

Binge Drinking and the Transtheoretical Model Among College Students

Matt Giffin
Department of Psychology
Miami University
Oxford, OH 45056 USA

Faculty Advisor: Dr. Rose Marie Ward

Abstract

Binge drinking among students is a major problem facing colleges across America⁶. There are many short-term and long-term negative consequences that result from binge drinking including blackouts, memory loss, automobile accidents, academic failure, and property damage⁶. After experiencing an alcohol-related negative consequence, some students report contemplating changing their drinking habits³. Given the difference in access to alcohol with on- and off-campus housing, the current study examined students' readiness to change their binge drinking behavior among college students across on- or off-campus housing. The Transtheoretical Model⁴ suggests that there are five levels or stages of readiness to change. The stages range from people who are resistant to change to those who have changed and maintained the change for a period of time. Participants were recruited from undergraduate, introductory level psychology courses at a mid-sized, mid-western university. From the primarily freshman based sample, 435 participants were recruited -- 380 of which lived on-campus and 55 of which lived off-campus. With respect to readiness to change alcohol consumption, 41% of on-campus students were binge drinking with no intentions of stopping, 15% were binge drinking with the intention of stopping, and 44% were not binge drinking. Of off-campus students, 73% were binge drinking with no intentions of stopping, 16% were binge drinking with intentions of stopping, and 11% were not binge drinking. On-campus and off-campus students were significantly different across binge drinking stage of change, $X^2(5, N = 435) = 28.05, p < .001$; specifically, off-campus students reported a lower willingness to change binge drinking behavior than on-campus students. Whereas the vast majority of students reported consuming alcohol with no intentions of stopping, the off-campus students were more likely to be resistant to changing their alcohol consumption.

Keywords: Binge drinking, Transtheoretical Model, College students

1. Introduction

Binge drinking and frequent binge drinking are serious health behaviors practiced by college students. Due to the dangerously high levels of alcohol consumption that binge drinking entails, many negative side effects are associated with binge drinking including arrests, property damage, fights, physical illness, and sexual assault⁶. Many of these side effects have increased in prevalence in recent years, due to the fact that college drinking and binge drinking rates have also been steadily increasing⁶. Many students are even beginning to develop these patterns as early as high school. Yu and Shacket¹⁴ found that about 86% of high school students admitted to drinking alcohol in the past year and about 54% reported binge drinking at least once in the past month. This is a staggering statistic considering many studies have found that drinking tends to either begin or increase once students enter college¹.

Binge drinking or heavy episodic drinking is most commonly defined as a single episode of drinking involving 5 or more drinks in a row for men or 4 or more drinks in a row for women^{6,11}. Even though a clear definition exists, it has been found that many college students fail to produce an accurate definition of binge drinking. Many frequent drinkers overestimate the amount of drinks that defines binge drinking by one drink for both men and women and

many frequent binge drinkers overestimate the amount of drinks by as many as 3 drinks for men and 2 drinks for women¹¹. This can be problematic due to the tendency for less people to actually identify themselves as having problems with their own abuse of alcohol, and thus will be more likely to resist help². According to Wechsler and colleagues, many colleges are beginning to invest more in identifying binge drinking habits and stepping up prevention efforts; if students don't recognize, however, that they are binge drinkers then they will not believe themselves to be in need of assistance and will not seek it out^{9,10}.

The Transtheoretical Model of Behavioral Change (TTM) is a model that depicts behavior change as a process involving five stages: Precontemplation (PC), Contemplation (C), Preparation (PR), Action (A), and Maintenance (M) of readiness. It suggests that an individual progresses and regresses through these stages over time when seeking change⁸. Due to the nature of its analysis of behavioral change, the TTM is an appropriate model for further dissecting the likelihood that students will seek assistance for negative behaviors such as drinking. As previously stated, many drinkers will not seek out assistance because they do not necessarily believe their behaviors to be harmful, which clearly presents an obstacle when seeking to influence behavioral change. However, Prochaska reported that the introduction of the TTM at various levels in the lives of students increases the likelihood that change in negative drinking behaviors will be experienced⁷. Thus, the TTM functions as an effective model to present the necessary stages needed for change to take place if the intent to do so is present.

Many environmental factors are also present in the college atmosphere, that are influential in the negative alcohol behaviors of students. Research has shown that little to no restraint in terms of drinking is present in the college environment. In fact, there are many social and traditional factors that are instead promoting drinking (Wechsler et al., 1994). This positive drinking climate allows students of varying ages to gain easier access to alcohol, thus presenting an increased risk of alcohol abuse and in turn, the various negative outcomes that are associated with such abuse⁹. Different residential structures also provide different norms of acceptability of alcohol, due to both inferred rules and also media representation, thus resulting in different expectations of the effects of alcohol among students who live in the different residences^{5,13}. Overall, the atmosphere of acceptability and the varying levels of said acceptability based on residence require consideration when analyzing attitudes on drinking behaviors of college students.

This study aims to utilize the TTM in order to analyze the differences in the willingness to change negative drinking behaviors among students who live on-campus and students who live off-campus. Based on previous studies such as the one performed by Larimer et al.⁵, we hypothesized that students living off-campus would possess a lower willingness to change negative drinking behavior, specifically binge drinking⁵. By determining this, we intend to further examine the environmental contexts in which the TTM is more likely to be successfully utilized among college students.

2. Methodology

2.1 Participants

Participants in this study consisted of 435 undergraduate students from a mid-sized, Midwestern university in Southwestern Ohio. The participants were gathered from an introductory level psychology course and consisted of 380 students who lived on-campus and 55 students who lived off-campus. Of the participants, 39% were male and 61% were female and the class distribution included, 67% freshman, 24.8% sophomores, 6.2% juniors, and 2% seniors.

2.2 Procedure

Students in an introductory psychology course were administered a paper survey on the first day of class. Participants received "research credit" in their psychology class for participation. The Institutional Review Board of the authors approved all the study's procedures.

2.3 Measures

The paper-based survey contained various questions regarding behaviors such as alcohol, willingness to change, and demographics such as age, gender, and area of residence. The willingness to change measure was a single item, which asked the participant's intention to stop drinking 4 (for females) /5 (for males) drinks in a row. The response options corresponded to the 5 stages of change in the TTM. The alcohol consumption questions assessed the frequencies and quantities of the participants' alcohol consumption and were based on the definition of a standard drink.

3. Results

Overall, 49.1% of students reported drinking at least 1 day a week and of those that did report instances of drinking, 66.4% reported drinking 4 or more drinks in one occasion. Of the students who reported living on-campus, 41% were binge drinking with no intentions of stopping (PC), 15% were binge drinking with the intention of stopping (C), and 44% were not binge drinking. Of the students who reported living off-campus, 73% were binge drinking without intentions of stopping (PC), 16% were binge drinking with intentions of stopping (C), and 11% were not binge drinking.

On-campus and off-campus students were significantly different across the binge drinking stages of change, $\chi^2(5, N = 435) = 28.05, p < .001$, thus supporting the hypothesis that willingness to change will be lower in the students living off-campus.

4. Conclusion

This study used a survey to examine various health behaviors and intentions of college students in regards to alcohol consumption. According to the data that was collected, college students living off-campus are less likely to express a willingness to change their negative drinking behavior, specifically engagement in the act of binge drinking, than students who live on-campus. By further dissecting the response that we received, we may be able to conclude that the different expectations that students hold about the use of alcohol in different residential settings plays a role in the difference in the willingness to change behaviors⁵. This possibly stems from the difference in perceptions of whether or not the students believe their behaviors are negative and whether their environment is helping to produce these feelings. It is possible that residential settings that are off-campus will not result in a willingness to change negative behaviors because there are no rules or stigmas having to do with alcohol in these settings. In addition, those who live off-campus might be older than those on campus. However, further research is warranted to tease out this relationship.

The TTM has been successfully used to change a variety of behaviors (e.g., smoking, depression, exercise) in intervention studies. The TTM provides a framework for developing intervention. Using both the recommendations from the TTM and the potential influence of living arrangement, future interventions in the lives of college students might become more effective and administrations that desire to curb the extreme drinking behaviors of college students may begin to experience an increase in positive results.

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6. References

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