, which he approved. As program development went on it was apparent that each department involved thought that students should be contacted by someone other than their staff. Athletics believed that it would be better if the Office of Alcohol Other Drug and Health Education contact the students, while John and I thought that establishing contact through Athletics would make students more likely to participate. Ultimately contact was made by the Office of Alcohol Other Drug and Health Education so that scheduling with student-counselors would run smoothly and student-athletes would be able to request further information related to alcohol use if needed. We hoped to enable participation through offering incentives such as reduced study hall hours; however, it was found that student-athletes at Drexel are not required to put in a certain number of hours at the Academic Achievement Center or other type of
study-hall. Although Dr. Chapman and Kathy O’Brien discussed setting up a time to meet with coaches to present BASICS and the goals of our program and develop advertisements to be displayed in the Daskalakis Athletic Center, for unknown reasons, this never occurred. We were able to secure a room at the Daskalakis Athletic Center where BASICS sessions could be held. Student-counselors were contacted through Dr. Chapman and we were given contact information for two student-counselors who Dr. Chapman saw fit to run BASICS sessions. After contacting the student-counselors we were informed by one (the other never replied) that she was very busy and could only give 2 hours per week of her time. Student-athlete e-mail addresses were then obtained through Kathy O’Brien in Athletics for the first-year student-athletes from fall athletic teams. Fall student-athletes were ultimately chosen as the ideal participants because of their status as out of season and therefore should have more time in their schedules to participate in programming such as BASICS. With the combination of 10 week class sessions and athletic commitments it was decided that fall athlete’s who were out of season during the winter, when BASICS was to be implemented, would be the best for gaining the participation we were hoping for. After sending three e-mail announcements to the student-athletes informing them of the program and inviting them to participate we received a reply from one student-athlete who was interested. This student-athlete was given further information regarding the program and was scheduled for two BASICS sessions with the student-counselor. The student-counselor was made aware of the appointments and attended as scheduled. The student-athlete, however, never showed up and never replied to two attempts of follow-up correspondence. At this time there have been no other student-athlete’s interested in participating in BASICS.
Future Recommendations

1. Involve Team Leaders and Coaches in Student-Athlete Recruitment for BASICS.

To aid the implementation of BASICS for student-athletes in the future I would suggest involving coaches in the recruitment of student-athletes. By providing coaches with the information regarding the program we may potentially gain support for providing athletically related incentives to student-athletes that participate in BASICS. This would provide the support needed to reach student-athletes and potentially encourage behavior change. Much of the hesitance from IRB and other program stakeholders related to this program was the chance that student-athletes may be identified as users of alcohol that would potentially affect their scholarship or participation in athletics. This viewpoint must be taken into consideration in any future implementation of BASICS. Although student-athletes that participate may speak to a counselor about their alcohol use, the student’s attempt to get help for their concerns must not be impeded. A mutually agreeable condition must be found between athletics, IRB and the Office of Alcohol Other Drug and Health Education so that student-athletes are protected from losing scholarships, or the ability to participate in athletics if they are seeking help for a problem or concerns with alcohol use through BASICS. Because of this issue future alcohol education and prevention programs may be designed so that the student-athlete is not involved in one-on-one discussions about their personal alcohol use
but use perhaps group or internet based programs that do not involve direct discussions of personal use.

2. **Advanced Institutional Review Board Approval with an Original Assessment Tool.**

For future implementation of BASICS with an evaluation component I would recommend gaining IRB approval 6 months to one year ahead of time. I would recommend using the Theory of Change attached in Appendix A going forward to guide the evaluation. Due to time restraints associated with IRB approval this project was unable to precede as first planned. It is my suggestion that future evaluation techniques be well thought out, with use of the Theory of Change, and IRB submission completed well ahead of the anticipated start of the program. Attached in Appendix E is a survey that was developed in place of using e-chug, the original pre- and post-assessment tool. From an evaluation perspective using an original survey through a web-based tool such as survey monkey would provide the software needed to conduct pre and post surveys and keep results anonymous and confidential, while allowing for comparisons of pre and post data at the individual level. Piloting the survey would be necessary for use in the future. Included in the survey are demographic questions, alcohol use assessment questions, knowledge questions, and behavior change questions. These sections would allow the evaluators to determine alcohol use trends, knowledge of alcohol’s effects, and readiness to change. Also attached in Appendix E is the scoring tool for the survey.
3. Baseline Data needed on Student-Athletes at Drexel.

I would recommend that baseline data be collected specific to student-athletes on campus. The non-typical experience of a Drexel student-athlete must be taken into consideration when addressing alcohol problems among that population. Drexel student-athletes may be under more pressure than a typical student-athlete that competes during a semester schedule and therefore unlikely to volunteer for an alcohol education and prevention program. Drexel student-athletes compete during a school year broken up into 10 week quarters, this may have out of the ordinary effects on Drexel student-athletes that may or may not make them a comparable population to student-athletes at other institutions. Baseline data such as the amount of athlete’s participating in high-risk alcohol consumption, the negative consequences resulting from high-risk alcohol use among student-athletes, the drinking culture among student-athletes on campus, knowledge of services available, perceptions of alcohol use and other important information regarding the extent of alcohol use among Drexel student-athletes and major concerns relating to alcohol use would be beneficial to collect. Collecting baseline data will also assist in program evaluation and the development and implementation of alcohol education programs in the future.
4. **Conduct a Needs Assessment among Student-Athletes for Alcohol Education focus areas.**

Conducting a needs assessment would be useful to determine whether or not BASICS as a one-on-one or in a group setting would be an appropriate prevention and education tool. From our experience recruitment for one-on-one sessions with no incentive was not successful. Either providing incentives for participating or implementing BASICS as a group session for specific teams, with the approval of the coach, would be potentially more effective in gaining participants. A needs assessment can not only answer specific programmatic questions related to BASICS and other alcohol education programs, but provide an inside view of the perceptions and needs of the student-athlete community on campus. In addition to assessing the needs of Drexel’s student-athletes a concurrent assessment of assets and strengths can assist in identifying leaders among the athletic department or specific team members that may be important resources to tap for future peer education and prevention programs.

5. **Using Trained Professional Counselors or Higher-Level Student-Counselors.**

Implementation of BASICS at Drexel included using trained student-counselors from the Behavioral Addictions Counseling program on campus to conduct the BASICS sessions. While I believe that it would be a beneficial opportunity for the student-counselors it caused significant barriers to implementation. Although we were told that 3
to 4 student-counselors would be prepared to participate in BASICS by the winter quarter, only 1 ultimately agreed to participate and was only available 2 hours per week. Suggestions for future implementation would be using trained professionals or higher-level student-counselors in graduate or doctorate level programs. Unfortunately, counseling staff is limited at Drexel, which was cause for the decision to use student-counselors in the original plan. Due to the lack of staffing and funding for more staff one option would be to use and train graduate students who may have more experience and comfort in participating in the sessions, or holding group sessions where confident student-counselors or professional staff members can address more students at once.


Considering other factors that will affect future implementation of BASICS I would suggest determining whether the implementation of the Medical Amnesty Policy at Drexel would serve as a new pathway for BASICS recruitment or potentially hinder the ability to continue. The Medical Amnesty Policy would potentially offer a direct pathway for students who experience consequences related to their alcohol use that require medical attention and are therefore required to attend alcohol education programming. BASICS can be used to serve the requirement of judicial sanctions under the Medical Amnesty Program of student-athletes, either one-on-one or in a group setting. Other institutions, such as Cornell who have implemented a Medical Amnesty Policy have seen dramatic increases of more than double the amount of students being scheduled for alcohol education programs (Lewis, 2006). A dramatic increase in students
being seen for alcohol education sessions would provide a pool of participants for the program. Separating student-athletes out from the general student body being scheduled for alcohol education programs through the Medical Amnesty Policy would provide a direct pathway for student-athletes needing alcohol education programming into BASICS and lightening the load of students in the general alcohol education program.

**DISCUSSION**

Alcohol prevention and education for college students is imperative, especially for today’s millennial student. Students of the millennial generation tend to rely on their peers for information relating to alcohol and other drugs and are easily persuaded by the environmental social norms they experience and their perceptions of their peer’s behaviors. There are many misperceptions relating to alcohol, especially students’ beliefs about their peers drinking patterns. Misperceptions and social norms should be addressed when conducting alcohol prevention and education programs. Harm reduction is an effective and important aspect of alcohol prevention and education and should be available to all students, especially when addressing students’ knowledge on when to get help for themselves or a friend who has been drinking. BASICS has been proven effective at many different institutions across the country. Implementing BASICS, especially among a specific population on campus requires cross department cooperation and support. Students should be familiar with the program prior to implementation to allow for word of mouth recruitment and trust. Gaining support from departments on campus is essential; as a result incentives can be created through the individual
departments so that students will be enticed to participate in BASICS. Significant programmatic obstacles were experienced during the development and implementation of BASICS for first-year student-athletes at Drexel. The information gained from attempting to initiate BASICS will be useful to inform future alcohol education programs. The most important aspects of implementing BASICS would be to establish stable pathways for recruitment and gaining reliable counselors to see students for BASICS sessions. Without stable and reliable participants and support BASICS will not have the capacity to establish itself as an effective program. Support from many departments across campus was established, however, actual staffing for the program was unsuccessful. Reliable, experienced counselors, whether professional staff members of the University or students in the Behavioral Addictions Counseling program or other Graduate or Professional masters programs, must be used and scheduling times must be made to comply with the erratic schedules of Drexel’s student-athletes. Planning, especially for any future evaluation or IRB submission is imperative. During the development phase of BASICS communication of the expected and actual evaluation plan was lacking. Realistically a web-based system for survey creation and management would provide a confidential, secure, professional and effective means for evaluating the program participants. The plan to use the existing web-based assessment tool (E-chug), which involved printing the results, keeping track of student ID numbers and un-modifiable questions posed potential breach in confidentiality and a challenge to collect post surveys as well as organize and evaluate the data.

Implications of campus policies affecting alcohol use among student-athletes must be evaluated as either a hindrance or help to BASICS. BASICS was proposed as a voluntary
alcohol education program for first-year student-athletes involving student-counselors,
there is potential for an effective, long lasting program to emerge, however, the support
and staffing must be used to the benefit of the students and the program. Current
development of the Medical Amnesty Policy on campus may offer the Office of Alcohol
Other Drug and Health Education as well as the Behavioral Addictions Counseling
Program and the Athletics Department a unique opportunity to create a stable pathway
for alcohol education programming for student-athletes who experience alcohol related
consequences. For future voluntary programs incentives will be necessary to establish
consistent participation, importantly coaches and team leaders must be contacted for
potential incentive ideas and encouragement, especially for first-year student
participation.

CONCLUSION

Throughout my work on this project it was clear that Drexel administrators, faculty
and staff sincerely have the best interest of students in mind when developing and
administering programs such as BASICS. Although the University has established a
need for alcohol education and prevention there is limited support in providing services
beyond the current judicial sanctioned education programs to specific groups on campus.
As the Medical Amnesty Policy is implemented it seems as though Drexel administration
and staff plan on creating a more caring, supporting environment for students, which may
allow for support to programs such as voluntary alcohol education programming for
student-athletes. It is important to note that results from Medical Amnesty Policy
evaluations at similar schools showed that students reported not knowing when to seek medical assistance for a friend in need; therefore, students can not determine what a friend in need looks like (Lewis, 2006). An argument could be made based on this fact that all students, regardless of alcohol consumption patterns, needs to have some sort of alcohol education at some point in their college career, most likely it would benefit the entire student community if this education took place prior to attending college or in the first few months. While Drexel has shown limited success with the establishment of BASICS for first-year student-athletes, the impending changes that will take place with the advent of the Medical Amnesty Policy could deepen the support and will of campus administrators, faculty, staff and students in accepting and participating in future alcohol education and prevention programming. It is encouraged that the Office of Alcohol Other Drug and Health Education play a significant role in the development, implementation, monitoring and evaluation of future programming.
BIBLIOGRAPHY


(ACHA) American College Health Association (2007b). American College Health Association Drexel University Health Assessment. Drexel University: Office of Alcohol Other Drug and Health Education.


Wechsler, H., Nelson, T. F. (2008). What we have learned from the Harvard School of Public Health College Alcohol Study: focusing attention on college student alcohol consumption and the environmental conditions that promote it. *Journal of Studies on Alcohol and Drugs.*


APPENDICES
APPENDIX A
**Program Name:** B.A.S.I.C.S. (Brief Alcohol Screening and Intervention for First-Year Student Athletes at Duquesne University)

**Target Population:** First Year Student Athletes at Duquesne University

**Contextual Background**

- Campus administrators are supportive of B.A.S.I.C.S.
- The departments of Student Affairs, Counseling, and Athletics are ready and willing to work with us on implementing and sustaining B.A.S.I.C.S.
- B.A.S.I.C.S. is a well-designed program that has been proven effective at colleges and universities across the country.
- Participation in B.A.S.I.C.S. will be through mandatory referral from judicial affairs.
- B.A.S.I.C.S. sessions will be confidential and one-on-one, with a B.A.S.I.C.S. trained counselor.

**Assess:**

- The first meeting takes place at off-campus bars and Greek houses.
- Campus bars are where students are often socializing, drinking games, and other promotions such as "go to the bar for free when you drink.
- Students are more likely to drink in larger quantities than those who are not consuming alcohol.
- Students who use alcohol as a role model and model their risky behaviors.
- Alcohol use is seen as a socially acceptable activity at college.

**Assumptions**

- Students are willing to participate in an alcohol screening and interventions.
- Students are capable of assessing and making changes to their alcohol-related behavior.
- Students want to change their alcohol-related behavior.
- Students believe they have a problem with alcohol.
- B.A.S.I.C.S. will have a positive effect on alcohol consumption.
- Harm reduction education will lead to less negative consequences associated with drinking.
- Counselors will be effective in helping students assess and change their behavior.

**GOAL 1:** Assess students’ alcohol consumption and drinking trends among the student population.

<table>
<thead>
<tr>
<th>Activities</th>
<th>Short-term Outcomes (1-2 yrs)</th>
<th>Long-term Outcomes (3+ yrs)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

**Goal 1:**
- Educate students on alcohol’s effect on the body, harms reduction techniques, and common misperceptions.
- Assess students’ alcohol consumption and drinking trends among the student population.

**Goal 2:**
- Assess students’ alcohol consumption and drinking trends among the student population.

**Goal 3:**
- Assess students’ alcohol consumption and drinking trends among the student population.

**Intermediate Outcomes (1-2 yrs):**
- Identification of high risk group

**Strategic Focus:**
- To reduce alcohol use among undergraduate student athletes at Duquesne University, by helping students assess and change their risky drinking habits so they can lead more academically and personally enriching lives.
**GOAL 2**: Educate students on alcohol’s effect on the body, harm reduction techniques and common misperceptions

<table>
<thead>
<tr>
<th>Activities</th>
<th>Short term Outcomes (1-2 yrs)</th>
<th>Intermediate Outcomes (2-3 yrs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ Two 40 minute one-on-one counseling sessions</td>
<td>➢ Students can identify personal triggers for drinking</td>
<td>➢ Increased Awareness on campus and among specific high-risk groups of alcohol use patterns</td>
</tr>
<tr>
<td>➢ Review e-chug results</td>
<td>➢ Identification of common misperceptions across student groups on campus about drinking patterns</td>
<td>➢ Decreased number of drinking events and quantity of alcohol consumption among students</td>
</tr>
<tr>
<td>➢ Discussion topics include:</td>
<td>➢ Increased knowledge of harm reduction techniques</td>
<td>➢ Decreased number of alcohol related consequences, specifically individual and campus wide consequences (assaults, injuries, illnesses, infections, etc)</td>
</tr>
<tr>
<td>➢ Typical drinking patterns</td>
<td>➢ Ways to change drinking patterns</td>
<td>➢ Reduction in high risk drinking patterns</td>
</tr>
<tr>
<td>➢ Triggers for alcohol consumption</td>
<td>➢ Common misperceptions</td>
<td></td>
</tr>
<tr>
<td>➢ Ways to change drinking patterns</td>
<td></td>
<td></td>
</tr>
<tr>
<td>➢ Common misperceptions</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### GOAL 3: Assess readiness to change, motivate stage in change and plan future treatment

<table>
<thead>
<tr>
<th>Activities</th>
<th>Short-term Outcomes (2 yrs)</th>
<th>Long-term Outcomes (3+ yrs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>➤ Two 40 minute one-on-one counseling sessions</td>
<td>➤ Students self-identify readiness to change their drinking behaviors</td>
<td>➤ Positive changes in stage of change (TTM) Students moving forward with changing their behavior related to alcohol consumption.</td>
</tr>
<tr>
<td>➤ Family history</td>
<td>➤ Students self-identify their drinking motivations and family history of alcohol consumption.</td>
<td>➤ Reduction in number of students needing referrals to off-campus treatment centers.</td>
</tr>
<tr>
<td>➤ Identify motivations</td>
<td>➤ Students create goals for changing drinking behavior</td>
<td></td>
</tr>
<tr>
<td>➤ Identify future goals</td>
<td>➤ Referrals to off campus treatment centers made for students who present with serious alcohol dependency and alcoholism.</td>
<td></td>
</tr>
<tr>
<td>➤ Refer for further treatment if necessary</td>
<td>Intermediate Outcomes (2-3 yrs)</td>
<td></td>
</tr>
<tr>
<td>➤ Readiness to change questionnaire</td>
<td>➤ Positive, incremental changes in stage of change (TTM).</td>
<td></td>
</tr>
</tbody>
</table>
December 14, 2008
Drexel University
Department of Athletics
Athletic Director

Dear Dr. Zihmier,

The following is a description of a proposed alcohol education/prevention program designed to help address high risk drinking called B.A.S.I.C.S. or Brief Alcohol Screening and Intervention for College Students. I am working with John Watson in the Office of Alcohol Other Drug and Health Education in accordance with my masters’ project for the School of Public Health, to implement B.A.S.I.C.S. with a select group of first-year athletes. B.A.S.I.C.S. has been used at many different institutions across the nation with a good deal of proven effectiveness and we feel it would be a good fit here at Drexel.

Project Goals
- Reduction of high risk behaviors among program participants.
- Enhanced collaboration between Athletics, The Office of Alcohol, Other Drug, and Health Education to better meet the needs of student athletes.
- Evaluate the effectiveness of B.A.S.I.C.S. as a prevention program among first-year student-athletes with the possibility of continuation.

Program Elements
- Assessment
  - On-line self assessment in the form of e-chug (10 minutes)
  - 1 in-person interview (Session 1) with a trained B.A.S.I.C.S. Student Counselor (40 minutes)
  - Drinking data collection between sessions 1 & 2
- Feedback
  - 1 in-person session with a trained B.A.S.I.C.S. Student Counselor to review data collected through the assessment and to provide further recommendations (40 minutes)
- Follow-up assessment for behavior change
  - Repeat of the e-chug on-line self assessment (10 minutes)
  - Results will be compared to the pre intervention results to assess for behavior change

Program Design
- Student-athletes 18 years of age or older will be recruited via e-mail to participate in the program and evaluation.
- Student-athletes will be randomly selected from those who participate to take part in either the B.A.S.I.C.S. program and evaluation or just the evaluation (control group).
- Those participating in the B.A.S.I.C.S. sessions and evaluation will schedule an appointment with a B.A.S.I.C.S. counselor and will be asked to sign a consent form.
- Those participating in the evaluation only will be given the link to e-chug and reminded in 30 days to retake e-chug.
- Absolutely no personal identifiers will be linked to the results and any and all information shared during B.A.S.I.C.S. sessions will not be used for evaluation purposes. All of the information shared and collected is private and confidential. At any time any student participating may decline to go any further, and any information collected will be destroyed.

Program Participants
- Project Coordinator: Kirsten Bugliose (2nd year student Drexel's Graduate School of Public Health)
- Supervisor: John Watson, Director, Office of Alcohol and Drug Education and Health Education
- Supervisor: Dr. Robert Chaplin, Assistant Clinical Professor, Behavioral Health and Addictions Counseling (BAC)
- Athletic Department liaison: Kathy O'Brien, Assistant Director of Athletics and Student Services
- Student Counselor: Juniors and Seniors in the BAC Program
- Student-Athletes: first year volunteers

By signing below permissible access to student-athletes and their e-mail addresses is granted to the project investigators.

Name: ___________________ Date: 03/08/08

Sincerely,

Kristen Bugliose

MPH Candidate
School of Public Health
Drexel University
e-mail: kb276@drexel.edu
cell: 215.551.1940
APPENDIX C
Dear Freshman Student-Athlete:

My name is John Watson, Director of Alcohol, Other Drug, and Health Education. We are in the process of recruiting first year student-athletes for the alcohol prevention and education program called BASICS (Brief Alcohol Screening and Intervention for College Students) and would like to invite you to participate.

If you agree to participate in BASICS, here is what you can expect:

• Completion of the e-chug online alcohol assessment tool (which takes no longer than 10 minutes to complete) prior to your first session.
• Two 40 minute one-on-one sessions with a BASICS Trained Student-Counselor.
  o Sessions available on Fridays between 11am-2pm and 4-6pm.
• Assessment and discussion of alcohol use.
• Completion of the e-chug online alcohol assessment tool 30 days after your last session.

If you would like to participate please reply to this e-mail and provide your name, your availability for the times listed above, and the best way to contact you (alternate e-mail address, phone, etc.). We greatly appreciate your support and participation.

This process is completely confidential. If you are not able to participate but would like to receive information or counseling on alcohol consumption please refer to the Office of Counseling and Health and the Office of Alcohol Other Drug and Health Education: http://www.drexel.edu/studentlife/ch/default.html.

If you have any questions or concerns, please do not hesitate to contact me at watsonjc@drexel.edu.

Thank you for your time and consideration,

John Watson, MS, NCC, LPC
Director of Alcohol, Other Drug, and Health Education
Assistant Director of Counseling

C.H.O.I.C.E.S. Center
3320 Powelton, 1st Floor Office
Philadelphia, PA  19104
phone - 215 895-2049
BASICS Participation E-mail Reply

Dear ___________ (Name):

Thank you very much for your interest in participating in BASICS. We request that you now schedule your two one-on-one sessions. Please reply with the days and times you are available to meet (from those available below). Remember the sessions run approximately, but no longer than 40 minutes. Once I am able to schedule you with a trained BASICS student-counselor I will confirm the date, time and location of your sessions and give you further instructions as well as the contact information for your session counselor.

This process is completely confidential. If you have any questions or concerns please do not hesitate to contact me.

Week of February _/09
11-12
12-1pm
1-2
4-5
5-6

Week of February _/09
11-12am
12-1pm
1-2pm
4-5pm
5-6pm

This process is completely confidential. If you are not able to participate but would like to receive information or counseling on alcohol consumption please refer to the Office of Counseling and Health and the Office of Alcohol Other Drug and Health Education: http://www.drexel.edu/studentlife/ch/default.html.

If you have any questions or concerns, please do not hesitate to contact me at watsonjc@drexel.edu.

Thank you for your time and consideration,

John Watson, MS, NCC, LPC
Director of Alcohol, Other Drug, and Health Education
Assistant Director of Counseling

C.H.O.I.C.E.S. Center
3320 Powelton, 1st Floor Office
Philadelphia, PA  19104
phone - 215 895-2049
Confirmation E-mail

To: Student-Athlete
CC: Student-Counselor

Dear __________ (Name):

This e-mail is to confirm your BASICS sessions. Listed below is the date, time and location of your sessions and the contact information for your student-counselor. Please contact me if the information below is not correct. Please contact your student-counselor within 24 hours of the session if you need to change the time/date of your session.

Session #1:
- Date: 
- Time: 
- Location:

Session #2:
- Date: 
- Time: 
- Location:

Student Counselor:
- Name: 
- E-mail: 
- Phone:

Please complete the e-chug assessment (this will take no longer than 10 minutes) by clicking on the link below: https://interwork.sdsu.edu/echug2/?id=Drexel&hfs= remember to print the results and bring them with you to your first session. Please write down the Identification Number that is provided to you by e-chug, this number will be needed for the follow-up e-chug after your second session. This process is completely confidential.

We greatly appreciate your participation in BASICS, we hope it is a valuable experience and will accept any feedback you may have once you’ve completed the program.

This process is completely confidential. If you are not able to participate but would like to receive information or counseling on alcohol consumption please refer to the Office of Counseling and Health and the Office of Alcohol Other Drug and Health Education:
http://www.drexel.edu/studentlife/ch/default.html.

If you have any questions or concerns, please do not hesitate to contact me at watsonjc@drexel.edu.

Thank you for your time and consideration,

John Watson, MS, NCC, LPC
Director of Alcohol, Other Drug, and Health Education
Assistant Director of Counseling

C.H.O.I.C.E.S. Center
3320 Powelton, 1st Floor Office
Philadelphia, PA 19104
phone - 215 895-2049
Post Session E-chug Reminder

Dear ___________ (Name)

It has been 30 days since your second BASICS session. We hope that you enjoyed your experience and ask just one more task of you. Please log onto e-chug using the ID# (below) you were given during the first e-chug assessment. Once you have completed the assessment make sure you allow the program to send your results to John Watson, Director of Alcohol and Other Drug Education. Once your final e-chug assessment is sent all links between your name/e-mail and your ID# will be destroyed. Remember this process is confidential.

E-chug link: https://interwork.sdsu.edu/echug2/?id=Drexel&hfs=
ID#

This process should take no longer than 10 minutes to complete and is completely confidential. Thank you again for your participation, if you have any questions or concerns please do not hesitate to contact me.

This process is completely confidential. If you are not able to participate but would like to receive information or counseling on alcohol consumption please refer to the Office of Counseling and Health and the Office of Alcohol Other Drug and Health Education: http://www.drexel.edu/studentlife/ch/default.html.

If you have any questions or concerns, please do not hesitate to contact me at watsonjc@drexel.edu.

Thank you for your time and consideration,

John Watson, MS, NCC, LPC
Director of Alcohol, Other Drug, and Health Education
Assistant Director of Counseling

C.H.O.I.C.E.S. Center
3320 Powelton, 1st Floor Office
Philadelphia, PA 19104
phone - 215 895-2049
APPENDIX D
MEMORANDUM

TO: Randy Sell, Sc.D. MS: 659

FROM: Sreekant Murthy, Ph.D.
Vice Provost of Research Compliance

SUBJECT: Protocol - Development & Implementation of BASICS (Brief Alcohol Screening and Intervention for College Students) for First-Year Student-Athletes

Sponsor: Internal
Univ. Project No.: 1042881
Univ. Protocol No.: 18035

DATE: February 4, 2009

The subject study was reviewed by the Office of Research Compliance. Per our review, the study consists of conducting development meetings, review of literature, and current best practices, creation of program documents, and disseminating program information to counselors, developing a plan of action, collaborating with Drexel staff on program development, planning, and advertisement, as well as providing recommendations for future programs, research, evaluation and/or relating to alcohol education for students. The study involves no human interaction or intervention. Hence, the study is considered non-human subject research.

If you have any further questions on this, please feel free to contact me at 215-255-7857.
Pre/Post BASICS Survey

Instructions

Please answer all questions and answer them honestly.

ALL answers are CONFIDENTIAL. Your name is not attached to this form and no personally identifiable information from this survey will be stored.

Demographics

D1. What is your year in school?
   0- Freshman
   1- Sophomore
   2- Junior
   3- Senior

D2. What is your gender?
   0-Male
   1-Female
   2-Neither apply to me

D3. What is your age? (___)

D4. What is your weight? (___)

D5. Please select the racial/ethnic group(s) within which you would include yourself. (Please check all that apply)
   a. Caucasian/White
   b. Black (non-Hispanic)
   c. Hispanic or Latino(a)
   d. Middle Eastern, Pakistani, and/or Indian
   e. Asian, South East Asian, and/or Pacific Islander
   f. American Indian, and/or Alaskan Native
   g. Other
   h. I prefer not to answer

D6. Are you an international student?
   0-No
   1-Yes

D7. Do you play on a college athletic team?
   0-No
   1-Yes

D8. Are you a member of a fraternity or sorority?
   0-No
   1-Yes
   2- I prefer not to answer
D9. Do you plan on becoming a member of a fraternity or sorority?
   0-No
   1-Yes
   2- I prefer not to answer

D10. Where do you currently live?
   0-Off campus house or apartment
   1-With parent/guardian
   2-Caneris Hall
   3-North Hall
   4-Calhoun Hall
   5-Towers Hall
   6-Myers Hall
   7-Van Rensselaer Hall
   8-Kelly Hall
   9-Race Street Residences
   10-Millennium Hall

About Your Drinking

When completing this survey, please remember that a “standard drink” is equivalent to, a 1.5 ounce shot/ 1 mixed drink, 5 ounces of wine, 1 wine cooler, or 12 ounces of beer, 10 ounces of malt liquor.

A1. At what age did you first start drinking? (___)

A2. In a TYPICAL MONTH, how many weeks do you have an alcoholic drink?
   Weeks you drink in a TYPICAL MONTH:
   (______________) Week
A3. For a TYPICAL MONTH, please describe a TYPICAL DRINKING WEEK. For each day, fill in the number of STANDARD DRINKS of each type of alcohol consumed and the NUMBER OF HOURS you drank on that day.

Drinks per Day in a TYPICAL WEEK:

<table>
<thead>
<tr>
<th></th>
<th>Mon</th>
<th>Tues</th>
<th>Wed</th>
<th>Thurs</th>
<th>Fri</th>
<th>Sat</th>
<th>Sun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beer</td>
<td>(___)</td>
<td>(___)</td>
<td>(___)</td>
<td>(___)</td>
<td>(___)</td>
<td>(___)</td>
<td>(___)</td>
</tr>
<tr>
<td>Wine</td>
<td>(___)</td>
<td>(___)</td>
<td>(___)</td>
<td>(___)</td>
<td>(___)</td>
<td>(___)</td>
<td>(___)</td>
</tr>
<tr>
<td>Liquor/Shots</td>
<td>(___)</td>
<td>(___)</td>
<td>(___)</td>
<td>(___)</td>
<td>(___)</td>
<td>(___)</td>
<td>(___)</td>
</tr>
</tbody>
</table>

Hours (___) (___) (___) (___) (___) (___) (___)

A4. Think of ONE occasion during the PAST MONTH when you DRANK THE MOST. Fill in the number of standard drinks of each type you consumed and the number of HOURS you drank that day:

The ONE Occasion you DRANK THE MOST in the LAST MONTH:

Beer (___)
Wine (___)
Liquor/Shots (___)

Hours (___)

A5. Think about the number of your BLOOD RELATIVES who are now, or have been in the past, problem drinkers or alcoholics.

(____) Parents
(____) Siblings
(____) Grandparents
(____) Uncles or Aunts
(____) Cousins
(____) I prefer not to answer

A6. During the PAST MONTH, how many days did you drive a vehicle shortly after having three or more drinks?

(____) Days

A7. During the PAST MONTH, how many days were you a passenger in a vehicle when a driver had three or more drinks?

(____) Days

A8. How much would you estimate you spend on alcoholic beverages per week?

$(____)

A9. For each of the following, estimate how common you believe these behaviors are: (Enter a percentage between 0 and 100)

a. What number of US college students drink MORE than you?

(____)%
b. What percent of Drexel student drink MORE than you?

(____)%
c. What percent of Drexel students have two drinks or less in a TYPICAL WEEK?

(____)%
d. What percent of Drexel students do not drink at all in a TYPICAL WEEK?

(____)%
A10. Please select the answer that is most closely related to your typical behavior:

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. How often do you have a drink containing alcohol?</td>
<td>0-Never, 1-Monthly or less, 2-2-4 times a month, 3-3 times a week, 4-4+ times a week</td>
</tr>
<tr>
<td>b. How many drinks containing alcohol do you have on a typical day when you are drinking?</td>
<td>0-0-2, 1-3-4, 2-5-6, 3-7-8, 4-9-10, 5-10 or more, 6- I completely abstain from alcohol.</td>
</tr>
<tr>
<td>c. How often do you have 5 or more drinks on more than one occasion?</td>
<td>0-Never, 1-Less than monthly, 2-Monthly, 3-Weekly, 4-Daily or almost daily</td>
</tr>
<tr>
<td>d. How often have you found that you were not able to stop drinking once you had started?</td>
<td>0-Never, 1-Less than monthly, 2-Monthly, 3-Weekly, 4-Daily or almost daily</td>
</tr>
<tr>
<td>e. How often do you fail to do what is normally expected from you because of drinking?</td>
<td>0-Never, 1-Less than monthly, 2-Monthly, 3-Weekly, 4-Daily or almost daily</td>
</tr>
<tr>
<td>f. How often do you need a drink first thing in the morning to get yourself going?</td>
<td>0-Never, 1-Less than monthly, 2-Monthly, 3-Weekly, 4-Daily or almost daily</td>
</tr>
<tr>
<td>g. How often have you had a feeling of guilt or remorse after drinking?</td>
<td>0-Never, 1-Less than monthly, 2-Monthly, 3-Weekly, 4-Daily or almost daily</td>
</tr>
</tbody>
</table>
h. How often have you been able to remember what happened the night before due to your drinking?
   0-Never
   1-Less than monthly
   2-Monthly
   3-Weekly
   4-Daily or almost daily

i. How often have you become ill due to your drinking?
   0-Never
   1-Less than monthly
   2-Monthly
   3-Weekly
   4-Daily or almost daily

j. Have you or someone else been injured as a result of your drinking?
   0-No
   1-Yes
   2-I do not know
   3-I prefer not to answer

k. Has a relative, friend, doctor or other health care worker been concerned about your drinking or suggested you cut down?
   0-No
   1-Yes
   2-I do not know

Knowledge
Please mark the following as True or False

K1. Alcohol affects you more quickly when mixed with carbonated/caffeinated beverages or mixers.
   0-True
   1-False
   2-I don’t know

K2. Your body uses the calories in alcohol as a source of energy in the same way it uses the calories in other kinds of food.
   0-True
   1-False
   2-I don’t know

K3. Drinking alcohol has little or no effect on your ability to build muscle strength.
   0-True
   1-False
   2-I don’t know

K4. Alcohol does not interfere with muscle recovery and healing.
   0-True
   1-False
   2-I don’t know
K5. Students who mix alcohol and energy drinks are at no greater risk of alcohol related consequences than students who don’t mix alcohol and energy drinks (Red Bull, Monster, etc).
0-True
1-False
2-I don’t know

K6. The liver breaks down about .5 oz. of alcohol per hour.
0-True
1-False
2-I don’t know

K7. Consuming 5 or more drinks in one night can affect the brain and body for up to three days.
0-True
1-False
2-I don’t know

K8. 2 consecutive nights of drinking can affect brain and body activities for up to 5 days.
0-True
1-False
2-I don’t know

K9. For individuals 21 and older the BAC limit is .08% (less than or equal to three drinks in two hours).
0-True
1-False
2-I don’t know

K10. The state of Pennsylvania has a PA Zero Tolerance Law for minors, the BAC limit is .02% (less than or equal to one drink).
0-True
1-False
2-I don’t know

K11. It is illegal in the state of Pennsylvania to be found carrying a fake ID.
0-True
1-False
2-I don’t know

Behavior Change

BC1. How IMPORTANT is it to you to make any change in your personal use of alcohol?
1-Not at all important
2-Fairly important
3-Moderately important
4-Very important
5-Extremely important
BC2. How CONFIDENT are you that you are able to make any change in your personal use of alcohol?
   1-Not at all confident
   2-Failry confident
   3-Moderately confident
   4-Very confident
   5-Extremely confident

BC3. My drinking is okay as it is.
   0-Disagree strongly
   1-Disagree
   2-Unsure
   3-Agree
   4-Agree Strongly

BC4. I am trying to drink less than I used to.
   0-Disagree strongly
   1-Disagree
   2-Unsure
   3-Agree
   4-Agree Strongly

BC5. I enjoy my drinking but sometimes I drink too much.
   0-Disagree strongly
   1-Disagree
   2-Unsure
   3-Agree
   4-Agree Strongly

BC6. I should cut down on my drinking.
   0-Disagree strongly
   1-Disagree
   2-Unsure
   3-Agree
   4-Agree Strongly

BC7. It’s a waste of time thinking about my drinking.
   0-Disagree strongly
   1-Disagree
   2-Unsure
   3-Agree
   4-Agree Strongly

BC8. I have just recently changed my drinking habits.
   0-Disagree strongly
   1-Disagree
   2-Unsure
   3-Agree
   4-Agree Strongly
BC9. Anyone can talk about wanting to do something about drinking, but I am actually doing something about it.
   0-Disagree strongly
   1-Disagree
   2-Unsure
   3-Agree
   4-Agree Strongly

BC10. I am at the stage where I should think about drinking less alcohol.
   0-Disagree strongly
   1-Disagree
   2-Unsure
   3-Agree
   4-Agree Strongly

BC11. My drinking is a problem.
   0-Disagree strongly
   1-Disagree
   2-Unsure
   3-Agree
   4-Agree Strongly

BC12. It’s alright for me to keep drinking as I do now.
   0-Disagree strongly
   1-Disagree
   2-Unsure
   3-Agree
   4-Agree Strongly

BC13. I am actually changing my drinking habits right now.
   0-Disagree strongly
   1-Disagree
   2-Unsure
   3-Agree
   4-Agree Strongly

BC14. My life would still be the same, even if I drank less.
   0-Disagree strongly
   1-Disagree
   2-Unsure
   3-Agree
   4-Agree Strongly
Scoring RTCQ

The precontemplation items are numbers 1, 5, 10, and 12.
The contemplation items are number 3, 4, 8, and 9.
The action numbers are 2, 6, 7, and 11.
All items are to be scored on a 5-point scale ranging from:

-2 Strongly disagree
-1 Disagree
0 Unsure
+1 Agree
-1 Strongly Agree

To calculate the score for each scale, simply add the item scores for the scale in question. The range of each scale is -8 through 0 to +8. A negative score reflects an overall disagreement with items measuring the stage of change, whereas a positive score represents overall agreement. The highest score represents the State of Change Designation.

Note: If two scale scores are equal, then the scale further along the continuum of change (precontemplation, contemplation, or action) presents the subject’s Stage of Change Designation. For example, if a subject scores 6 on the Precontemplation scale, 6 on the Contemplation scale, and -2 on the Action scale, then the subject is assigned to the Contemplation stage.

Note that positive scores on the Precontemplation scale signify a lack of readiness to change. To obtain a score for Precontemplation which represents the subject’s degree of readiness to change, comparable to scores on the Contemplation and Action scales, simply reverse the sign of the Precontemplation score (see below).

If one of the four items on a scale is missing, the subject’s score for that scale should be prorated (i.e., multiplied by 1.33). If two or more items are missing, the scale score cannot be calculated. In this case the Stage of Change Designation will be invalid.

<table>
<thead>
<tr>
<th>Scale Scores</th>
<th>Readiness to Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precontemplation score</td>
<td>Precontemplation  (reverse score)</td>
</tr>
<tr>
<td>Contemplation score</td>
<td>Contemplation  (same score)</td>
</tr>
<tr>
<td>Action score</td>
<td>Action  (same score)</td>
</tr>
</tbody>
</table>

**Stage of Change designation**

(Precontemplation, Contemplation, or Action)

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