Drinking Refusal Self-Efficacy and Alcohol Expectancy: Changing Undergraduate Students’ Alcohol Drinking Behavior

Chakkrit Ponrachom¹, Karuntharat Boonchuaythanasi², Bradley J. Cardinal³

¹Faculty of Community Health, Kasetsart University Chalermphrakiat Sakon Nakhon Province Campus, Kasetsart University, Oregon State University
²Faculty of Education, Kasetsart University Chalermphrakiat Sakon Nakhon Province Campus, Kasetsart University, Oregon State University
³College of Public Health and Human Science, Kasetsart University Chalermphrakiat Sakon Nakhon Province Campus, Kasetsart University, Oregon State University

¹ponrachom@hotmail.com
²jinda99@yahoo.com
³brad.cardinal@oregonstate.edu

Abstract: Under-age drinking and the overconsumption of alcohol among undergraduate students results in unnecessary physical, emotional, and intellectual problems, as well as economic losses for individuals. This issue remains an enduring educational and public health challenge. To better understand what is known and what is not known on this subject, the purpose of this article is to review past literature as it pertains to individual causal factors. The review points to the importance of considering individual resiliency in the form of drinking refusal self-efficacy and alcohol expectancy. Innovative solutions aimed at addressing these constructs among undergraduate students, such as adaptive skill-building strategies that are social context specific, advance progress in solving this problem behavior.

Keywords: Alcohol abuse, Decision making, Health promotion, Health behavior, Student health services.

1. INTRODUCTION:

Excess alcohol consumption causes physical, emotional, intellectual, and economic problems. The World Health Organization has identified its negative impact on individuals, families, communities, and societies. Specifically, it is associated with 60 different diseases. Unfortunately, trends are getting worse in some countries. For example, relative to other countries around the world, alcohol consumption in Thailand is quite high, with youth as young as 15 starting up. Among certain population subgroups, such as college and university students, alcohol consumption is especially high. Internationally, the college and university years of life are often reported to be when people begin consuming alcohol. For Thai people, this is no different. The “average” age in which Thai people begin drinking alcohol is 20.4 years. Some of these students seem woefully unprepared for this. For example, Gilles, Turk, and Fresco reported dangerously high levels of alcohol consumption among 56.8 percent of their study participants. Moreover, excess alcohol consumption is associated with other high-
risk health behaviors, thereby conflating its deleterious effects. For example, Karam, Kypri, and Salamoun reported that those who consumed excessive amounts of alcohol were 25 times more likely to engage in other high-risk behaviors\cite{5}. For Thai people, this translates into shorter life expectancies among heavy alcohol drinkers. Clearly, alcohol consumption among people is problematic, and it is during the impressionable college and university years that genuine solutions are needed.

This is not to suggest that the problem has been ignored. Quite the contrary, various agencies have attempted to solve this problem. However, as the data show, the impact to date has been less than optimal\cite{6}. In part this is because the problem is extraordinarily complex\cite{7-9}, inclusive of individual internal and external factors, as well as environmental factors (e.g., the physical and social environments). The most proximal factors in the causal pathway are those at the intra-individual level, which makes them a desirables at the intra-individual level and targeting those for intervention may lead to sustainable behavior change.

To better understand what is known and what is not known about the alcohol consumption behavior of college and university students, the purpose of this article is to review past literature as it pertains to individual causal factors. Both conceptual and empirical work is included in this review. The overarching aim to identify intra-individual, modifiable alcohol drinking behavior constructs that can serve as intervention and/or programmatic target points that may genuinely impact undergraduate students’ immediate and long-term alcohol consumption behaviors.

2. ALCOHOL DRINKING BEHAVIOR AND CAUSAL FACTORS OF ALCOHOL DRINKING BEHAVIOR IN UNDERGRADUATE STUDENTS

Various interrelated causal factors are associated with alcohol drinking behavior. Central among these is the alcohol drinkers’ perception of themselves and their surrounding social environment. This is consistent with Lewin’s classic formulation, where behavior is the resultant function of the person and her/his environment\cite{10}. Again, though, interventions aimed at addressing alcohol consumption among college and university students have not really solved the problem\cite{6}. While acknowledging the multifactorial nature of the problem\cite{7-9}, this problem can be further stripped down to the individual internal factors associated with decision-making Bandura’s work, which came a half-century after Lewin’s, proposed two major concepts regarding individual decision making and its effects on executing any behaviors\cite{11}. The first is efficacy expectation, which refers to an individuals’ belief or confidence in her/his ability to generate a desirable expectation before taking an action. The second is outcome expectation, which refers to an individual’s assessment that her/his behaviors can lead to expected actions. The efficacy expectation and outcome expectation process is correlated with behavior (see Fig. 1).

![Fig. 1](image_url)

Fig. 1 shows the correlation between efficacy expectation and outcome expectation (Bandura, 1986).
As summarized in Fig.1, a college or university student would be more likely to inappropriately consume alcohol the student did not have drinking refusal self-efficacy and her/his alcohol expectancy was not positive. Gilles et al.’s study is supportive this. That is, they found that the alcohol drinking behaviors of college and university students consisted of their drinking refusal self-efficacy and their alcohol expectancy [4]. Their work was consistent with the work of Oei and Baldwin, who found that drinking refusal self-efficacy and alcohol expectancy were the important individual internal factors that could explain alcohol drinking behavior [12]. This was further confirmed in later work [13], including how these two factors specifically could explain the alcohol drinking behavior of undergraduate students [14-15].

With this in mind, the next step in this review is to review two specific constructs. Namely, the constructs of drinking refusal self-efficacy and alcohol expectancy.

**Drinking Refusal Self-Efficacy**

Drinking refusal self-efficacy refers to one’s ability, confidence, and reliability to refuse alcohol under three situations [16]. They are:

1. Emotional relief self-efficacy means refusing to drink alcohol under situations associated with emotional relief, such as when feeling angry or bored. Because college and university life can be stressful due to academic pressure, interpersonal relationships, and social strain, and because college students may not have fully developed appropriate or mature coping mechanisms to handle these stresses, they may turn to alcohol to relieve their emotions, feel more relaxed, good-tempered, or cheerful.

2. Social pressure self-efficacy means refusing to drink alcohol under situations associated with social pressure. This might include, for example, when at a party, dining out, or when a person offers a drink. As college students are the age that friends have more influence on them [17], therefore, social pressure can be a factor driving their alcohol drinking behavior.

3. Opportunistic self-efficacy means refusing to drink alcohol when it is opportunistically or conveniently available. This might include during alone time, social time, or wait time.

Previous studies have found that drinking refusal self-efficacy was negatively related with alcohol drinking behavior [13,18]. Therefore, it can be concluded that if a person has drinking refusal self-efficacy, an intrapersonal factor, it can help that person avoid drinking alcohol or drinking alcohol in a more responsible manner.

**Alcohol Expectancy**

Whether someone has ever consumed alcohol or not, they likely have formed an outcome expectation about alcohol and its affects. This is known as alcohol expectancy, which is a cognitive factor associated with students’ beliefs about what alcohol may do for them or to them. For example, through social learning processes, which may or may not be accurate, including observing family, friends, movies and television shows, or advertisements, they may learn that alcohol increases confidence to express, improves sexual function, helps generate creative solutions to problems, enhances one’s disposition or temperament (e.g., increases social ability, relaxes stressful feelings), and fills-in other missing interpersonal skills beyond that which is possible without consuming alcohol [16]. Such alcohol expectancies are associated with problematic alcohol consumption behaviors [19-20], especially among men [20]. There are usually relatively fewer negative outcome expectations associated with alcohol consumption. Body weakness and depression, which can lead to further alcohol consumption, are two [9].
Dunn, Lau and Cruz suggest that there are seven primary alcohol expectancies, four positive and three negative \cite{21}. They include:

1. Sociability; often perceived as a positive alcohol expectancy. It is the expectancy that when a person drinks alcohol, he or she will be become more sociable and, as such, will be better accepted by others or society.

2. Tension Reduction; another perceived positive alcohol expectancy. It is the expectancy that alcohol consumption will help a person relax and reduce tension; stress and worries are diminished as a result \cite{16}. O’Hare and Sherrur found that higher frequency alcohol consumption was associated with the alcohol expectancy that it would reduce tension \cite{22}. Moreover, those with more problems reported higher alcohol expectancies for reducing their tension by consuming alcohol compared to those with fewer problems \cite{20}.

3. Liquid Courage; is another perceived positive alcohol expectancy. The idea here is that alcohol consumption results in more confidence to express oneself in social situations \cite{16}. O’Hare and Sherrur found that men believed that drinking alcohol could increase their self-confidence in different situations (e.g., being able to express how they feel, speaking out in social situations) \cite{22}. Similarly, Kidorf and Lung reported that among women, an alcohol expectancy for increasing their social expression also occurred (e.g., speaking in front of a group, overcoming shyness) \cite{23}. Ham and Hope reported that alcohol expectancy was associated with lowering social anxiety \cite{9}.

4. Encouraging sexuality; this is final perceived positive alcohol expectancy. The belief here is that when person drink alcohol, he or she is better able to attract the opposite sex and also to increase one’s sexual performance \cite{16}. People with this belief were more likely to drink alcohol compared to those without this belief \cite{22}.

5. Cognitive Behavioral Impairment; this is the first perceived negative alcohol expectancy. The belief here is that when people drink alcohol, they lose their self-control, memory, and consciousness.

6. Risk and Aggression; this is second perceived negative alcohol expectancy. The belief here is that when a person drinks alcohol, he or she will be more likely to take risks and engage in aggressive behaviors.

7. Self Perception; this is the final perceived negative alcohol expectancy. Here the person believes that alcohol consumption will result in a lower self-perception, including feeling like a failure, or more moody, sad, or miserable.

Positive alcohol expectancy are associated with higher levels of alcohol drinking behavior. By contrast, negative alcohol expectancies are associated with decreased alcohol drinking tendencies or higher rates of non-alcohol drinking behavior \cite{4, 25-26}. Consequently, and taken together, it is important to emphasis the negative alcohol expectancies to undergraduate students and to reduce or eliminate their positive alcohol expectancies.

3. PROCESS OF ENHANCING DRINKING REFUSAL SELF-EFFICACY AND ALCOHOL EXPECTANCY

According to Bandura, there are four sources of self-efficacy (i.e., situation specific self-confidence) \cite{11}. They include enactive mastery experiences, vicarious experiences, verbal persuasion, and physiological and affective states. These are each more thoroughly elucidated below:

1. Enactive Mastery Experience; essentially these are the successful experiences that a person has in their lives. They are directly and personally experienced, as such they are associated with deep feelings of satisfaction. They are a particularly strong source of self-efficacy formation.
2. Vicarious Experiences; these are the experiences observed and learned from others. They are not direct, but rather indirect. Nonetheless, they are powerful sources of learning, as learning occurs through observation, imitation, and repetition. They, too, result in self-efficacy formation.

3. Social Persuasion; these are usually thought of as the words of significant others in people’s lives. There is an adage that “actions speak louder than word,” and this seems true in self-efficacy formation, as the method is not considered as powerful as the first two. The more credibility the source of the social persuasion, the more influence they have.

4. Somatic and Emotional States; one’s emotional arousal also plays a role in self-efficacy formation. Physiological and affective states, which fluctuate, therefore, influence one’s self-efficacy if a person has negative feelings such as feeling tired, bored, worried, stressed, or pressured, or their somatic state is otherwise abnormal, self-efficacy can be diminished. By contrast, if one’s somatic and emotional states are above normal or normal, self-efficacy will be increased.

The interplay among these sources of self-efficacy appraisal affects one’s drinking refusal self-efficacy and alcohol expectancies. Lowering the positive alcohol expectancies of undergraduate students and building their self-efficacy skills in different contexts, are useful learning strategies.

4. CONCLUSION

On the basis of this review, it is apparent that teenager and young adult alcohol drinking behaviors are influenced by many factors. However, this review also identified two higher-order factors associated with undergraduate student drinking behaviors, namely alcohol expectancy and drinking refusal self-efficacy. These are both important intrapersonal factors that can explain alcohol drinking behavior. Therefore, the authors would like to present a new paradigm aimed at solving the aforementioned problem so as to prevent alcohol drinking in the first place (i.e., prevention) and/or lower the amount of alcohol that undergraduate students consume. The implementation is as follow:

1. Previously used strategies for controlling alcohol consumption have focused on implementing laws restricting use (e.g., minimum age, zoning areas where alcohol can be sold and/or consumed) and increasing taxes on alcoholic drinks thereby raising their prices. Such strategies can work under certain circumstances and conditions, but not universally. However, marketers can also use those tactics to build advertising campaigns and strategies. In the new paradigm proposed in this paper, the focus is on strengthening individual immunity through empirically supported psychological constructs (i.e., strengthening drinking refusal self-efficacy, negative alcohol expectancies, and lowering positive alcohol expectancies)

2. Past work has emphasized the mobilization of the design pattern of behavior modification programs aimed at preventing alcohol consumption. In the new paradigm the emphasis is placed on designing the behavior modification program in accordance with the identified causal factors (i.e., real causal factors). Having identified these, specific strategies can be developed and practiced in the Thai context. The aim should be to insure that these are simple, convenient, accessible, and meet the needs of undergraduate students.

3. The final point in the newly proposed paradigm is to distinguish effectiveness from efficiency. Effectiveness work refers to achieving certain objectives of goal expectations. This might have been done in piecemeal fashion (e.g., determine whether activities were administered as planned). The emphasis was on the outcome or product rather than the process itself. In the new paradigm the focus is on efficiency. Accomplishments here would include “outcomes” such as worthiness, timeliness, and quality.
5. ACKNOWLEDGEMENT

The authors gratefully acknowledge the financial support of this work from National Research Council of Thailand (NRCT).

6. REFERENCES


