

## **MUmythbusters Abstract**

The University of Missouri-Columbia's Wellness Resource Center (WRC) has been implementing an extensive social norming effort for six years using clear and consistent messages informing students about the actual alcohol use of their peers as well as informing students about the protective factors that their peers are using in regard to their drinking.

The WRC wants to contribute to the development and advancement of the theory, knowledge, and practices in the field by implementing and rigorously evaluating the impact of an advanced multifaceted social norms and social marketing effort. The WRC proposes to increase the number of students who make responsible decisions in regard to alcohol by changing the norms and behaviors of the students through implementing two comprehensive interventions called **Most of Us Make Healthy, Safe and Smart Choices** and **MUmythbusters**.

This model program proposal is designed to further social norms research, with a special emphasis on evaluating the extent to which students' drinking behavior is influenced by; the perception of their peers' use, what they hope to get out of their own drinking (expectancies) and by their perceptions of the environment in which they drink.

The "**Most of Us make Healthy, Safe and Smart Choices**" campaign will be enhanced through adding more protective factors and by adding data about injunctive norms. In addition, a targeted campaign will be created to better address the higher risk drinkers in the Greek system using injunctive and protective norms. The "**MUmythbusters**" campaign will address myths about the environment in which students drink and about students' drinking expectancies. These myths will be countered with facts in an ongoing marketing campaign.

The evidence of efficacy, the quality of the program, the lessons learned, the implementation strategies and the significance of the results will provide useful information for the field and a model for campuses to replicate.

### **"MUmythbusters"**

The University of Missouri-Columbia (MU) is the main campus of the University of Missouri system with a student population of over 26,000. MU has been developing and implementing prevention programs and services for 16 years through the Wellness Resource Center (WRC) which is committed to addressing prevention through a multifaceted comprehensive approach guided by the principles of environmental management, responsible decision-making, harm reduction, and social norming. MU's prevention efforts have attempted to go beyond traditional prevention programming to create and sustain a systemic change in the social, cultural, and physical environment.

The WRC presently conducts evaluations on an on-going basis such as profiling health-related behavior of students through the Core Alcohol and Other Drug Survey (appendix A) with additional questions (appendix B) which has been administered annually for the past 16 years. For the past five years an additional survey entitled the "Wellness Survey" (appendix C) has been created by the WRC and distributed through a web-based random sampling of students each November. This survey captures students' use patterns and other information such as the protective factors students use before and during drinking. Evaluation efforts also include surveys completed at the end of every prevention program and event. An extensive environmental assessment has been conducted through an ongoing tracking of

alcohol-related articles and ads appearing in the student newspaper and posters placed on campus bulletin boards. Incident report data from Residential Life, Campus Judicial, Campus and Columbia Police are gathered yearly. These data drive the implementation of our comprehensive approach for prevention, integrating student leadership, harm reduction, policy enforcement, and social norming.

The WRC uses extensive environmental prevention strategies that recognize that students do not make decisions about their use of alcohol entirely on their own, but are influenced by the greater community through its policy decisions affecting the availability of alcohol and price of alcohol at local businesses, the level of enforcement of laws, and the availability and attractiveness of alcohol-free social and recreational opportunities both on and off campus. As a result, MU's Chancellor created a campus-community coalition called the Access to Alcohol Action Team which has assisted in developing the strategic plan for decreasing the high risk drinking rate among students. Consisting of campus and community leaders, such as law enforcement, campus administrators, concerned citizens, business owners, and health professionals, the Access Team illustrates the institutional commitment, leadership, and support for prevention efforts on campus and in the community.

WRC's prevention programs and services are student driven with peer educators and other student volunteers leading many of the initiatives outlined in the comprehensive approach. The WRC provides ongoing peer education presentations within the residence halls, Greek houses, and classrooms. The Director of the WRC also presents quest lectures in classrooms on over 50 occasions per year. Major campus-wide events such as Alcohol Responsibility Month, Safe Spring Break, Safe Holiday Break and Wellness Month are planned each year by a steering committee of

student volunteers. The over 200 WRC events are attended by over 12,000 students per year. The WRC has been recognized nationally for its comprehensive prevention efforts (appendix D).

A harm reduction or health protection approach is used by the WRC to help students who drink to reduce their harm when engaging in this risky behavior. The WRC implements a number of harm reduction strategies including creating and sustaining the Project CHEERS to the Designated Driver statewide program. As a result of this effort, over 60 bars in Columbia provide free soda to designated drivers.

In addition, a BASICS (Brief Alcohol Screening Intervention for College Students) style referral workshop has been implemented by the WRC. The WRC runs weekly BASICS 2-hour workshops for students who have been caught in violation of alcohol or drug policies and/or for other students at risk for alcohol or other drug abuse. The process also includes a one-hour individual one-on-one feedback session, in which data about student drinking patterns at MU is shared.

### **Significance**

The WRC's extensive social norming approach which has been in effect for six years has used clear and consistent messages informing students about the actual alcohol use of their peers as well as informed students about the protective factors that their peers are using in regard to their drinking. This campaign has been creative, innovative and extensive and has been incorporated into all aspects of our students' environment: where they live, study, eat, socialize and learn.

This social norming effort has underscored that students consistently overestimate the frequency and intensity of other student substance use as well as underestimate personal vulnerability to the consequences of alcohol misuse. As a

result, students often drink more alcohol to be socially correct even when they might prefer to drink less or not at all. If college students think "everyone is doing it" (drinking), then binge drinking rates rise due to influence from "imaginary peers" (Berkowitz, 1991). In the July, 2005 issue of Journal of Studies on Alcohol, the authors wrote that, "a student's perception of campus drinking norms was the most powerful predictor of how much they drank. Schools that do not seek to reduce these misperceptions with their prevention information are neglecting a potentially powerful component of prevention." (Perkins, Haines, Rice, 2005).

### **Evidence of Success**

The WRC began its social norming six years ago with the message that: "Most MU Students Drink 0-4 Drinks Per Week." The social norming marketing messages were created based on the Core statistics and feedback from focus groups of students. However by the winter of 2003 the students had grown tired of the message. As a result, the WRC stopped the 0-4 message and used data from the Wellness survey to create a new set of messages that focused on the protective factors employed by MU students as well as the good choices students were making in regard to alcohol consumption. The new message was, "**Most of Us Make Healthy, Safe and Smart Choices**" (appendix E). This theme worked well because the University of Missouri-Columbia is called **MU**. The "**Most of Us**" campaign has consisted of three parts: "*Most of Us Make Healthy Choices.....Most of Us Make Smart Choices.....Most of Us Make Safe Choices.*" The WRC also incorporated messages about how MU students have fun, relieve stress, and focused on students' values.

The WRC created weekly social norming ads in the student newspaper, social norming posters in the living units and large sandwich boards for the student

commons. Other social norming promotional items included t-shirts distributed at major prevention events, water bottles, buttons, and mouse pads for all of the computer labs on campus. The WRC believes that it takes more than marketing to have an impact on students. The social norming messages must be re-enforced and explained in educational programs. The peer educators and the WRC staff consistently present social norming outreach programs in freshman experience classes, residence halls, and Greek houses. These programs allow students to question the messages and hear an explanation of how the stats are gathered and why they are factual. The WRC also incorporates social norming messages into all of its outreach programs. In addition, the WRC provided social norming trainings for the influential people in a student's life including admissions recruiters, student outreach teams, academic advisors, faculty, residential life staff, orientation leaders, and parents.

During the academic year the WRC staff drives around campus in its golf cart called the "prize cruiser" rewarding students for wearing promotional "Most of Us" buttons or any of the various social norming t-shirts. The winners are given a \$10.00 gift certificate to the University Bookstore. In addition every couple of weeks a WRC staff member goes through the residence halls to see if the social norming posters are up on the walls. If a poster is spotted the residence hall staff member is given a \$10 gift certificate to the bookstore. This incentive program has resulted in over 85% of the residence hall floors having the posters up, which is a significant exposure to the messages.

Following is a list of the most frequently used messages:

**Most MU students make smart choices:-do not to go to bars or parties Sunday through Thursday night (68.1%) –do not to drink if they have academic obligations the next day (78.3%)-not to drink alcohol at a party (74.7).**

**Most MU students make healthy choices by:-eating before and/or during alcohol consumption (93.8%) -alternating non-alcoholic drinks with alcoholic drinks (58.5%)**

**Most MU students make safe choices by:-always wearing a seatbelt (80.3%), -using a designated driver (who has consumed no alcohol) (86.6%)**

**Most of Us enjoy spending our free time...-watching a movie (89.3%) -spending time with friends without alcohol (85.5%) -playing or listening to music without alcohol or drugs (81.5%) -playing sports or working out without alcohol or drugs (69.8%) -going shopping (60.3%)...More than going to a party with alcohol (53.5%)**

**Most of Us value...Family 95.4% -Friends 91.4% -Education 64.2% -Success 62.9% -Faith 48.2%-Career 40.5% -Money 29.7% -Appearance 22.2%...More than partying 14.0%**

**Most MU students think... that the people (94.6%), the atmosphere (84.2%), the music/entertainment (83.5%), and the dancing (64.0%) make a party or bar more fun than alcoholic drinks (48.0%)**

These “Most of Us” messages resulted in several improvements over the course of a three-year period 2003-2006. These improvements indicate that students are in fact making safer choices about alcohol and are using the protective factors that the social norming messages are promoting. Following is a list of improvements:

- Students who alternated non-alcoholic drinks with alcoholic drinks increased 44%



The believability rate increased in the past two years with the highest believability rate among the freshmen (67%), followed by sophomores (61%), which indicates a 16% increase since 2003. There has been a 5% decrease in students who report underage drinking in the past 30 days from 2003 to 2005. There has been a 21% decrease in the number of residence hall students who have driven under the influence of alcohol and a 10% decrease in the number of underage students who have driven under the influence. Within the residence hall population where much of the efforts were focused, data showed a 17% decrease in the binge drinking rate, a 23% decrease in the frequent binge drinking rate, a 10% decrease in the number of students who drank in the residence halls, and a 14% decrease in the number of students who missed class due to alcohol (Dude, 2003-2005).

### **Areas that need improvement**

#### *Student expectancies are inaccurate*

In the NIAAA's January, 2006 Alcohol Alert it was stated that; "How people view alcohol and its effects influences their drinking behavior." Through the WRC's extensive focus group assessments with MU students it has become clear that they have inaccurate expectancies in regard to their alcohol use (Dude, 2005). For example, typically MU students feel that by drinking they are more likely to "hook up" with someone, reduce their stress, have more fun, and fit in (Dude, 2005). The WRC data suggests that these expected outcomes are not what typically happen when MU students drink. Rather, MU data actually suggests that 82% of MU students become less interested in a person if they drink to the point of intoxication. Similarly, when asked what students do to relax, drinking was eighth on the list behind making lists, exercising, talking with a friend, taking a nap, talking with family, etc. Also

when asked what students do for fun the results indicated that going to parties or bars was tenth on the list behind hanging out with friends without alcohol, hanging out with family, going to movies, playing sports, working out, and etc. Finally, when asked what they value MU students placed partying as eighth on their list below friends, family, success, career, education, appearance, money, and faith which counters the idea that they must drink to fit in (Dude, 2005). Clearly there is a discrepancy between what students expect to happen when they drink and what students report happens when they drink.

### *Environmental Misperceptions*

The WRC focus group research also indicates that MU students have many misperceptions about the campus and community environment which influence the choices they make about alcohol (Dude, 2005). MU students for decades have believed the urban legend that MU has been listed as a top 10 party school by Playboy magazine. In reality this has never happened. In fact, MU has never been listed on any of the top 10 party school lists. Other myths include that students should drive home from the bars instead of walking because if they walk they are more likely to be arrested by the police due to the State of Missouri's new minor in possession by consumption law. In addition, students feel that the police are targeting their student run taxi service in order to make minor in consumption and minor in possession arrests. As a result, some students are deciding to drive themselves home instead. After extensive interviews with police and examining police incident report data, both of these myths are absolutely not true. These are just a few of the many myths that exist among MU students about their environment. These myths result in unhealthy behaviors on the part of students. As reported in the December, 2001 issue of the

“Report on Social Norms” it states that “Myth-Making is the creation of unproven, false collective beliefs about the risk-taking behaviors of a sub-population that grow into widely held beliefs by the general population...these myths become clichés that are recycled and supported.” The social norms article goes on to say, “The misperception-effect....can be minimized by informing the viewer of the true behavioral context and the potential side effects of misinterpretation.” The proposed MUmythbusters campaign will take these myths and, in a mass strategic communications plan, educate students about the facts.

### *Greek students*

One of the main weaknesses of MU’s present prevention efforts has been the inability to have a significant impact upon the Greek population. The norm among this high risk drinking group on the MU campus averages 15-20 drinks per week (Dude, 1990-2005). The drinking rate among MU fraternity men is also excessively high, with the overall fraternity binge drinking rate of 81% (Dude, 2005). Further underscoring the importance of these findings is that 67% (Dude, 2005) of fraternity freshmen indicating they were frequent binge drinkers (binge drinking three or more times in the last two weeks). Promising new research by Mary Larimer, Aaron Turner, Kimberly Mallett and Krend Geiserner in Psychology of Addictive Behavior indicate that “injunctive normative (what people think others believe about what is right to do) feedback may be most appropriate to use with Greeks because it has been found to be more influential and salient in close knit groups.” The WRC has focused its social norming effort on descriptive and behavior norms which have worked with the general population but not well with the Greek population. Injunctive or attitudinal norms could be more effective in impacting Greek students. The WRC will

implement an extensive targeted social norming effort using injunctive norms using communications networks inherent in the Greek systems such as the Greek newspaper and locations within the Greek chapter houses.

### **Plan to Enhance and Further Evaluate**

The WRC has witnessed success with its social norming efforts over the past six years and these efforts can serve as a model for the prevention field on how to improve protective behaviors among students. Now the WRC wants to take these social norming strategies to a next level. The WRC proposes to advance knowledge in the prevention field by implementing a three-fold norm setting effort. *The hypothesis of this grant proposal is that students' drinking behavior is influenced by the perception of their peers' use, what they hope to get out of their own drinking (expectancies) and by their perceptions of the environment in which they drink.* The WRC proposes to advance the prevention field by evaluating the efficacy of this hypothesis and examining the effectiveness of the proposed comprehensive social norming effort's ability to impact student drinking behaviors by targeting the three areas listed.

The WRC will contribute to the development and advancement of the theory, knowledge, and practices in the field by implementing and rigorously evaluating the impact of an advanced multifaceted social norms and social marketing effort. First, the WRC will enhance the present extensive and comprehensive Most of Us campaign that emphasizes protective behaviors by adding injunctive norms. In addition, the WRC will create a new campaign targeting Greek students using injunctive and protective norms.

Secondly, the WRC proposes to implement a campaign called MUmythbusters that will expand its social norming efforts to address not only students' misperceptions about the environment in which they drink but to also dispel the myths students have about what they expect from their drinking. Funding would have a significantly positive impact on the WRC's prevention efforts by allowing it to create a more comprehensive, systemic social norming approach.

The Most of Us and the MUmythbusters campaigns will be creative, innovative, and extensively evaluated and will be incorporate into all aspects of a students' environment, where they live, eat, socialize, and learn. Effective marketing will be coupled with interactive educational outreach programs that incorporate the social norming messages. These programs, facilitated by trained peer educators, will help students openly discuss their misperceptions and will help educate them through these discussions. In addition, the WRC will provide trainings for influential people in a student's life. The WRC will help these impactors understand their roles in the social norming efforts and the importance of having all the impactors in a students' life communicate the same message.

### **Dissemination**

The implementation of this grant will contribute to the advancement of prevention theory through creating promising new strategies that will have been implemented and rigorously evaluated, and be capable of being replicated at other institutions of higher education. The WRC has a history of seeking new ideas, implementing these ideas on the MU campus, evaluating the effectiveness of these strategies and making necessary modifications. This will result in valuable lessons that will be shared with the profession.

The WRC proposes to take their present social norms effort to the next level and implement a comprehensive strategic communications and education plan that would be disseminated to other prevention professionals who could create similar programs at their institutions. The WRC would be an enthusiastic partner with the Higher Education Center for Alcohol and Other Drug Prevention to disseminate information in a special report or white paper will be created that would be available in a special section of the WRC website and/or in publication form. The staff of the WRC would be willing to present at the US Department of Education annual conference, the National Social Norms Conference and the National BACCHUS Peer Education Conference. In addition the WRC staff would be enthusiastic about writing articles for appropriate publications and serving as a consultant to other professionals around the country.

In addition, each year the WRC hosts a regional conference through its Missouri Partners In Prevention (PIP) statewide coalition created and sustained by the WRC since 1999. PIP is composed of the twelve state universities in Missouri. The annual regional conference called “Meeting of the Minds” takes place every April with over 300 professionals and students attending from higher education institutions in Missouri, Nebraska, Iowa and Kansas. This conference would provide a great opportunity to present information and provide individual consultations.

The WRC already has a system in place for creating and disseminating information. For the past six years the WRC has created social norming and other educational materials for the other eleven universities within the Missouri PIP statewide coalition and has a system in place for sharing publications and social norming materials.

## Project Design

In the NIAAA's (National Institute for Alcohol Abuse and Alcoholism) College Drinking Report, A Call to Action: Changing the Culture of Drinking at U.S. Colleges it was recommended that campuses address the abuse of alcohol on three different levels: (1) with the entire student body, (2) in the broader college and community environment, and (3) with the at-risk individual student. The report suggests that campus officials should respond by implementing a comprehensive, coordinated effort with a broad base of support from within the campus and the community. In addition, the US Department of Education in 1999 developed a set of "Principles of Effectiveness" to evaluate alcohol and drug abuse prevention programs which focused on: (a) evidence of efficacy, (b) quality of program, (c) educational significance, and (d) usefulness to others" (Celmens, Cuyahoga, Thombs, 2004).

To address these standards, the WRC proposes to develop and advance the theory, knowledge, and practices in the field by creating and enhancing a comprehensive, innovative and evidence based social norming effort that will serve as a model for the higher education prevention community. The evidence of efficacy, the quality of the program, the lessons learned, the implementation strategies and the significance of the results will be disseminated so as to provide useful information for the field and a model for campuses to replicate.

The WRC proposal will follow the NIAAA recommendations in that a portion of the effort will be aimed at the entire student body, a portion will be aimed at the students whose drinking behaviors are most at risk (Greeks) and the effort will also be aimed at the campus/community environment by changing the perceived normative beliefs that students have in regard to their environment.

The WRC staff and students will develop and implement an extensive social norms campaign that corrects students' normative beliefs about their peers' use of alcohol, their own expectancies about alcohol and the environment in which they drink. As explained earlier, these strategies will become a guide for replication on other campuses. In the message identification stage, current prevalence statistics will be examined to create positive messages about the actual campus norms associated with alcohol use. Focus groups and intercept surveys will be conducted to evaluate the impact of these messages and to screen messages for clarity and believability. The WRC will be careful to pretest at each stage of material development to establish that the messages are quality attention-getting, clear and understandable, factually accurate, up-to-date, credible, attractive, and impactful to students. All of the social norming strategies will occur in three phases: message identification, implementation, and evaluation.

Two complementary social norms campaigns will be implemented simultaneously. First will be the enhancement of the already successful **“Most of Us make Healthy, Safe and Smart Choices”** campaign through adding more protective factors information and by adding injunctive norms data. In addition, a targeted campaign will be created to better address the higher risk drinkers in the Greek system using injunctive and protective norm. The second campaign will be called **“MUmythbusters.”** Every two weeks this effort will take a different myth about the environment or drinking expectancies and counter it with facts that will help to dispel the myths (appendix F). Both of these efforts will include extensive saturation of the messages where students, live, eat, recreate, and study. The MUmythbusters will

include bi-weekly mass emails to students, faculty and staff that will contain a website that will explain the myth in more detail.

Both of these campaigns will be strengthened by the existing partnerships and linkages that exist on campus and in the community. The Access to Alcohol Action Team, the campus/community coalition, meets monthly and initiates the evaluation, dissemination and consistent enforcement of MU's alcohol and drug policies. The University administration is committed to the success of this effort as is illustrated in the attached letters of support. These partners will help in supporting these messages and the dissemination of information about these campaigns.

The WRC proposes that the following mission, goals, action steps and outcomes are specific, measurable and realistic within the time frame of the grant. The logic model in appendix G illustrates these strategies.

**Mission: To increase the number of students who make responsible decisions in regard to alcohol by changing the norms and behaviors of the students through implementing and rigorously evaluating two comprehensive interventions called *Most of Us Make Healthy, Safe and Smart Choices* and *MUmythbusters*.**

Short term Outcomes:

1. Increase the number of social norming outreach programs presented.
2. Increase the number of social norming posters, ads and other promotional items distributed.
3. Increase in the number of people trained on their role in the social norming.
4. Increase the student participation in prevention events and services.

Intermediate Outcomes

1. Increase students' exposure to "Most of Us" and "MUmythbusters."

2. Increase the students' believability of "Most of Us" and "MUmythbusters".
3. Improve the accuracy of the perceptions of MU students about their peers' alcohol use, injunctive norms and protective factors norms.
4. Increase the accuracy of students' perception of their expectancies about drinking.
5. Increase the accuracy of students' perception about the environment in which they drink.

### Long Term Outcomes

1. Decrease the students' average number of drinks per week.
2. Decrease the students' number of drinks per occasion.
3. Decrease the students' typical Blood Alcohol Content (BAC) levels.
4. Decrease the students' negative consequences from drinking (missed class, hangovers, trouble with authorities, etc.)
5. Increase the protective factors used by students when they drink.

### **Goals:**

1. **Enhance the "Most of Us Make Healthy, Safe and Smart Choices", social norming campaign using injunctive and protective norms.**

#### *Action Steps:*

- Place weekly Most of Us ads in the student newspaper.
- Distribute Most of Us t-shirts and other promotional items at outreach events.
- Distribute ID holder/key chain to all new students through the ID office.
- Distribute Most of Us posters to all residence hall floors bi-weekly.
- Implement programs in the residence halls, Greek houses and classrooms

- Train orientation leaders, student recruiters, Residential Life staff, Admissions staff, and academic advisors as to their role in the social norming efforts.
- Implement programs during freshman orientation, Alcohol Responsibility Month, Wellness Month, Safe Spring Break, and Safe Holiday Break.

**2. Create and implement a comprehensive educational marketing campaign called “MUmythbusters” to dispel myths and educate students about the environment in which they drink.**

*Action Steps:*

- Distribute bi-weekly mass email to all students with a new MUmythbusters message that is linked to a website where it is explained in more detail.
- Place MUmythbusters sandwich boards in the student commons.
- Place weekly MUmythbusters ads in the student newspaper.
- Distribute MUmythbusters posters to all residence hall floors bi-weekly.
- Implement MUmythbusters educational outreach programs in the residence halls, Greek houses and classrooms.
- Integrate MUmythbusters into educational outreach programs such as freshman orientation, Alcohol Responsibility Month, Wellness Month, etc.

**3. Utilize the “Most of Us Make Healthy, Safe and Smart Choices” and “MUmythbusters” to implement a targeted campaign addressing students’ misperceptions about what they hope to get out of drinking.**

*Action Steps:*

- Place weekly ads in the student newspaper.

- Distribute social norming t-shirts and other promotional items at outreach events.
  - Distribute ID holder/key chain to all new students through the ID office.
  - Distribute posters to all residence hall floors bi-weekly.
  - Implement programs in the residence halls, Greek houses and classrooms
  - Train orientation leaders, student recruiters, Residential Life staff, Admissions staff, and academic advisors as to their role in the social norming efforts.
  - Implement programs during freshman orientation, Alcohol Responsibility Month, Wellness Month, Safe Spring Break, and Safe Holiday Break.
- 4. Create and implement an ongoing social norming campaign targeting Greek students using injunctive norms and protective factors.**

*Action Steps:*

- Add questions to the Wellness Survey to gather injunctive norm information
- Distribute posters in to all chapter houses bi-weekly.
- Place weekly ads in the Greek newspaper.
- Print and distribute promotional items recommended by focus groups.

The WRC will begin by conducting an extensive needs assessment through gathering the information for social norming messages from the present data from the Core, Wellness Survey, focus groups and environmental scanning results. It is imperative that the WRC staff creates linkages with appropriate groups on campus and thus will create a team of WRC staff, faculty, staff and student volunteers to conduct the needs assessment and develop a strategic communications plan using the results of the assessments. This team will design and implement the enhanced Most of

Us campaign focusing on protective factors and injunctive norms and the MUmythbusters campaign. An additional team composed of Greek students, faculty, staff and the WRC staff will conduct a needs assessment and then create and implement the social norming messages targeting Greek students. In November, 2006 the annual Wellness Survey will be distributed with additional questions in an effort to gather more information on injunctive norms and protective factors. Additional questions will also be added to the Core Survey when it is distributed in February of 2007. Both teams will brainstorm on new, innovative communication tools to market the social norming messages such as use of internet communities.

The WRC staff will ensure that this new MUmythbusters and enhanced Most of Us efforts are integrated into the WRC's comprehensive prevention efforts that were described earlier. The WRC staff will continue its responsible decision making and social norming efforts by creating and implementing trainings for impactors (residence hall staff, academic advisors, faculty of predominantly freshmen classes, parents, peer educators, etc) to encourage them to send the social norming and social marketing same messages. These messages will be incorporated into Alcohol Responsibility Month, Wellness Month, Safe Spring Break and Safe Holiday Break outreach events. In addition new educational outreach programs will be created for use by the ADAPT and PAWS peer educators and the WRC staff for use in the residence halls, Greek houses and classrooms. The harm reduction aspect of the WRC will be enhanced through educating students about the protective factors used by their fellow students. The environmental management aspect of the WRC's efforts will be significantly enhanced by increasing the accuracy of information students have about the environment in which they drink.

## **Project Evaluation**

The WRC intends to pursue rigorous evaluations of both process and outcome indicators. In evaluating process indicators, a thorough documentation and assessment of all social norming and social marketing efforts will be conducted using extensive market research. Outcome indicators will be evaluated via longitudinal tracking of trends in the use, consequences, expectancies, and perceptions of peers' use of alcohol. The use of distinct, yet integrated, methodologies will provide a thorough assessment of both positive changes made as a result of prevention efforts and areas that need to be modified to create enhanced impact.

### **Process Indicators**

Specifically in regard to process indicators, it will be important to measure source credibility, believability of the messages, and recognition by students of the social norming messages. Ongoing evaluation of these aspects of the “Most of Us” and “MUmythbusters” campaigns will inform both the creation of and modifications to components of these prevention efforts. The following assessments will be used to evaluate process indicators:

The Core Survey and the Wellness Survey will be used. These two large surveys are reliable and valid measures designed to assess patterns of alcohol use including prevalence, frequency, quantity, negative consequences, and perception of others' use of alcohol. The Core Survey is administered in February of each academic year both in classrooms via paper and pencil and on-line. Currently, over 130 college campuses use this measure. The Wellness Survey was specifically designed to address limitations of the Core Survey. In particular, many of our social norms messages regarding students' expectancies about alcohol use and protective factors are

generated from this measure. Of notable importance to the current proposal, several questions on the Wellness Survey assess students' exposure to and believability of the social norming messages. The Wellness Survey is administered in November of each academic year. Students are entered into a drawing for a \$200 gift certificate to the University Bookstore as incentive to participate.

Focus groups and intercept interviews, used frequently in standard marketing research, will be conducted periodically to gather student recommendations and appraisal of the marketing campaigns, to assess credibility and believability of the messages, and to evaluate overall sense of social norming. Central to the social norming communications plan, focus groups will be used to identify messages that would be most effective at correcting students' misperceptions of peer norms both generally and for specific sub-populations (i.e., Greeks). Contingent on focus group feedback, several messages may be reworded or even discarded. Conducted towards the end of the first and second semesters of both years of the grant period, focus groups will assess the impact of the prevention efforts as well as establish ways to improve our efforts to gain insight on the level of exposure to social norming (e.g., have they seen the messages in the newspaper), effectiveness of social norming (e.g., what reactions did they have to the messages), and obtain overall feedback (e.g., new ideas for social norming). Incentives will be offered for the students' participation.

Central to the dissemination of social norm messages is the use of outreach and peer-education programs to reinforce these messages. As has been standard practice for the WRC, every outreach and peer educator program will be evaluated with brief surveys. Evaluations not only provide demographic information about who attends these programs (i.e., who might be the recipients of social norming messages),

but also about behavioral intentions (e.g., assessing how a program will influence future drinking behavior). These evaluations are important when considering that social norming messages may affect specific sub-groups (e.g., heavy drinker, Greeks, men) within the university population in unique ways.

Ongoing environmental scannings will be conducted to measure number of posters and other marketing materials visible in the campus environment (e.g., flyers posted throughout campus, the number of newspaper ads and articles pertaining to social norming messages). This level of saturation will be correlated with student self-report of seeing social norming messages via various media to assess the relation between placement and visibility.

### **Outcome Indicators**

With regard to outcome indicators (i.e., both intermediate and long-term), it will be important to assess changes in students perceptions, expectancies, and behaviors relating to alcohol use. Specifically, the WRC intends to evaluate both changes in harmful drinking behaviors and protective factors used by students, as well as the mechanisms through which those changes are hypothesized to occur (e.g., changes in student's perceptions of others' use). Pre-post design will be used to evaluate each of the proposed outcomes. The following assessments will be used:

Mentioned above in the process indicators, the annual Core Survey and the WRC's Wellness Survey will also be used to evaluate outcome indicators. Longitudinal changes in drinking behavior will be examined using data from both the Core (Dude, 1990-2007, 08) and the Wellness Survey (Dude, 2002-2007, 08). Additionally, data from the most recent surveys will serve as a baseline from which to assess changes that result from specific prevention strategies. Further, additional data

will be collected concerning student's perceptions of others use and protective behaviors (e.g., avoiding drinking games) to test the relationship between our social norming efforts and the hypothesized changes in drinking behavior and negative consequences. One advantage of these measures, and especially the Wellness Survey, is that the WRC will be able to modify these instruments to gather specific questions relevant for certain subgroups. Focus groups will be conducted to determine the use of injunctive and attitudinal norms with specific sub-populations on campus and the WRC will add questions related to this on the Wellness Survey. In addition to the cross-sectional surveys, the WRC will follow a small sample of students over the duration of the grant to assess, more specifically, the causal relation between the three-pronged approach (i.e., expectancies, perceptions, and environment) and reductions in drinking occasions, number of drinks per occasion, and negative consequences of drinking, as well increased use of protective behaviors.

Noting the limitations of relying solely on self-report data for alcohol use, the WRC will also gather incident data from Campus Judicial, Greek Life, Residential Life and Campus and Columbia Police. Currently, the WRC has a strong relationship with each of these entities and have current access to these data. Ongoing cooperation is expected and access to these data will continue to strengthen these relationships.

The enclosed logic model will be used to guide the WRC's efforts to implement this model program grant and, subsequently, to evaluate our endeavors. The above listed action steps will be used to create a comprehensive on-going educational communications plan that will correct the misperceptions students have about their peers' drinking, the environment in which they drink and their expectancies about drinking. Overall, the WRC is committed to rigorously evaluating

all aspects of this model program grant through the means listed above including program evaluations, tracking changes in the Core and Wellness Survey data, collected incident data from Campus and City Police, the Campus Judicial Office Residential Life and from Greek Life, as well as ongoing environmental scanning and student focus-groups. These data will be examined throughout the grant funding cycle and modifications will be made, if necessary, in the strategic plan based on the results of the assessments. The WRC believes these distinct methods of assessment and evaluation will guide the implementation the model and provide evaluations of *specific* strategies that may be most useful for other campuses with differing needs.

### **Project Personnel**

The director of the WRC (appendix H) will serve as the project director, supervising staff and students. The director has over 20 years experience in prevention and has supervised many grants (appendix I) including; seven US Department of Education grants, sixteen Missouri Division of Highway Safety grants, an NCAA grant, and a nine Missouri Division of Alcohol and Drug Abuse grants.

If the grant is awarded the WRC intends to hire two graduate assistants. A graduate assistant (appendix J) is needed to coordinate the development and implementation the extensive social norming marketing ads and promotions. This graduate assistant would also help coordinate all of the outreach programs and trainings and check to make sure that the marketing materials are effectively distributed. An additional graduate assistant will be hired to coordinate the research and evaluation efforts (appendix K). This research assistant will conduct the focus groups, intercept interviews, the Wellness Survey, the program evaluation data collection and assist in the implementation of the Core Survey. The WRC presently

employs a full time graphic designer, who provides the graphics for all 12 colleges and universities in the state that are part of the Partners In Prevention coalition and will be used to create the social norms and social marketing materials.

The WRC places a high priority on recruiting a diverse and talented group of graduate assistants from a variety of excellent academic programs at MU. Within the last five years alone the WRC has employed African American, gay and lesbian, international, and Hispanic staff members. The University of Missouri is an Equal Opportunity/ Affirmative Action institution and is nondiscriminatory relative to race, religion, color, national origin, sex, sexual orientation, age, disability or status as a Vietnam-era veteran in compliance with Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, the Americans With Disabilities Act of 1990, or other civil rights laws.

#### **Adequacy of Resources**

The WRC could have the grant underway within 30 days of grant notification. The director of the WRC, two new graduate assistants, the present staff, and student volunteers will implement an extensive time line (appendix L) over the next two years. In order to implement the goals, outcomes and rigorous evaluations of this proposal, a detailed budget (appendix M) and the budget narrative has been included (appendix N). The University is willing to provide personnel support in the form of the Director of the WRC, clerical assistance, trained peer educators, and other student volunteers. The University will also provide office space, and telephone, fiscal support and the necessary statistical software for data analysis (ie. SPSS).

The WRC cannot, however, effectively implement the goals, outcomes and evaluations of this proposal without considerable outside funding. In partnership with

the US Department of Education, the WRC can provide outstanding programs, services and evaluations that could serve to advance prevention theory.

### **Opportunity**

The MUmythbusters proposal is designed to further social norms research, with a special emphasis on evaluating the extent to which students' drinking behavior is influenced by; the perception of their peers' use, what they hope to get out of their own drinking (expectancies) and by their perceptions of the environment in which they drink. The WRC has competent personnel, a prevention program with a history of success, and support from the University (see letters of support) and the community. The mission, goals, action steps, outcomes and evaluation plan are feasible, rigorous, and innovative. This proposal holds tremendous promise in providing critical answers for reducing alcohol abuse and the ensuing consequences of college students.

## End Notes

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