

ECALC –  
Expectancy Challenge  
Alcohol  
Literacy Curriculum

Training Manual

**\*\*Pre-Publication Version, Please Do Not Quote\*\***

## **Contents**

<b>Copyright.....</b>	<b>3</b>
<b>Chapter 1: The Problem and Efforts Toward a Solution .....</b>	<b>5</b>
<b>Chapter 2: Theoretical Foundation and History of Expectancy Intervention Efforts .....</b>	<b>12</b>
<b>Chapter 3: Basic Alcohol Information and Media Literacy.....</b>	<b>20</b>
<b>Chapter 4: Introducing the ECALC .....</b>	<b>28</b>
<b>Chapter 5: ECALC Script and Slide Breakdown .....</b>	<b>35</b>
<b>Appendices.....</b>	<b>63</b>

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## **Chapter 1**

### **The Problem and the Efforts Toward A Solution**

### *The Problem*

Dealing with problematic student alcohol use has been a consistent struggle for colleges and universities across the nation. College student drinking has been repeatedly recognized as the primary public health concern impacting students on college campuses. The scope of the problem becomes apparent when looking at drinking behaviors, use patterns and the rates of alcohol-related negative consequences experienced by this population. A recent national report states that 85% of college students surveyed endorsed having tried alcohol, with 40% reporting occasions of binge drinking (five or more drinks in the past two weeks) and 48% indicated that they had been “drunk” in the past 30 days (Johnston, O’Malley, Bachman, & Schulenberg, 2007).

Although alcohol use frequently begins prior to college, students’ typically experience a significant increase in their alcohol use during their first year (Fromme, Corbin & Kruse, 2008). In addition, college students engage in more high-risk drinking than their non-college attending peers ( Johnston et al, 2007; Slutske et al., 2004), making college attendance itself a risk factor for problematic alcohol use. College students’ drinking patterns tend to vary, with use increasing or decreasing in relation to the academic calendar, holidays, and days of the week. Specifically, student drinking tends to be highest during the beginning and end of the academic year, be 4 times as high on the weekends compared to weekdays, and be lowest during exam periods and highest during holidays or special events (Del Boca, Darkes, Greenbaum, & Goldman, 2004; Greenbaum, Del Boca, Darkes, Wang, & Goldman, 2005).

The consequences for college students are grave. Alcohol use contributes to over 1,800 of their deaths, almost 700,000 assaults, and 97,000 cases of sexual assault or date rape among college

students each year. Of the alcohol-related college student deaths, 470 were due to unintentional injury (e.g. falls, hypothermia, drowning, etc.) and over 1,300 were motor-vehicle crashes (Hingson, Heeren, Winter, & Wechsler, 2005). Yet despite prevention efforts on campuses throughout the country, the rates of negative consequences are not decreasing. Unfortunately, in almost every category there have actually been increases in alcohol-related harms for college students (Hingson, Zha & Weitzman, 2009). Therefore, the need for evidence-based prevention and intervention efforts has never been greater.

### *Efforts Toward a Solution*

In order to address high-risk alcohol use amongst college students, colleges and universities have implemented a vast array of different prevention and intervention strategies. Yet, even with increased awareness and widespread prevention efforts to address the problem on college campuses nationwide, little change in college students high-risk drinking has been documented (Wechsler et al., 2002). The lack of reduction in alcohol related harms experienced by college students can be attributed to several obvious problems. For example, campus alcohol programming usually suffers from a lack of careful evaluation for effectiveness. In addition, research results on effective strategies have not been disseminated adequately, making the selection of appropriate strategies difficult. In response to the prevalence of risky alcohol use and lack of effective response among colleges and universities, the National Advisory Council of the National Institute on Alcohol Abuse and Alcoholism created a task force to review the relevant research literature on alcohol interventions. The primary objective of the task force was to advise college administrators on effective program implementation and evaluation as well as

provide recommendations for future research directions. (National Institute on Alcohol Abuse and Alcoholism, 2002)

Through their extensive review, the Task Force concluded that effective prevention on college campuses takes place on multiple levels, termed the *3-in-1 Framework*. These levels include prevention targeted toward individual students (including those at-risk for or already dealing with alcohol-related problems), toward the student body as a whole, and toward the entire college and community. The Task Force also evaluated the effectiveness of specific strategies in order to make recommendations for their use within this framework. The resulting recommendations were organized into tiers based on the interventions focus on college students and the degree of empirical support. Tier 1 identified strategies that had empirical support specifically with college students, while Tier 2 strategies had empirical support for the general population but had yet to be implemented in college settings. Interventions that required further evaluation to establish effectiveness and those that had evidence of ineffectiveness were included in Tier 3 and Tier 4 respectively. Overall, only three strategies met criteria for Tier 1 designation: interventions using cognitive-behavioral skills training, norms clarifications, and motivational enhancements, interventions that serve as brief motivational enhancements, and interventions aimed at challenging alcohol expectancies. (National Institute on Alcohol Abuse and Alcoholism, 2002) The following are examples of interventions that meet these Tier 1 designations.

#### Alcohol Skills Training Program (ASTP)

The Alcohol Skills Training Program (Fromme, Marlatt, Baer, & Kivlahan, 1994) utilizes cognitive-behavioral skills training, motivational enhancement, and harm reduction principles in a 6- to 8-week course administered to a group. A trained instructor leads the course which involves presentations, group discussions, role playing, and demonstrations. Students learn about and discuss basic alcohol information and conceptualizations of “problem” use. They also participate in a placebo drinking experience at bar which is followed by a discussion of alcohol expectancies and their role in drinking behavior and experiences. The skills based training includes strategies aimed to help students moderate their drinking and intoxication levels, as well as prepare for high-risk drinking situations. However, one of the barriers to effective intervention with a college student population is that college student’s experiencing most of the alcohol-related problems are high-risk but nondependent drinkers (Presley & Pimentel, 2006). Therefore, they may be unlikely to recognize their alcohol consumption as problematic or to implement skills to moderate their drinking. For that reason, motivational interviewing strategies and harm reduction principles are utilized in ASTP. Motivational interviewing involves approaching intervention from a non-judgmental stance with the goal of fostering and increasing motivation for change (Miller & Rollnick, 1991). In addition, the program is a harm reduction approach. This means that the overarching message to students is not overwhelmingly one of abstinence, but instead focuses on decreasing negative consequences experienced due to alcohol use. Using these three core components of skills building, motivational enhancement and harm reduction, the ASTP serves to decrease risk for students regardless of their initial view of their alcohol use. In fact, empirical investigations show that ASTP results in significant decrease in students’ alcohol consumption and alcohol-related harm at both 1-year (Kivlahan, Marlatt, Fromme, Coppel, & Williams, 1990) and 2-year follow-up periods (Baer et al., 1992).

### Brief Alcohol Screening and Intervention for College Students (BASICS)

BASICS is a brief motivational enhancement intervention that represents the most cost-effective ASTP modality (Dimeff, Baer, Kivlahan, & Marlatt, 1999). Similar to the lengthier ASTP course, BASICS focuses on education about basic alcohol information (including alcohol expectancies), cognitive-behavioral skills aimed at moderating drinking, and motivational interviewing and harm reduction principles. BASICS consists of two 50-minute individual sessions where the student completes a series of survey measures followed by feedback about their alcohol use and beliefs and perceptions specific to their use. This includes a discussion of potential risks and negative consequences associated with the student's alcohol use and specific strategies the student can implement to reduce alcohol-related harms. As a brief individual intervention, BASICS is without the experiential and group discussion-based vehicles for change. However, it retains the core components and increases the cost-effectiveness of an ASTP due to its reduction to two brief sessions. Most importantly, this brief intervention is successful in decreasing high risk students' alcohol consumption and alcohol-related harms at both the 2-year follow-up (Marlatt et al., 1998) and 4-year outcome assessment periods (Baer et al., 2001).

### Challenging Alcohol Expectancies

A method described as "expectancy challenge" is the third strategy listed among those meeting the Task Force's Tier 1 designation (empirical support specifically with college students; NIAAA, 2002). In addition to their other content, the other two Tier 1 programs include a

component dealing with the topic of alcohol expectancies. The ASTP includes a placebo drinking experience followed by a general discussion of alcohol expectancies. In BASICS, a discussion of the role of positive alcohol expectancies is provided in the context of basic alcohol education. A stand-alone method of expectancy challenge was also found to meet the criteria for Tier 1 status based on the extensive scientific literature validating the importance of alcohol expectancies in understanding alcohol use, as well as several studies that demonstrated the effectiveness of expectancy challenge in reducing alcohol use.

The *Expectancy Challenge Alcohol Literacy Curriculum*, or “ECALC,” was developed from the expectancy challenge method validated by Darkes and Goldman (1993, 1995) that was the primary source of the NIAAA Tier 1 designation. The ECALC is a brief, group intervention that can be used as a stand alone or complementary strategy to ASTP or BASICS. The ECALC maintains the motivational enhancement and harm reduction framework inherent in both ASTP and BASICS, but provides an expansion of the expectancy content with the specific focus of teaching students to challenge their own alcohol expectancies. Information in the ECALC is presented within a media literacy framework, and as such, is appropriate for use with the student body as a whole because the content is not targeted solely towards high risk users. Instead, the program is relevant and engaging for students spanning the spectrum of abstainers to heavy and problematic drinkers. Given the substantial underpinnings of expectancy processes and their impact on drinking behavior, the following chapter details the theoretical foundation for expectancy-based intervention. It also discusses in detail important expectancy-based intervention efforts that have preceded and laid the groundwork for the ECALC.

## **Chapter 2**

### **Theoretical Foundation and History of Expectancy Intervention Efforts**

“Alcohol expectancies” refer to beliefs people hold about the anticipated effects of alcohol. These beliefs are formed at a very early age, and exist from the first time an individual is exposed to information about alcohol. This information about alcohol is stored in the brain and nervous system and becomes “activated” in memory when a person begins thinking about alcohol. For example, when an individual is presented with an alcoholic drink, expectations based on how consuming the drink will affect the individual emerge based on past experience with alcohol use. This past experience can come in many forms including observing friends or family drink, exposure to the media and advertising for alcohol, and prior drinking experience. Beliefs about the effects of alcohol have been identified as a key component in explaining alcohol dependence. Memories related to alcohol use can influence how an individual thinks about alcohol and its effects, and therefore indirectly influences how much an individual consumes and the pattern of drinking that is developed (Cruz & Dunn, 2003; Fromme & Dunn, 1992; Goldman, 1999a; Rather & Goldman, 1994).

Research on expectancies and memory processes has described memory as a symbolic, proximity-based network (Rather & Goldman, 1994). Simply put, memories are stored in a network where they are linked closely or distantly to each other based on how related their meanings are and what the history of learning was for the individual. These networks of memories are activated in a predictable manner whenever the individual encounters stimuli that relates to the previously learned memories.

There have been two dimensions identified related to alcohol expectancies. The first dimension is in regards to the positive and negative outcomes of alcohol. The second dimension deals with arousal and sedation, or the observed pharmacological effects of alcohol (Goldman, 1999b; Rather & Goldman, 1992; 1994). Research has demonstrated that high-risk drinkers may be more likely to rapidly associate drinking with the positive and arousing effects rather than the negative and sedative effects. In terms of memory networks, the network of expectancy effects in high-risk drinkers is more “tightly packed,” leading to the fast activation of the positive-arousing beliefs when they are exposed to alcohol. In contrast, the network of expectancy effects is more dispersed in light drinkers, causing them to form expectancy associations with alcohol more slowly than high-risk drinkers, which in turn may inhibit drinking (Rather & Goldman, 1994).

Arousal-based expectancies are generally associated with positive views of alcohol use such as “Alcohol will make me feel energetic,” or “Alcohol will make me feel happy.” These expectancies also tend to be associated with early onset for alcohol use and the eventual development of high risk drinking patterns. Sedation-based expectancies focus on the sedating effects of alcohol. An individual with these types of expectancies might believe that “Alcohol will make me feel depressed,” or “Alcohol will make me feel tired.” Those who possess primarily sedation-based expectancies tend to drink less (or not at all). Research on alcohol expectancies has found that:

- A person’s expectancies exist before a drinking experience (Dunn & Goldman, 1996; Kraus, Smith, & Ratner, 1994)

- Expectancies can predict drinking initiation (Christiansen, Smith, Roehling, & Goldman, 1989; Stacy, 1997)
- Expectancies can differentiate light-drinking and heavy-drinking children and adults (Dunn & Earleywine, 2001; Dunn & Goldman, 1998; 2000; Rather & Goldman, 1994; Rather et al., 1992)
- Expectancies can mediate the influence of antecedent variables, or precursors to drinking, on alcohol use (Darkes & Goldman, 1998; Sher, Walitzer, Wood, & Brent, 1991; Stacy, Newcomb, & Bentler, 1991)
- Regarding heavy-drinking college students, if an individual's expectancies are modified to be consistent with sedation-based expectations, it can result in decreased alcohol consumption over time (Darkes & Goldman, 1993, 1998; Dunn, Lau, & Cruz, 2000; Goldman, 1999b)]

Expectancy research most relevant to intervention strategies has focused on changing expectancies in an effort to change alcohol use. These efforts are strategies that the NIAAA Task Force identified for Tier 1 designation due to the empirical support demonstrated with college students. Referred to as an "Expectancy Challenge" (Darkes & Goldman, 1993, 1998; Dunn, Lau, & Cruz, 2000; Lau-Barraco & Dunn, 2008) this approach involves the use of a simulated-bar environment recreated in a laboratory, consists of multiple sessions. During the sessions, heavy-drinking college students are exposed to information about expectancies and are

encouraged to engage in discussions about how true these expectancies are of alcohol's chemical effects. During the key session, arousal-based expectancies with regard to alcohol use are "challenged." The challenge typically involves an experiential activity in which each participating student is told to expect to receive either an alcoholic or non-alcoholic drink when joining the activity. Students are also given the rule not to speak about what they believe they are drinking. The key is that while students are told to *expect* a certain type of beverage, they may or may not actually receive the expected drink. In reality, half of the students expecting alcohol unknowingly receive a non-alcoholic drink.

Following a period of socialization designed to replicate what might occur in a party or bar-setting, the students are asked to identify who among all individuals (including themselves) actually received an alcoholic drink and who did not. Because of the rules of the challenge, the students are forced to make their predictions solely on behavior they observed during the socialization period. Students expect that those who were the most outgoing and social were among the individuals who received alcohol, and are surprised to find that these are the students who *expected* alcohol but actually received a non-alcoholic drink. Failure to identify who had been influenced by alcohol at better than chance levels and the realization that the behaviors most often associated with alcohol use (becoming energetic, outgoing, social) are actually a result of expectancies and not alcohol itself disconnects the associations between alcohol use and the expected experiences due to expectancies rather than the pharmacological effects of alcohol. The aim is that through this disconnect, students' expectancy processes will shift and lead to decreased alcohol use (Lau-Barraco & Dunn, 2008; Goldman, 1999b; Darkes & Goldman, 1993).

Darkes & Goldman (1993; 1998) conducted studies using a three-session Expectancy Challenge intervention to validate the effectiveness of this approach and to further establish the casual relationship between alcohol expectancies and consumption. Using moderate to heavy drinking male college students, they were able to demonstrate significant decreases in their positive expectancies and corresponding decreases in drinking at a 2-week follow-up for participants in the intervention group as compared to controls. Using the same Expectancy Challenge protocol, Dunn et al. (2000) were able to replicate the effectiveness of this intervention and model changes in memory processes related to changes in alcohol use. Although women were included in this sample, changes in likely activation patterns and corresponding decreases in drinking were only demonstrated in men. In an attempt to address the limitation of a multi-session format and increase generalizability, Lau-Barraco & Dunn (2008) adapted the Darkes & Goldman (1993, 1998) protocol to a single session intervention with additional content targeted to women. This modified protocol resulted in significant decreases in expectancies and drinking across genders as compared to controls.

However powerful the bar laboratory-based Expectancy Challenge can be, there are limitations to the original form of the protocol that represents a huge barrier to its utilization in colleges across the country. First, the necessity of a state-of-the-art bar-laboratory makes the administration of the protocol difficult for many institutions. Second, the initial format of the Expectancy Challenge was intended to be held over multiple sessions and heavy drinking students can be reluctant to start an intervention program that requires an extended commitment. Lastly, the early form of the protocol was also designed for heavy-drinking males, and there were variable effects in modifying the expectancies and drinking patterns of heavy-drinking

females (Lau-Barraco & Dunn, 2008; Musher-Eizenman & Kulick, 2003; Wiers & Kummeling, 2004). For the wide-spread use of an expectancy-focused prevention program, there was a need for a protocol that could be quickly administered in typical settings and could be effective with both male and female students— a classroom-based Expectancy Challenge.

The *Expectancy Challenge Alcohol Literacy Curriculum* (ECALC), is a classroom-based protocol designed to help students modify their expectancy activation patterns during a single-session intervention. The goal is for the students to become more likely to activate sedative expectancies when exposed to alcohol-related stimuli as opposed to arousal-based expectancies without the necessity of the experiential component key in the bar laboratory-based protocol. To achieve this, the present single-session, classroom-based Expectancy Challenge developed as an interactive classroom-based curriculum designed to alter the expectancy patterns of the students. The classroom-based curriculum is comprised of introductory lessons on expectancies and the true effects of alcohol as a depressant. It also includes a component that addresses how the media (e.g. advertisements, commercials) can impact one's perceptions about alcohol. The students are asked to identify inaccurate representations of alcohol in different advertisements and engage in activities that deconstruct ads that promote positive or arousal-based expectancies about alcohol.

The effectiveness of the classroom-based prevention program has been demonstrated in various college setting including small classrooms, large classrooms, and fraternities and sororities. Sivasithamparam (2008) implemented the protocol with small classes ( $\leq 50$  students) of first-year college students and compared alcohol use between those exposed to the program with a control-group (group that did not participate in the presentation.) The results of the study

revealed that the Expectancy Challenge Alcohol Literacy Curriculum led to significant decreases in the amount of alcohol consumed among both male and female first-year students compared to the control group. Specifically, the participants in the ECALC group compared to those in the control group had a greater decrease in both the average number of drinks consumed per week and number of binge episodes over the previous month. Schreiner (2010) implemented the protocol with large classes (100+ students) of primarily freshman and sophomore students and also found the participants receiving the ECALC had decreased their average drinks consumed per sitting over a one month period, while students in the control group increased. And most recently, Fried (2010) implemented the protocol with fraternities and sororities and found that ECALC participants significantly decreased their average number of drinks consumed per sitting and their drinking frequency over one-month when compared to members in the control group.

The Expectancy Challenge in its present form has become an effective intervention protocol involving the use of trained “expert” peers or near peers to present all the information and engage participants. The students get exposed to concepts such as expectancies, the biphasic effects of alcohol, brand recognition research, the placebo effect, and other important content in an interactive manner that encourages attention and processing of the information.

## **Chapter 3**

### **Basic Alcohol Information and Media Literacy**

In addition to the expectancy content, the ECALC provides educational information regarding some basic alcohol information and media literacy skills. This chapter will cover relevant alcohol information that even if not covered directly curriculum, is essential to the foundational knowledge of a competent ECALC facilitator. It will also highlight some of the relevant research specific to media literacy and discuss the utility of presenting alcohol information within this framework.

### **Basic Alcohol Information**

The psychological or expectancy effects of alcohol are discussed in depth in previous chapters. But in addition to expectancy effects, alcohol is a psychoactive drug that has very real effects on the body. However, college students may not typically conceptualize alcohol as a drug. Alcohol functions as a central nervous system depressant which impairs both mental and motor functioning and causes sedation. The specific effects and degree of impairment experienced are a function of intoxication. Alcohol intoxication is measured by blood alcohol concentration (BAC) which can be influenced by a number of factors.

BAC is primarily a function of the amount of alcohol a person has consumed and the rate over which they consume it. The quicker alcohol is consumed the higher the resulting BAC. Since alcoholic beverages contain varying amounts of actual alcohol, there is a standard definition to define what is meant by a “drink.” Understanding this definition can help students to accurately estimate their level of intoxication and their risk level for experiencing negative consequences and impairment. However most college students are unaware of what the definition of a “drink” is and will most likely consider whatever may be in a cup or their hand at the moment as one

drink. However this is not always the case. The National Institute on Alcohol Abuse and Alcoholism (NIAAA) defines a standard drink as a beverage containing 0.6 fluid ounces or 14 grams of pure alcohol. This translates to:

- 12 ounces of beer (about 5% alcohol)
- 5 fluid ounces of wine (about 12% alcohol)
- 1.5 fluid ounces of hard liquor (about 40% alcohol)

This can get particularly tricky for college students who are making mixed drinks on their own; few tend to measure the liquor they pour into the drink. This can lead students to believe they are drinking significantly less than they actually are. This in turn can lead to becoming more intoxicated than they had planned (or were prepared to) and increasing their risk for negative consequences. In addition to the amount of alcohol consumed, there are other factors that influence BAC and subsequent impairment.

BAC will also depend on a person's weight, gender, and body composition. The more a person weighs, the less their BAC will increase with each standard drink consumed. Similarly, females experienced increased BAC's when consuming an equal amount of alcohol as compared to males. Weight plays a role in this difference as males on average weigh more than females. However, these gender differences in BAC are not completely explained by difference in weight. Females still achieve higher BAC's when body weight is equivalent (Mumenthaler, Taylor, O'Hara, & Yesavage, 1999; Taylor, Dolhert, Friedman, Mumenthaler, & Yesavage, 1996). One of the reasons this gender difference still exists has to do with biological differences in body composition. Females have a higher proportion of body fat compared to males, which also leads

to less body water. Because alcohol can disperse across in body water, females will have higher BAC levels when consuming equal amounts of alcohol due to this difference (Frezza et al., 1990, Mumenthaler, et al., 1999). In addition, females have lower levels of the stomach enzyme gastric alcohol dehydrogenase, which metabolizes alcohol in the body. This also leads to increased BAC levels for females (Baraona, et al., 2001; Mumenthaler et al., 1999).

*Absorption.* Other factors that impact BAC relate to how alcohol is absorbed and eliminated from the body. Alcohol consumed through drinking is absorbed into the bloodstream through the stomach and small intestine. For this reason, the amount and type of food in the stomach during alcohol consumption will impact how quickly absorption into the bloodstream takes place. Alcohol consumed on an empty stomach will result in faster absorption of alcohol into the bloodstream and result in higher BAC levels (Mumenthaler et al., 1999). What the alcohol is mixed with will also play a role in the speed of absorption. Specifically, carbonation causes alcohol to be absorbed more quickly into the stomach-lining and small intestine due to increasing the rate at which the stomach is emptying (Becker, 1970; Roberts & Robinson, 2007). As alcohol is absorbed into the bloodstream, it quickly will distribute throughout the body and different organ systems.

*Oxidation.* Once alcohol enters our bodies, it begins to become metabolized through a process called oxidation. As stated previously, the enzyme alcohol dehydrogenase is responsible for the break down of alcohol in our system. This begins to some extent within the stomach and small intestine as alcohol is first ingested. However most of alcohol oxidation occurs within the liver. Once a certain BAC level is attained, oxidation of alcohol within our bodies is the only thing that can decrease it. The rate at which this occurs is relatively constant and determined by the ability

of alcohol dehydrogenase to handle the alcohol in the body. When a large quantity of alcohol is consumed over a short period of time, the oxidation process becomes overwhelmed resulting in higher BAC levels. (Mumenthaler et al., 1999)

This information is important for students to understand due to the numerous myths that exist about “sobering up.” There are a number of methods that people frequently contend will aid them in decreasing their intoxication level. While there are a number of strategies that can be implemented to slow the absorption of alcohol and therefore decrease attained BAC levels (i.e. eating before or during drinking, using water-based mixers, spacing out drinks), the only thing that can decrease an obtained BAC is time. Activities such as taking a cold shower, drinking coffee, or eating after you have stopped drinking will not actually help someone increase the rate at which they are eliminating alcohol from the body.

*BAC and Tolerance.* Different BAC levels are associated with different effects of alcohol intoxication. Below is a chart describing some common effects experienced at specific BAC ranges.

- .02% Relaxed
- .04% Relaxation continues, buzz develops
- .06% Cognitive judgment is impaired
- .08% Nausea can appear. Motor coordination is impaired
- 10% Clear deterioration in cognitive judgment and motor coordination
- .15%-.25% Black outs
- .25%-.35% Pass out Lose consciousness Risk of Death

– .40%-.45%Lethal dose

As BAC level increases, impairment and associated risk for negative consequences also increase. It is also important to note that these are effects a drinker who has minimal tolerance can expect to experience at each BAC level. However, as students gain drinking experience there is the potential of developing tolerance. In that case, the associated effects the student may experience are harder to predict.

Tolerance can be described as needing more alcohol in order to achieve the same effect one used to at a lower level of use. For example, a student who has developed tolerance may notice that they now need 4 drinks to feel relaxed or “buzzed” when they used to experience those effects after 2 drinks. Although tolerance may result in shift in effects experienced, BAC remains relatively unchanged with tolerance. In other words, the amount of alcohol consumed will result in the same level of intoxication, but the student may need to achieve higher BAC’s to experience similar effects. The consequence of gaining tolerance likely therefore to be an increase in the amount of alcohol used, increased BAC levels, and also increased financial impact (that student is now paying for 4 drinks when they used to stop at 2). They are also likely to experience an increased risk for negative consequences. Students with a higher tolerance are achieving higher levels of intoxication and also not experiencing the same degree of impairment that used to be associated with that BAC. Therefore, judgments about how impaired they actually are will become increasingly less accurate and may lead to poor decision making. For instance, the student may be more likely to make the decision to have another drink or decide that they are able to drive. Fortunately, tolerance is something that once achieved, can be decreased and

eliminated. Simply taking a break from drinking or decreasing the quantity or frequency of alcohol use can reduce tolerance. Understanding the common effects of alcohol depicted above can be a helpful way in assessing the degree of tolerance a student may be experiencing. If the student notices that the effects they experience at certain BAC's are not consistent with the common effects for someone without tolerance, it may indicate that they have developed a certain degree of tolerance.

*Biphasic Effects of Alcohol.* As seen in the chart describing common effects of alcohol intoxication, there are differing experiences at lower or more moderate BAC levels as compared to higher levels. At lower levels, alcohol can be associated with more stimulating or euphoric types of feelings. This is also the point at which expectancies about positive and arousing effects have a profound impact. These experiences associated with the initial phase of drinking will eventually reach a "point of diminishing return." At this point the drinker will begin to experience the depressant effects of alcohol in their system. They may begin to feel that they have lost their "buzz." This is referred to as the point of diminishing returns because further alcohol use will not result in a return to the initial stimulating effects, but instead will increase the depressant effects being experienced. However, college students experiencing this loss of a "buzz," will frequently choose to have another drink in an attempt to regain those feelings. Functioning under the cultural myth that "more is better," students associate heavier use with a more pleasurable drinking experience. They are usually unaware that physiologically they will not be able to increase those initial pleasurable feeling with more alcohol use. Therefore, it is easy to see why even though most outcomes students are seeking from alcohol use (mild arousal, increased confidence, slight euphoria) occur at the low-moderate BAC levels, students may end

up experiencing unwanted negative consequences (vomiting, blackouts, etc). Alcohol consumption may continue to higher BAC levels under the false impression that this will result in increased positive outcomes or experiences. (Dimeff et al., 1999)

### **Media Literacy**

The information about alcohol and alcohol expectancies in the ECALC is delivered in the framework of a media literacy program. The use of advertising to practice identifying expectancies and learning to deconstruct alcohol advertisements is integral to the curriculum. This is highly salient for adolescents and young adults as a majority of the beverage ads that they are exposed to endorse alcoholic drinks (Austin & Hust, 2005; Center on Alcohol Marketing and Youth, 2002). Media literacy is used to refer to the ability to think critically about messages conveyed in the media and advertisements as well as an understanding of how and why media messages are created (Brown, 1998; Hobbs, 1998). Print and digital portrayals of alcohol use reinforce social and behavioral aspects of drinking as research suggests that exposure to alcohol media is linked to favorable alcohol expectancies (Grube & Wallack, 1994). With the intention of selling alcohol, media advertisements consistently portray effects of alcohol that are seen as desirable regardless of whether these outcomes are related to the actual pharmacological effects of alcohol. In fact most alcohol ads have themes equivalent to those of non-alcoholic beverage ads with the addition of sexually suggestive themes (Austin, 2006). In the evaluation of a media literacy training program for children, Austin and Johnson (1997) demonstrated that this program was effective in decreasing expectations of positive consequences from alcohol use. Thus media literacy is an engaging and interactive framework through which students can begin to challenge their own expectancies as well as the ones being portrayed in the media.

**Chapter 4**  
**Introducing the ECALC**

The ECALC is a tool that has been established as an effective intervention with groups of college student drinkers. The group format of the ECALC provides a huge advantage over a variety of other interventions and strategies. The group format allows the ECALC to be highly cost-effective. It can be delivered to a large number of students and only requires one brief session. It is also designed to be easily delivered in typical classroom settings found in college campuses across the country. While these are clear advantages, the group setting can also present certain challenges for presenters who are not experienced in managing a classroom (or even ones who are). The ECALC is designed to be interactive and engaging and this can really help to circumvent potential resistance or potential problems. However, in order for the ECALC to function as intended, it is important for the presenters to be thoroughly prepared, be able to manage the group, and build rapport effectively.

### *Preparing for Delivery*

In addition to having the basic foundational knowledge detailed in previous chapters, it is important for presenters to be familiar with all the materials involved in the ECALC. The interactive nature of the curriculum necessitates a high level of comfort with the material and background information as well as with any activities you may be asking the students to partake in. While this handbook provides much of the necessary background information, the presenters need to feel comfortable explaining the information to others. The presentation provides a large amount of information condensed into 45-minutes. So all the material covered in this manual is not explicitly detailed for the students within the presentation. The depth and breadth of the manual however, allows the presenter to gain that increased expertise to be able to field questions that students may have but which are not addressed in the ECALC. Fielding questions

effectively can be vital to the students' engagement in the program. Not being able to confidently and correctly speak on certain topics may decrease the students' perception of the presenter as an expert on alcohol and alcohol expectancies. This may invalidate for the student any of the information they have learned or will learn within the presentation. Over the many different ECALC implementations, there are certain frequently asked questions that arise. These "Frequently Asked Questions" are provided in Appendix B of this manual along with information that will help in addressing them. Presenters should feel comfortable being able to answer at a minimum this set of questions.

Being comfortable with the presentation materials is also important for effective delivery of the ECALC. This includes any assessment materials, the student workbook, and the actual presentation files and necessary equipment. The ECALC is designed to be compatible with collecting data for research of program evaluation purposes. However it does not have to include this component. When collecting outcome data, presenters will need to be prepared to provide instructions regarding the necessary measurement tools. In addition, they should be knowledgeable about the purpose of each and be comfortable answering questions about how to complete them. A detailed description and breakdown of each is provided in Appendix C for presenters who are including this module.

All students receiving the ECALC will receive a student workbook that contains necessary materials for interactive portions of the curriculum. Presenters will want to be familiar with the workbooks for a number of reasons. Firstly, during the ECALC you will be referring students to specific activities that they will complete. It will be helpful to be familiar with what each of these

sections of the workbook look like so that you know what the students see and can orient them appropriately. The workbook contains activities you will lead them through and are usually based on clips and/or visual you present them with. The activities are a large part of the interactive elements and also help the students stay engaged and allow them to process the content. For that reason, it is also crucial to be prepared to deal with the technology necessary to deliver the ECALC.

The ECALC is a lecture-type intervention that relies on text slides, images, audio clips, and video clips. It can typically be delivered with ease in most college classrooms that are increasingly likely to be equipped with a computer, projector, and audio system. However, not all classrooms will be readily prepared for the delivery of the ECALC and prior arrangements for necessary projection and audio equipment will be necessary. Therefore, prior to delivery presenters should be aware of the capabilities of the facility they will be using. This will allow time to either acquire necessary equipment and/or to become comfortable using the equipment. Audio and video clips will also require certain software (such as a media player) to be functional in the presentation. This is also something presenters should check out before attempting to deliver the ECALC. Significant portions of the presentation rely on watching or listening to advertisements. Getting into a situation where technical difficulties make this impossible will severely limit the impact of the program as well as eliminate a majority of the interaction and student engagement.

Another area presenters should prepare for prior to delivery is how to handle students who disclose risky or concerning symptoms or behaviors. As presenters on the topic of alcohol,

students will ideally perceive you as experts on the topic. It is therefore possible that students might share personal information about difficulties they are having with alcohol, other substances, or related mental health symptoms with you. While the interactive and structured nature of the ECALC make this less likely to occur within the context of the presentation it is not impossible. Having a plan about how you will handle these potential situations is recommended. More likely however, students may approach presenters at the end of the ECALC in order to discuss their issue or seek help. Having referrals for substance use services on campus or in the community prepared ahead of time will help in these instances.

#### *Introducing the ECALC: Building Rapport*

As stated in the beginning of the chapter, the group format is a distinct advantage of the ECALC. However it can present several challenges for the presenters. Group sizes can vary from small to large which may entail as many as 300 to 400 students at one time. Since the ECALC relies on interaction and engaging activities, groups can be challenging when they are either too quiet (not feeling comfortable to participate or simply not engaged) or when they are too loud (talking over each other or the presenters, shouting things out when unsolicited). The key to effectively delivering the ECALC to groups of all sizes is to establish trust and rapport quickly. So before jumping into the content of the curriculum, it is important to orient the students to what they can expect from the ECALC. There may be a tendency to immediately begin to tune out the presenters if the students feel the ECALC will be similar to the number of previous messages they have received from different alcohol and drug education programming. So much of the introduction will highlight how the ECALC is different and provide reasons for the students to engage with the presenters.

When introducing the ECALC, it is important to highlight that the goal is not to lecture to them about dangers of alcohol or use “scared straight” tactics to encourage abstinence. Consistent with motivational interviewing principles, the presenters should emphasize that the focus of the curriculum is not what a student’s alcohol use “should” be as it is impossible to make that choice for another person. Decisions to drink or not are ultimately up to the student. What is relevant to the ECALC is students’ views and knowledge about alcohol and how that compares to the research. Since the foundations of the ECALC are rooted in research, this can be a helpful fact to set the presentation apart from what they may have received before. Presenters should highlight that the point of the program is to learn about “cutting edge” research on alcohol that does not always find its way into alcohol education. This lets the students know that they will most likely be hearing information that is new and help prevent them from becoming disinterested from the start. The aim during the introduction is to engage students and to prevent defensiveness and resistance to the content. The presenters want to keep their tone non-judgmental, friendly and conversational throughout. If student’s feel judged or condescended too, they are not likely to become invested in the curriculum. All in all, the introduction will hopefully come across as an invitation to the students to participate in thinking critically about the media and their thoughts/perceptions/experiences with alcohol.

In the following section of this manual, the script and corresponding slides are provided. The script is designed to be divided into two roles and to be presented using two facilitators. The purpose of this is that the changing of speakers allows for more variety and increases attention from the students. It is also highly advantageous when delivering to large groups as you have

more help in managing the students. While facilitators can divide the script up in a way comfortable for them, the full script provides an example of how this can be done. The following section also provides further notes and areas of emphasis for each part of the script. While the ECALC is provided in a script format, presenters are encouraged to convey the information in their own words. When using different wording, it is important that the presenter maintain the integrity of the information that is the core of each module. As such, this may be something that comes more naturally as one becomes more familiar with the content.

**Chapter 5**  
**ECALC Script and Slide Breakdown**

The ECALC script and slides lead the presenters through the content they will deliver as well as through a number of interactive activities with the students. The script is presented in a series of modules, each of which has specific aims and objectives. To achieve the level of effectiveness demonstrated in our validation studies, the modules must be presented chronologically, in the same order as presented in this manual. A seamless script without the module breakouts is provided in Appendix A.

### **Module 1: Introduction**

#### Objectives

1. Research Based
2. Dispel Myths

The ECALC begins with a succinct description of the source for the material contained in the program. The specific goal of this module is to inform students that the information contained in the ECALC is based on the vast amount of research that has been conducted on alcohol. In particular, the focus of the ECALC is to use findings from scientific research to dispel several myths about alcohol that are commonly believed to be true.

#### *Script*

*This is a Myth Busting presentation about alcohol. You all know what alcohol is, and you certainly have ideas about what the effects of alcohol are, but despite everything you may **think** you know about alcohol, the facts you are about to hear may surprise you. This information is*

*based on a huge amount of research completed by scientists over the years. There are several important differences between the facts, and things that are commonly believed by most people. That's why this is called the **Myth Busting** presentation about alcohol.*

## **Module 2: What is a “standard” drink?**

### Objectives

1. Definition of a Standard Drink
2. Free Pour amounts (Solo Cups)
3. Number of Standard Drinks in “common” beverages
4. Why this matters

The goal of this module is to teach students to recognize the amount of alcohol contained in commonly available alcoholic beverages. There are several beneficial consequences of teaching this information. Increasing awareness of the amount of alcohol contained in each type of beverage is the first step toward encouraging conscious and deliberative thought during the process of deciding whether or not to consume alcohol. In addition, increasing knowledge of the amount of alcohol being consumed with each beverage is necessary for understanding the amount of alcohol being consumed overall during a drinking episode, and thereby more fully understanding the likely effects of the amount of alcohol a person has consumed. The effects people experience from consuming alcohol include pharmacological effects and expectancy effects. Understanding the quantity of alcohol being consumed is the first step in learning to differentiate expectancy effects from the pharmacology of alcohol.

Which Cup Shows A Standard Drink?



A Standard Drink...



A Standard Drink...



## Script

*One of the first facts about alcohol that may surprise you is the amount of alcohol that is contained in different alcoholic beverages. When people talk about having a drink, the ways that they may define one drink can vary widely from person to person. For instance, some people count whatever may be in their cup as one drink, even if the size of the cup or the type of beverage varies. However, there is a definition for what a STANDARD DRINK is. Take a look at this slide that shows a number of different amounts of alcohol in a solo cup. Now if this is a common 80 proof liquor, which of these do you think is a standard drink?*

Slide: Solo Cups

Take some guesses from the students as to which cup reflects a STANDARD DRINK. Then click to advance the slide effect and reveal the STANDARD DRINK as cup E

Next slide: Standard Drinks: Beer, Wine, shots

*These are examples of a single STANDARD DRINK. It is your typical 12-ounce bottle or mug of beer, a 5-ounce glass of wine, or 1.5oz of 80 proof liquor. But in the real world, you frequently see many other types of drinks. Mixed drinks for example are can be one standard drink, but it depends on how many shots of liquor go into a mixed drink! Also, you might be drinking out of a container that is not a standard drink size.*

---

Slide: Red Solo Cup

---

*For example, people will sometimes consume alcohol out a cup such as this one. Unless someone is measuring, it can be hard to tell how many standard drinks are in such a cup. This image shows how different drink types look in one of these cups if you were to be consuming 1 standard drink.*

---

Slide: Variety of real world drinks depictions

---

*These are just a few more examples of the many ways alcoholic beverages are available. They include drinks like a “yard of beer” which can be 4-6 standard drink, and the “boot” of beer which can have 5-6 standard drinks. Beer can also be served in a pint glass or in a pitcher which is not easily recognizes in terms of how many standard drinks they contain. Also, if you look at the middle picture on the bottom, this illustrates how different 1 standard drink can appear when you are talking about different beverages and different cups or glasses.*

*Why does it matter? To understand how alcohol will affect someone, you first need to know how much alcohol they are actually consuming. Not that you understand how much alcohol is in various drinks, we can move on to the effects of alcohol.*

## Word List Module

### Objectives

- Have students reflect on effects they have experienced when drinking

### Slides



**WORD LIST**

Less nervous	Relaxed	Cool
Active	Sleepy	Goofy
Cocky	Slow	Less Upset
Content	Smart	Nice
Dizzy	Talkative	Sick
Friendly	Wild	Crazy
Funny	Calm	Good
Happy	Fun	Carefree
Loud	Jolly	Hyper
Pretty	Outgoing	Nauseous

### Script

*To start, we want you to flip to page \_\_\_\_ and look at the list of words. Thinking about times when you've had any amount of alcohol, circle any words that describe effects you experienced. If you don't ever drink, circle words you **THINK** you might experience **IF** you were drinking.*

*When you're done, turn to the stop sign and we'll come back to this word list later.*

## Introduction to Expectancies Module

### Objectives

1. Introduce alcohol as a drug
2. Introduce ad content communicating expectancies
3. Have students generate alcohol expectancies
4. Identify opposing effects from the list
5. Differentiate physiological and expectancy effects

### Slides

 <p>Alcohol as a prescription drug.</p>		<p>Complete this sentence:</p> <p><i>"Drinking alcohol makes a person ..."</i></p>
---	--	--

### Script

*Let's see a show of hands. How many of you think of alcohol as a drug?*

---

Wait for students to raise hands

---

*Alcohol IS a drug, an over-the-counter drug because you don't need a prescription to get it. If alcohol WAS a prescription drug, an ad for it might sound something like this...*

---

Slide: Alcohol as a prescription drug.

Play audio file.

---

*This ad is funny because it treats alcohol as if it was a prescription drug that can cure shyness and awkwardness, which it obviously can't. Overall, the purpose of advertising is to encourage people to believe certain things. For a specific product like alcohol, advertising encourages people to associate alcohol with memorable experiences. Typical alcohol ads often look like the following...*

---

Slide: Bacardi Ad

---

*Regardless of where we get our ideas about the effects of alcohol, all of us have BELIEFS about how people feel and behave after they've had a few drinks. For example, the ad we listened to promised that drinking alcohol makes people less shy and more social.*

---

Slide: "Drinking alcohol makes a person..."

---

*How do you think people feel and behave after a few drinks?*

*Under #1 of your activity sheet, write down a few words that complete this sentence:*

*"Drinking alcohol makes a person . . ."*

---

Give students a minute and then begin asking for students to state their answers out loud. If students are confused, repeat the example from above – "Drinking alcohol makes a person less shy," or "Drinking alcohol makes a person more social."

Draw a line in the middle of the board so that there are two halves in which you can write the students' responses.

---

*What kinds of words did you have on your lists?*

---

---

Write the responses that are either EXPECTANCY responses (e.g., happy, outgoing, fun) on the right side and write down pharmacological responses (e.g., dizzy, sleepy, nauseous, loss of judgment) on the left side. Continue until you have 5 or 6 answers written down on each side.

---

*The words you came up with are basically the same words everyone reports. Research on the effects people associate with alcohol has found that everyone thinks alcohol has most of the same possible effects, and that's why everyone reports the same list you just did. I have put the words you reported into two groups on the board. The strange thing about these two groups of words is that they are all possible effects of the same drug. How can one drug make people happy and outgoing but also make them sleepy and nauseous?*

---

Slide: Definitions of Physical Effects and Expectancy Effects

---

*Alcohol research has found the answer to this question by separating physical drug effects of alcohol from “expectancy” effects. Physical effects are direct pharmacological or biological effects of a drug. Physical effects are effects people experience even if they don't know they have taken a particular drug. Expectancy effects are similar to placebo effects. Expectancy effects are the effects people experience solely as a result of believing they have taken a drug that produces the effects they are experiencing, even when they have actually been given no drug at all.*

*The possible effects of alcohol that appear to be contradictory can be explained by differentiating physical effects of alcohol from expectancy effects. Physical effects of alcohol*

*include feeling dizzy, sleepy, and nauseated. Most other effects people associate with alcohol are primarily expectancy effects and are not directly or physically caused by alcohol.*

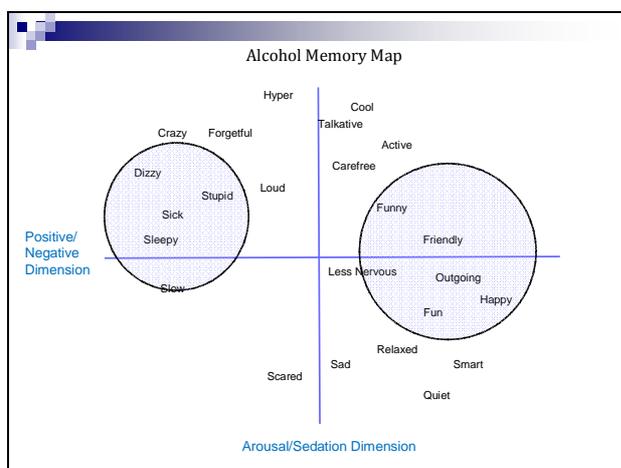
*To understand how we could experience these opposing physical and expectancy effects, we have to understand how our minds store and process information.*

## Memory Map Module

### Objectives

1. Connect student generated list to memory research
2. Demonstrate associations in memory between expectancies

### Slide



### Script

*Scientists have found that possible effects of alcohol are GROUPED together in your brain in very specific ways. For example, if someone believes that alcohol will make them friendly, they're also likely to believe that alcohol will make them outgoing, happy, and funny.*

---

Advance slide to demonstrate this effect.

---

*Similar effects are grouped together. The physical effects of alcohol we talked about are grouped farther away from positive social effects. So someone who believes alcohol makes them FRIENDLY is less likely to believe that alcohol can also make them dizzy, sleepy, and nauseous.*

---

Point to FRIENDLY, and then DIZZY, SLEEPY and NAUSEOUS on slide.  
Advance slide to demonstrate effect

---

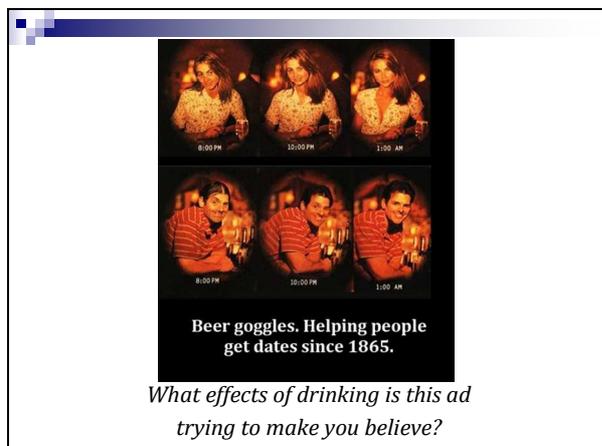
*How do we acquire all these expectancies for alcohol effects? Growing up we see adults drinking or hear them talking about it. We also see people drinking in television or in movies, and even in cartoons! One place where we get a lot of information about what alcohol can do for us and how it will make us is from ads in magazines and TV commercials. We will be focusing on the media in this presentation because it is an influence that constantly bombards us with depictions of possible effects of alcohol. We will evaluate how accurate the effects ads want us to associate with alcohol are compared to what research reveals are the actual physical effects of alcohol. That way we can learn to think more critically about these messages we get consistently exposed to.*

## Introduction to Alcohol Ad Deconstruction Module

### Objectives

- Have students identify expectancies in an ad
- Evaluate the accuracy of alcohol effects in the media

### Slides



### Script

*Let's practice identifying what alcohol expectancies that are depicted in the media.*

*I'm going to show you an ad, and I want you to write down the expectancies you see. Under #2 of your activity sheet, write down any effects from drinking this ad is trying to make you believe.*

---

Slide: Beer goggle ad

---

*Go ahead and write down a few of the expectancies you see in this ad.*

---

Give students one minute and prepare to write on the board.

---

*Alright, what expectancies did you catch? Let's see some hands.*

---

Almost all your students will say something along the lines of “ugly girls turn pretty,” or “you’ll imagine things.”

No matter what your students bring up, rephrase it into the statement that: you’ll see, or imagine pretty girls.

Then write on the board, under the column of positive expectancies:

- Pretty girls
- 

*Excellent! How has their clothing changed?*

---

No matter what your students answer, rephrase it into the statement that: girls’ clothes get more racy.

Then write on the board.

- Racy clothes
- 

*Thousands of times you’ll see alcohol ads that promise if you drink, good things will happen.*

*Is this ad true? Do people actually get more attractive as they drink?*

*Because the poster is funny, you don't think about whether the message is true. Does that make sense?*

---

Author's Note: Students may be resistant to the idea that certain media depictions are expectancy effects that are not actual physical effects of alcohol. It is important not to get defensive if confronted with this situation. The student's insistence that they experience these effects helps illustrate the point that expectations have a powerful influence over people's experience. We actually do experience some of these effects, however what is key is that we only experience them because we believe that we will. They are not effects associated with the physical effects of alcohol.

We use advertising as a tool to illustrate how expectancies are formed and reinforced without our conscious involvement, and how we can learn to control our expectancy processes rather than surrendering that control to the media and other external influences. By learning to control these processes, we can direct the power of placebo effects for our own benefit, rather than letting others control our expectancy processes and thereby control us for their benefit.

---

## Bar Lab Study Module

### Objectives

1. Understand the procedure of lab-based expectancy challenge
2. Discussion about results and what it tells us about alcohol's effects
3. Discussion of how we develop our beliefs about alcohol

### Slides



### Script

*There are lots of universities around the country that have been studying alcohol expectancies for years. One way they've done this is by having a research lab set up to look like a bar.*

---

Slide: Bar Lab Study

---

*They conduct experiments that show EXACTLY how our beliefs about alcohol influence the way we feel and act after drinking. In these studies, they often bring college students into a bar-lab and tell them that they are going to have a couple of alcoholic drinks.*

*To illustrate these bar-lab experiments, we have a short video from the Science Channel, “The Power of the Placebo” featuring one of the scientists who pioneered this research.*

---

Slide: Dr. G. Alan Marlatt video

---

*In Pavlov’s studies, it took Pavlov 23 tries to get dogs to salivate at the sound of a bell. If you’re the average American teenager, you’ll see thousands of alcohol ads by the time you turn 18. Is it possible that alcohol companies have figured out how to train you to respond to alcohol the way Pavlov trained his dogs?*

*Much of what you believe is supposed to happen when you drink actually happens because you believe it, but not because alcohol causes it. You form ideas about alcohol from a really young age. Over time, you hear messages and like we said earlier, you hear thousands of messages reinforcing the idea that drinking alcohol causes you to feel good. Eventually, you begin to genuinely believe that this is true and these beliefs determine what you experience when you drink. So beliefs shape your experiences and behavior regardless of how alcohol as a chemical actually affects you.*

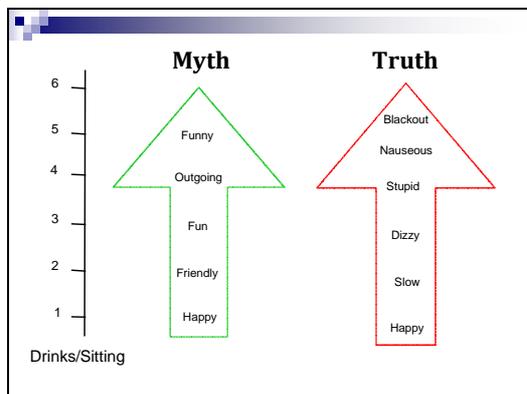
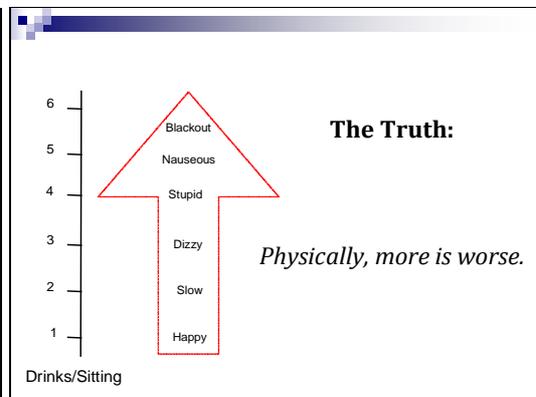
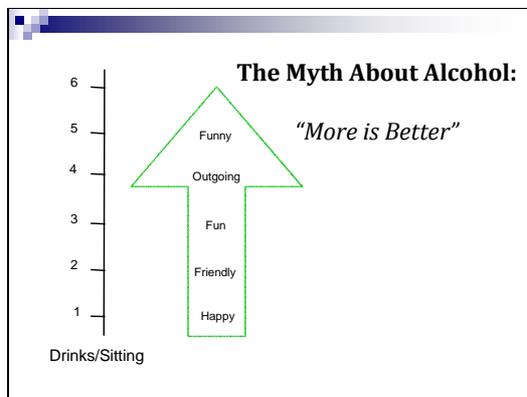
*This is why all the students in the experiment were acting wild and having fun - it didn’t matter whether they got alcohol or not. Their belief that they were drinking alcohol actually shaped their experience.*

## Alcohol Myth Module: More is Better

### Objectives

1. Elicit from students the common myth that more alcohol leads to more arousing effects
2. Discuss the real physiological effects of alcohol
3. Discuss how belief in the myth is related to level of consumption

### Slides



### Script

*We're not saying that alcohol doesn't have ANY effect on people. As we've seen from our lists, there are physical effects of drinking.*

*Let's compare what we THINK about how alcohol physically affects us to what REALLY happens. This is what most people believe about drinking.*

---

Slide: The Myth About Alcohol

---

*This chart shows the idea that the more you drink, the better you'll feel. Is this true?*

*In our culture, we often associate drinking a lot with having fun. Can you think of some examples of how this idea might manifest in someone's drinking behavior?*

---

Hopefully students will volunteer statements consistent with people who “drink to get drunk.” If they are not generating statements that are consistent with this myth, you can try asking them if they have ever heard someone state that their goal for a certain drinking occasion is to get “drunk”, “wasted” etc. You can then describe how this goal exists for the most part because that person is associating this high level of drinking with increased fun.

---

*Let's look at what really happens.*

---

Slide: The Truth

---

*Alcohol is primarily a DEPRESSANT drug that slows you down, both mentally and physically. If you drink just a little bit you may start to feel happy, and this is caused by the low dose effects of alcohol AND your expectancy that you will feel happy. But if you drink more, the DEPRESSANT effects of alcohol become overwhelming and you start to experience all those unpleasant things we've put on our list. A key point is that once you get to the amount of alcohol*

*that causes you to experience those DEPRESSANT effects, you CAN'T get back to the low-dose pleasant feelings.*

---

Refer to slide at HAPPY and UNPLEASANT points of script.

---

*Given all this, why do a lot of people drink so heavily?*

---

Slide: Myth vs. Real

---

*It's because most heavy drinkers really believe alcohol will make them fun, outgoing, or energetic no matter how much they drink and they don't think about the real, physical effects of drinking. They keep chasing that low-dose happy feeling, and because they already passed that point, it's physically impossible to get it back!*

*Now that we've talked about the reality of the effects of alcohol and the myth that drinking more will make someone feel better and better: Where does the myth come from? Well, there are many sources, but the media and their depictions of alcohol are a really important source for this information.*

## Brand Recognition Module

### Objectives

1. Demonstrate the influence of exposure to advertising
2. Demonstrate the automatic nature of brand recognition
3. Discuss perceptions we associate with products because of the media

### Slides



### Script

*American companies spend billions on advertising because they know how strong the advertising influence is on you. They know advertising works! Some of you may have heard about the research on brand recognition – basically, it looks at how quickly people can recognize a brand name when shown the label. Let's try it – I'm going to show you a group of labels with the brand name removed, and I want you all to shout out the brands you recognize.*

*Ready?*

---

Slide: Brand recognition – popular brands

Lead group through each brand label.

---

*Great! All I had to do was show you an image and you were able to name the brand RIGHT AWAY. Kids as young as those in elementary school can name brands this quickly too! Media advertising has a very strong influence over our perceptions – not only could each of you name the brands associated with each label, but I bet you also had a certain perception of the brand itself. For example, seeing a McDonald’s label might make someone think of having fun, being around kids, and having a certain quality of fast food. Or seeing a Tommy Hilfiger label might bring up thoughts about clothing quality, and what kind of people might wear Hilfiger. We all have perceptions of products that we see advertised in the media. Let’s try another one.*

---

Slide: Brand recognition – alcohol brands  
Lead group through each brand label.

---

*You guys are REALLY good! So what did you notice about the products in this image?*

---

Wait for someone to identify images as being alcohol products. If no one says anything, prompt with “*Do they have anything in common?*”

---

*Exactly! These are all brand labels for alcohol products, and you knew most, if not all of them.*

*American alcohol companies spend over \$5 BILLION a year on advertising. The constant repetition of these ads for generations helps explain why so many people think that drinking alcohol makes positive, not negative, things happen.*

---

## Commercial Comparison Module

### Objectives

1. Practice identifying expectancies in commercials
2. Discussion about similarity of expectancies portrayed in ads for very different product
3. Highlight the expectancy effects portrayed are experienced without alcohol or at low levels of drinking

### Video Clips

- Alcohol Ad – Coors Light “Because We Can”
- Water Ad – Dasani Water

### Script

*Let's watch a clip and you tell me what expectancies you see.*

---

Slide: Because We Can video

---

*What's this ad telling us about drinking beer?*

---

Elicit feedback.

Reinforce their ability to identify expectancies if they are successful (most are). If they have trouble you can help them out and identify the expectancies that alcohol will mean having a great time, flirting, being happy, and getting “wild and crazy.”

---

*This ad is telling you that you're supposed to drink because you can. And if you do, people will*

*flirt with you and you'll have a great time. Now let's watch an ad for a different product.*

---

Slide: Water video

---

*Are the expectancies in the water ad any different from what we just saw in the beer ad?*

---

Elicit feedback and discuss. Point out that in both ads the people shown are partying, having fun, and flirting.

Note: Some students will say that this ad doesn't show flirting. Mention how the girl gets out of a taxi with a guy, then she walks into a bar with a guy, then the bartender smiles at her, and then while she's spinning and dancing, a guy is looking over her shoulder, grinning.

---

*Except for the woman drinking water, this ad looks like most other alcohol ads. While the aim of successful advertising is to sell the product, most alcohol ads don't actually depict the effects of alcohol. This is because associating the physical effects of alcohol, such as sleepy, dizzy and nauseous, is not likely to help them with their goal of selling the product. This is why advertising aims to create positive associations with the product and brand that they are selling. It becomes clear that alcohol ads aren't actually selling the physical effects of alcohol when we look at these ads together. We know that alcohol and water have very different physical effects, but both ads portray their product as being associated with flirting, partying and having a great time.*

## Word List Revisited Module

### Objectives

1. Demonstrate ability to distinguish expectancy from real effect
2. Review word list activity and eliminate personal experiences due to expectancies
3. Highlight the physiological effects of alcohol that remain

### Slides

<b>WORD LIST</b>			<b>WORD LIST</b>		
Less nervous	Relaxed	Cool	<del>Less nervous</del>	<del>Relaxed</del>	<del>Cool</del>
Active	Sleepy	Goofy	<del>Active</del>	<del>Sleepy</del>	<del>Goofy</del>
Cocky	Slow	Less Upset	<del>Cocky</del>	<del>Slow</del>	<del>Less Upset</del>
Content	Smart	Nice	<del>Content</del>	<del>Smart</del>	<del>Nice</del>
Dizzy	Talkative	Sick	<del>Dizzy</del>	<del>Talkative</del>	<del>Sick</del>
Friendly	Wild	Crazy	<del>Friendly</del>	<del>Wild</del>	<del>Crazy</del>
Funny	Calm	Good	<del>Funny</del>	<del>Calm</del>	<del>Good</del>
Happy	Fun	Carefree	<del>Happy</del>	<del>Fun</del>	<del>Carefree</del>
Loud	Jolly	Hyper	<del>Loud</del>	<del>Jolly</del>	<del>Hyper</del>
Pretty	Outgoing	Nauseous	<del>Pretty</del>	<del>Outgoing</del>	<del>Nauseous</del>

### Script

*The good news is that expectancies are not permanent. We can change our expectancies once we learn about where they come from and how they work.*

*Now, let's flip back to the word list you completed before the presentation.*

---

Slide: Word list

---

*Now I am going to show you this list with some of the words crossed out and others not. Look it over and see if you can tell the difference between the words.*

---

Slide: Word list with words crossed out.  
Elicit feedback

---

*The words that we have eliminated are the experiences associated primarily with expectancy effects and not the physical effects of alcohol. So looking at your OWN word list, we want you to identify the experiences you circled at the start of the presentation that were due primarily to your expectancies. Using this word list as your guide, CROSS OUT all the words you circled that were expectancies.*

---

Refer to slide. Give students 5 minutes to go through and cross out their expectancies.  
Move on to next slide.

---

*All the crossed out words represent experiences that you had due to the expectations you have for the effects of alcohol. If you were a participant in the bar lab experiment we discussed earlier, these would be the effects you might have experienced while drinking, even if you received a placebo beverage that had no alcohol in it. What we're left with are the words that are due primarily to the physical effects of alcohol. Alcohol as a drug in our bodies can really only make use sleepy, dizzy, sick, and nauseous. Other effects like being more outgoing, talkative, social or happy are not things you are experiencing due to the alcohol content of your beverage. These effects are coming from the power that of expectations can have over our experiences.*

*We covered a lot of important myths about alcohol today and used scientific research to*

*address the truth behind them. We discussed the truth about what one drink means, we debunked the myth that more alcohol is associated with more fun, we looked critically at media portrayals of alcohol, and most importantly we challenged what we know about the effects of alcohol. Hopefully you heard something here today that you had never learned before and that you enjoyed the presentation!*

## Appendices

## **APPENDIX A**

*This is a Myth Busting presentation about alcohol. You all know what alcohol is, and you certainly have ideas about what the effects of alcohol are, but despite everything you may **think** you know about alcohol, the facts you are about to hear may surprise you. This information is based on a huge amount of research completed by scientists over the years. There are several important differences between the facts, and things that are commonly believed by most people. That's why this is called the **Myth Busting** presentation about alcohol*

*One of the first facts about alcohol that may surprise you is the amount of alcohol that is contained in different alcoholic beverages. When people talk about having a drink, the ways that they may define one drink can vary widely from person to person. For instance, some people count whatever may be in their cup as one drink, even if the size of the cup or the type of beverage varies. However, there is a definition for what a STANDARD DRINK is. Take a look at this slide that shows a number of different amounts of alcohol in a solo cup. Now if this is a common 80 proof liquor, which of these do you think is a standard drink?*

---

Slide: Solo Cups

Take some guesses from the students as to which cup reflects a STANDARD DRINK. Then click to advance the slide effect and reveal the STANDARD DRINK as cup E

Next slide: Standard Drinks: Beer, Wine, shots

---

*These are examples of a single STANDARD DRINK. It is your typical 12-ounce bottle or mug of beer, a 5-ounce glass of wine, or 1.5oz of 80 proof liquor. But in the real world, you frequently see many other types of drinks. Mixed drinks for example are can be one standard drink, but it*

*depends on how many shots of liquor go into a mixed drink! Also, you might be drinking out of a container that is not a standard drink size.*

---

Slide: Red Solo Cup

---

*For example, people will sometimes consume alcohol out a cup such as this one. Unless someone is measuring, it can be hard to tell how many standard drinks are in such a cup. This image shows how different drink types look in one of these cups if you were to be consuming 1 standard drink.*

---

Slide: Variety of real world drinks depictions

---

*These are just a few more examples of the many ways alcoholic beverages are available. They include drinks like a “yard of beer” which can be 4-6 standard drink, and the “boot” of beer which can have 5-6 standard drinks. Beer can also be served in a pint glass or in a pitcher which is not easily recognizes in terms of how many standard drinks they contain. Also, if you look at the middle picture on the bottom, this illustrates how different 1 standard drink can appear when you are talking about different beverages and different cups or glasses.*

*Why does it matter? To understand how alcohol will affect someone, you first need to know how much alcohol they are actually consuming. Not that you understand how much alcohol is in various drinks, we can move on to the effects of alcohol.*

*To start, we want you to flip to page \_\_\_\_ and look at the list of words. Thinking about times when you’ve had any amount of alcohol, circle any words that describe effects you*

*experienced. If you don't ever drink, circle words you THINK you might experience IF you were drinking.*

*When you're done, turn to the stop sign and we'll come back to this word list later.*

*Let's see a show of hands. How many of you think of alcohol as a drug?*

---

Wait for students to raise hands

---

*Alcohol IS a drug, an over-the-counter drug because you don't need a prescription to get it. If alcohol WAS a prescription drug, an ad for it might sound something like this...*

---

Slide: Alcohol as a prescription drug.

Play audio file.

---

*This ad is funny because it treats alcohol as if it was a prescription drug that can cure shyness and awkwardness, which it obviously can't. Overall, the purpose of advertising is to encourage people to believe certain things. For a specific product like alcohol, advertising encourages people to associate alcohol with memorable experiences. Typical alcohol ads often look like the following...*

---

Slide: Bacardi Ad

---

*Regardless of where we get our ideas about the effects of alcohol, all of us have BELIEFS about how people feel and behave after they've had a few drinks. For example, the ad we*

*listened to promised that drinking alcohol makes people less shy and more social.*

---

Slide: “Drinking alcohol makes a person...”

---

*How do you think people feel and behave after a few drinks?*

*Under #1 of your activity sheet, write down a few words that complete this sentence:*

*“Drinking alcohol makes a person . . .”*

---

Give students a minute and then begin asking for students to state their answers out loud. If students are confused, repeat the example from above – “Drinking alcohol makes a person less shy,” or “Drinking alcohol makes a person more social.”

Draw a line in the middle of the board so that there are two halves in which you can write the students’ responses.

---

*What kinds of words did you have on your lists?*

---

Write the responses that are either EXPECTANCY responses (e.g., happy, outgoing, fun) on the right side and write down pharmacological responses (e.g., dizzy, sleepy, nauseous, loss of judgment) on the left side. Continue until you have 5 or 6 answers written down on each side.

---

*The words you came up with are basically the same words everyone reports. Research on the effects people associate with alcohol has found that everyone thinks alcohol has most of the same possible effects, and that’s why everyone reports the same list you just did. I have put the words you reported into two groups on the board. The strange thing about these two groups of words is that they are all possible effects of the same drug. How can one drug make people happy and outgoing but also make them sleepy and nauseous?*

---

Slide: Definitions of Physical Effects and Expectancy Effects

---

*Alcohol research has found the answer to this question by separating physical drug effects of alcohol from “expectancy” effects. Physical effects are direct pharmacological or biological effects of a drug. Physical effects are effects people experience even if they don’t know they have taken a particular drug. Expectancy effects are similar to placebo effects. Expectancy effects are the effects people experience solely as a result of believing they have taken a drug that produces the effects they are experiencing, even when they have actually been given no drug at all.*

*The possible effects of alcohol that appear to be contradictory can be explained by differentiating physical effects of alcohol from expectancy effects. Physical effects of alcohol include feeling dizzy, sleepy, and nauseated. Most other effects people associate with alcohol are primarily expectancy effects and are not directly or physically caused by alcohol.*

*To understand how we could experience these opposing physical and expectancy effects, we have to understand how our minds store and process information.*

*Scientists have found that possible effects of alcohol are GROUPED together in your brain in very specific ways. For example, if someone believes that alcohol will make them friendly, they’re also likely to believe that alcohol will make them outgoing, happy, and funny.*

---

Advance slide to demonstrate this effect.

---

*Similar effects are grouped together. The physical effects of alcohol we talked about are grouped farther away from positive social effects. So someone who believes alcohol makes them FRIENDLY is less likely to believe that alcohol can also make them dizzy, sleepy, and nauseous.*

---

Point to FRIENDLY, and then DIZZY, SLEEPY and NAUSEOUS on slide.  
Advance slide to demonstrate effect

---

*How do we acquire all these expectancies for alcohol effects? Growing up we see adults drinking or hear them talking about it. We also see people drinking in television or in movies, and even in cartoons! One place where we get a lot of information about what alcohol can do for us and how it will make us is from ads in magazines and TV commercials. We will be focusing on the media in this presentation because it is an influence that constantly bombards us with depictions of possible effects of alcohol. We will evaluate how accurate the effects ads want us to associate with alcohol are compared to what research reveals are the actual physical effects of alcohol. That way we can learn to think more critically about these messages we get consistently exposed to.*

*Let's practice identifying what alcohol expectancies that are depicted in the media.*

*I'm going to show you an ad, and I want you to write down the expectancies you see. Under #2 of your activity sheet, write down any effects from drinking this ad is trying to make you believe.*

Slide: Beer goggle ad

---

*Go ahead and write down a few of the expectancies you see in this ad.*

---

Give students one minute and prepare to write on the board.

---

*Alright, what expectancies did you catch? Let's see some hands.*

---

Almost all your students will say something along the lines of “ugly girls turn pretty,” or “you’ll imagine things.”

No matter what your students bring up, rephrase it into the statement that: you’ll see, or imagine pretty girls.

Then write on the board, under the column of positive expectancies:

- Pretty girls
- 

*Excellent! How has their clothing changed?*

---

No matter what your students answer, rephrase it into the statement that: girls’ clothes get more racy.

Then write on the board.

- Racy clothes
- 

*Thousands of times you’ll see alcohol ads that promise if you drink, good things will happen.*

*Is this ad true? Do people actually get more attractive as they drink?*

*Because the poster is funny, you don't think about whether the message is true. Does that make sense?*

---

Author's Note: Students may be resistant to the idea that certain media depictions are expectancy effects that are not actual physical effects of alcohol. It is important not to get defensive if confronted with this situation. The student's insistence that they experience these effects helps illustrate the point that expectations have a powerful influence over people's experience. We actually do experience some of these effects, however what is key is that we only experience them because we believe that we will. They are not effects associated with the physical effects of alcohol.

We use advertising as a tool to illustrate how expectancies are formed and reinforced without our conscious involvement, and how we can learn to control our expectancy processes rather than surrendering that control to the media and other external influences. By learning to control these processes, we can direct the power of placebo effects for our own benefit, rather than letting others control our expectancy processes and thereby control us for their benefit.

---

*There are lots of universities around the country that have been studying alcohol expectancies for years. One way they've done this is by having a research lab set up to look like a bar.*

---

Slide: Bar Lab Study

---

*They conduct experiments that show EXACTLY how our beliefs about alcohol influence the way we act after drinking. In these studies, they often bring college students into a bar-lab and tell them that they are going to have a couple of alcoholic drinks.*

*To illustrate these bar-lab experiments, we have a short video from the Science Channel, "The Power of the Placebo" featuring one of the scientists who pioneered this research.*

---

Slide: Dr. G. Alan Marlatt video

---

*In Pavlov's studies, it took Pavlov 23 tries to get dogs to salivate at the sound of a bell. If you're the average American teenager, you'll see thousands of alcohol ads by the time you turn 18. Is it possible that alcohol companies have figured out how to train you to respond to alcohol the way Pavlov trained his dogs?*

*Much of what you believe is supposed to happen when you drink actually happens because you believe it, but not because alcohol causes it. You form ideas about alcohol from a really young age. Over time, you hear messages and like we said earlier, you hear thousands of messages reinforcing the idea that drinking alcohol causes you to feel good. Eventually, you begin to genuinely believe that this is true and these beliefs determine what you experience when you drink. So beliefs shape your experiences and behavior regardless of how alcohol as a chemical actually affects you.*

*This is why all the students in the experiment were acting wild and having fun - it didn't matter whether they got alcohol or not. Their belief that they were drinking alcohol actually shaped their experience.*

*We're not saying that alcohol doesn't have ANY effect on people. As we've seen from our lists, there are physical effects of drinking.*

*Let's compare what we THINK about how alcohol physically affects us to what REALLY happens. This is what most people believe about drinking.*

Slide: The Myth About Alcohol

---

*This chart shows the idea that the more you drink, the better you'll feel. Is this true?*

*In our culture, we often associate drinking a lot with having fun. Can you think of some examples of how this idea might manifest in someone's drinking behavior?*

---

Hopefully students will volunteer statements consistent with people who "drink to get drunk." If they are not generating statements that are consistent with this myth, you can try asking them if they have ever heard someone state that their goal for a certain drinking occasion is to get "drunk", "wasted" etc. You can then describe how this goal exists for the most part because that person is associating this high level of drinking with increased fun.

---

*Let's look at what really happens.*

---

Slide: The Truth

---

*Alcohol is primarily a DEPRESSANT drug that slows you down, both mentally and physically. If you drink just a little bit you may start to feel happy, and this is caused by the low dose effects of alcohol AND your expectancy that you will feel happy. But if you drink more, the DEPRESSANT effects of alcohol become overwhelming and you start to experience all those unpleasant things we've put on our list. A key point is that once you get to the amount of alcohol that causes you to experience those DEPRESSANT effects, you CAN'T get back to the low-dose pleasant feelings.*

---

Refer to slide at HAPPY and UNPLEASANT points of script.

---

*Given all this, why do a lot of people drink so heavily?*

---

---

Slide: Myth vs. Real

---

*It's because most heavy drinkers really believe alcohol will make them fun, outgoing, or energetic no matter how much they drink and they don't think about the real, physical effects of drinking. They keep chasing that low-dose happy feeling, and because they already passed that point, it's physically impossible to get it back!*

*Now that we've talked about the reality of the effects of alcohol and the myth that drinking more will make someone feel better and better: Where does the myth come from? Well, there are many sources, but the media and their depictions of alcohol are a really important source for this information.*

*American companies spend billions on advertising because they know how strong the advertising influence is on you. They know advertising works! Some of you may have heard about the research on brand recognition – basically, it looks at how quickly people can recognize a brand name when shown the label. Let's try it – I'm going to show you a group of labels with the brand name removed, and I want you all to shout out the brands you recognize. Ready?*

---

Slide: Brand recognition – popular brands

Lead group through each brand label.

---

*Great! All I had to do was show you an image and you were able to name the brand RIGHT AWAY. Kids as young as those in elementary school can name brands this quickly too! Media*

*advertising has a very strong influence over our perceptions – not only could each of you name the brands associated with each label, but I bet you also had a certain perception of the brand itself. For example, seeing a McDonald’s label might make someone think of having fun, being around kids, and having a certain quality of fast food. Or seeing a Tommy Hilfiger label might bring up thoughts about clothing quality, and what kind of people might wear Hilfiger. We all have perceptions of products that we see advertised in the media. Let’s try another one.*

---

Slide: Brand recognition – alcohol brands  
Lead group through each brand label.

---

*You guys are REALLY good! So what did you notice about the products in this image?*

---

Wait for someone to identify images as being alcohol products. If no one says anything, prompt with “*Do they have anything in common?*”

---

*Exactly! These are all brand labels for alcohol products, and you knew most, if not all of them.*

*American alcohol companies spend over \$5 BILLION a year on advertising. The constant repetition of these ads for generations helps explain why so many people think that drinking alcohol makes positive, not negative, things happen.*

*Let’s watch a clip and you tell me what expectancies you see.*

---

Slide: Because We Can video

---

*What's this ad telling us about drinking beer?*

---

Elicit feedback.

Reinforce their ability to identify expectancies if they are successful (most are). If they have trouble you can help them out and identify the expectancies that alcohol will mean having a great time, flirting, being happy, and getting “wild and crazy.”

---

*This ad is telling you that you're supposed to drink because you can. And if you do, people will flirt with you and you'll have a great time. Now let's watch an ad for a different product.*

---

Slide: Water video

---

*Are the expectancies in the water ad any different from what we just saw in the beer ad?*

---

Elicit feedback and discuss. Point out that in both ads the people show are partying, having fun, and flirting.

Note: Some students will say that this ad doesn't show flirting. Mention how the girl gets out of a taxi with a guy, then she walks into a bar with a guy, then the bartender smiles at her, and then while she's spinning and dancing, a guy is looking over her shoulder, grinning.

---

*Except for the woman drinking water, this ad looks like most other alcohol ads. While the aim of successful advertising is to sell the product, most alcohol ads don't actually depict the effects of alcohol. This is because associating the physical effects of alcohol, such as sleepy, dizzy and nauseous, is not likely to help them with their goal of selling the product. This is why advertising aims to create positive associations with the product and brand that they are selling. It becomes*

---

*clear that alcohol ads aren't actually selling the physical effects of alcohol when we look at these ads together. We know that alcohol and water have very different physical effects, but both ads portray their product as being associated with flirting, partying and having a great time.*

*The good news is that expectancies are not permanent. We can change our expectancies once we learn about where they come from and how they work.*

*Now, let's flip back to the word list you completed before the presentation.*

---

Slide: Word list

---

*Now I am going to show you this list with some of the words crossed out and others not. Look it over and see if you can tell the difference between the words.*

---

Slide: Word list with words crossed out.  
Elicit feedback

---

*The words that we have eliminated are the experiences associated primarily with expectancy effects and not the physical effects of alcohol. So looking at your OWN word list, we want you to identify the experiences you circled at the start of the presentation that were due primarily to your expectancies. Using this word list as your guide, **CROSS OUT** all the words you circled that were expectancies.*

---

Refer to slide. Give students 5 minutes to go through and cross out their expectancies.  
Move on to next slide.

---

*All the crossed out words represent experiences that you had due to the expectations you have for the effects of alcohol. If you were a participant in the bar lab experiment we discussed earlier, these would be the effects you might have experienced while drinking, even if you received a placebo beverage that had no alcohol in it. What we're left with are the words that are due primarily to the physical effects of alcohol. Alcohol as a drug in our bodies can really only make use sleepy, dizzy, sick, and nauseous. Other effects like being more outgoing, talkative, social or happy are not things you are experiencing due to the alcohol content of your beverage. These effects are coming from the power that of expectations can have over our experiences.*

*We covered a lot of important myths about alcohol today and used scientific research to address the truth behind them. We discussed the truth about what one drink means, we debunked the myth that more alcohol is associated with more fun, we looked critically at media portrayals of alcohol, and most importantly we challenged what we know about the effects of alcohol. Hopefully you heard something here today that you had never learned before and that you enjoyed the presentation!*

## **APPENDIX B: Frequently Asked Questions**

### Word List Module

*“What if I don’t drink?”*

Whether a student consumes alcohol or not, everyone has certain thoughts, beliefs, and perceptions about how alcohol affects people. Nondrinkers can complete the measures based on what they believe or how they think people behave when drinking.

### Introduction to Expectancies Module

*“What makes alcohol a drug?”*

*“I don’t agree that alcohol is a drug.”*

Alcohol is a psychoactive drug that has very real effects on the body. We might not always conceptualize it as a drug because it is a beverage that can be obtained legally (21 or older) and does not require a prescription. However, this is also true of nicotine and caffeine which are also classified as drugs. Alcohol functions as a central nervous system depressant which impairs both mental and motor functioning and causes sedation. The specific effects and degree of impairment experienced are a function of intoxication.

*“Why is relaxed (or something similarly related to tension reduction) on the expectancy list?”*

*Alcohol is a depressant so doesn’t that mean it relaxes you?”*

This expectancy item is the one that will be the most likely to be met with some resistance. It makes sense as there is also some inconsistency in the research about how much is pharmacology versus expectancy. While alcohol will slow the system down and be sedating, this

does not always translate into the experience of relaxation for a drinker. Research indicates that expectancies play a moderating role in a person's subjective experience of tension reduction and their subsequent behavior while drinking (O'Connor, Farrow, & Colder, 2008). In other words the degree to which someone might experience effects consistent with tension reduction, is influenced by the beliefs they hold about alcohol's tension reduction properties. The higher a person's belief that alcohol will reduce tension, the more tension reduction someone will report and experience when drinking (Young, Oei, & Knight, 1990). In sum, the important role that expectancies play in the experience of tension reduction while drinking is why within the ECALC relaxation is conceptualized as an expectancy effect.

A helpful example for students is to ask them how different settings may be associated with different experiences for them for drinking:

*“How might your experience having a drink at home while watching a movie be different than when you are drinking at a bar or club with a group of friends?”*

Students will usually recognize that one of those settings is related to a more relaxing experience while the other is usually quite the opposite or relaxing (Loud, talkative, wild and crazy etc.).

*“Now the alcohol does not know where it is. So we can't really account for these differences based on alcohol's pharmacological effects alone. Expectancies we have for certain settings can influence our experience while drinking pretty significantly.”*

### Bar Lab Module

*“Even if the drinks looked/tasted/smelled the same, how could participants not know what they were drinking? You said earlier that alcohol is a drug that has depressant effects? So couldn’t they tell based on the real pharmacological effects?”*

What is key here is that participants were only given 2 standard drinks to be consumed in 30 minutes. So this was not enough for to achieve a high enough BAC level to be experiencing marked impairment in functioning. It is important for the drinker not to be able to tell what type of drink they may have consumed in order to evaluate the influence of their expectancies. The lower BAC levels are where our expectancies are largely functioning and before we are really feeling the impact of the depressant effects so that is what is targeted.

# ECALC – Expectancy Challenge Alcohol Literacy Curriculum

Student Workbook

***\*\*Pre-Publication Version, Please Do Not Quote\*\****

## Contents

Copyright.....	3
Introduction/Confidentiality .....	5
Word List Activity.....	17
Activity #1: "Alcohol makes a person" .....	19
Activity #2: Ad Expectancies .....	21

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First Printing:

## **Introduction to the ECALC**

Welcome to the ECALC presentation! You will be lead through this program by one or two trained facilitators. The program is designed to include interaction from you the student. You may be asked to respond to questions or to complete activities. This workbook contains a number of activity sheets that your facilitators will be referring you to throughout the course of the presentation. Please do not attempt to skip ahead or fill them out until instructed. Even if it may seem as though the directions are clear, you may be completing the task incorrectly. Listen carefully to the facilitators for what they are asking of you. They will be giving you more specific instructions as you go through the presentation and will be asking you to turn to specific pages and activities.

### **Confidentiality**

This workbook is yours to keep. We will be asking you about information related to alcohol use and your thoughts and beliefs about alcohol. Since some of you may be underage, it might feel strange discussing your drinking. For that reason, everything we talk about today, and everything you write down, is ANONYMOUS. Do not write your names on the workbook and take them with you when you leave. This ensures that anything you write down within the context of this presentation will not be used by anyone and cannot be connected to you.

## **Word List Activity**

## Word List

Using the calendar you just filled out as a reference, think back to a time when you had several alcoholic drinks. Circle all the words you experienced or have ever experienced feeling when having several drinks. If you have never had an alcoholic beverage, circle any words you think you could experience feeling.

Less nervous

Relaxed

Sleepy

Active

Slow

Smart

Cocky

Talkative

Wild

Content

Calm

Fun

Dizzy

Jolly

Outgoing

Friendly

Cool

Goofy

Funny

Less Upset

Nice

Happy

Sick

Crazy

Loud

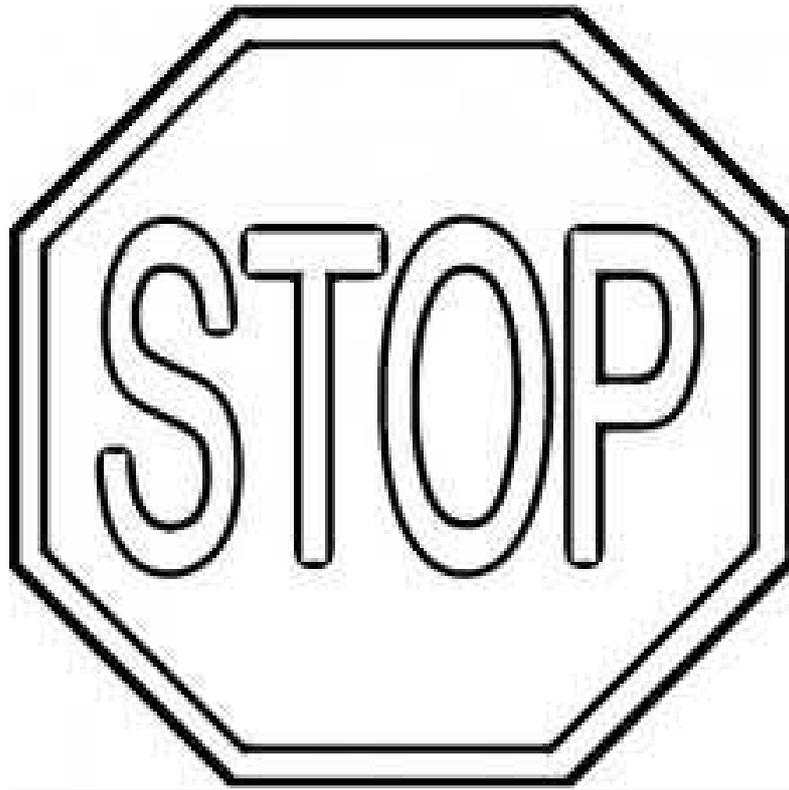
Good

Carefree

Pretty

Hyper

Nauseous



**Do Not Proceed Until Instructed**

**Activity #1: Alcohol makes a person...**

**Activity Sheet #1**

Complete this statement with the first words that come to mind.

***Drinking alcohol makes a person .....***

---

---

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---

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---

---

## **Activity #2: Ad Expectancies**

**Activity Sheet #2**

Take a look at the ad displayed for you. What expectancies do you see? What is this ad trying to make you believe are the effects of alcohol?

***According to the ad, alcohol makes a person .....***

---

---

---

---

---

---

---

---

**Turn back to Word List when instructed.**

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