Sophomore = Wise Fool? The Examination of Alcohol Consumption Throughout Class Years

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Abstract

Alcohol consumption occurs across all years of school in college. However, first year and sophomore students tend to be under the legal drinking age and therefore have additional risks. Year in school may affect the amount of alcohol a person consumes [1]. When comparing underclassmen drinking to upperclassmen drinking, as students progress into upperclassmen status, upperclassmen learn when and how to use alcohol [2]. The purpose of this study is to examine the drinking variables across the different years in school (i.e., first year, sophomore, junior, and senior). Approximately 349 Miami University students participated. The majority of the participants were 18-22 years old. This study contains participants of both genders. However, females comprise 73% of the total participants. Most participants reported being of Caucasian descent. Data was collected through an online survey using a snowball recruitment method. The data showed a trend in drinking behavior throughout class years. In the descriptive data reports, the senior class reported the highest number of alcohol consumption on all days of the week, except for Saturday, which contained the highest alcohol consumption by sophomores. For most days of the week, the alcohol consumption amounts between classes are not significantly different from each other. However, on specific days of the week, sophomores and seniors showed a significant difference in drinking consumption compared to freshmen. This data overall makes it possible to analyze the significant jump in alcohol consumption from freshmen year to sophomore year. This information can also be useful in planning and targeting those that are most at risk for alcohol abuse [3].

Keywords: Sophomore Year, Class Years, Alcohol Consumption

1. Introduction

Alcohol consumption among college students is a major health concern. People of ages 18-24 are considered the highest risk for problematic drinking. The highest rates among alcohol consumption and problematic drinking are those of the ages 18-24 [4]. The leading cause of death among college-aged students is alcohol-related. It has been reported that approximately 1,400 college students are killed each year from alcohol related injuries and 500,000 are injured [5]. Alcohol consumption of college-aged students has increased from 1998 to 2005 [6]. There has been a 25% increase of alcohol related unintentional deaths from 1998 to 2005. College aged students are at highest risk for problematic drinking, but what is the comparison of alcohol consumption between class years within this general population? Research indicates that the odds of underage binge drinking are slightly higher than binge drinkers of age [4]. This indicates a health concern for not only all college aged students, but specifically those who abuse alcohol underage. Therefore, the purpose of this study is to examine the alcohol consumption among college students throughout class years.

In general, research indicates that the college-aged population has different drinking patterns than the general population [5]. College drinking is thought of by most as a social norm and has become a "ritualistic" college tradition [7]. Students in this environment consume more alcohol than their non-college counterparts of the same age [8]. Heavy

drinking is a contextual aspect of college, indicating that alcohol consumption is going to occur regardless of interventions and prohibitions.[5] This is why the dangerous drinking culture of college needs to change. Although this concept of alcohol consumption is regarded as a norm, all students experience the effect of alcohol on a college campus, whether they drink or not [7]. Most of these effects by students in turn create negative consequences. Research suggests that binge drinkers (4 or more drinks for females and 5 or more drinks for males in a row [11]); were 16 times more likely to miss class, be hurt or injured, have unplanned sex, and get behind ins school in comparison to their non binge drinking counterparts [9]. The relationship between drinking amount of college students and negative consequences experienced by college students is substantial. There have been interventions to reduce the amount of underage drinking for college students. Legislation enacted 21 as the legal drinking age in 1984 through the Minimum Legal Drinking Age [10].This legislation was set in part due to research indicating that lower drinking ages was associated with increased alcohol related fatalities. This law and other restricted drinking laws have since caused a reduction in beer consumption as a whole following these enactments [10]. The question on most college campuses however focuses on whether these laws really impact the alcohol consumption of the under aged .

Research indicates that although most underclassmen are illegally able to consume alcohol at a college campus, the minimum drinking laws have failed to reduce the availability of alcohol to underage drinkers [4]. Research indicates that 1 out of 2 underage drinkers said that obtaining alcohol was very easy. The odds of underage binge drinking were slightly higher than that of legal age drinkers and in Engs, Hanson, and Diebold's study [3] the results show that there was a higher amount of underage drinkers than heavy drinkers of legal age. Research suggests that underage students used alcohol less frequently but more when they had access to it [10]. This concept describes an initial increase in alcohol consumption followed by a gradual reduction in alcohol consumption followed by moderation throughout the college years. This explains the spike in alcohol consumption of underage students as they have less responsibility with academic curriculum than the upper classmates who take on more academic responsibility.

2. Methodology

2.1 Procedure:

This data information was collected through an online survey using the snowball recruitment method. In order to recruit participants for the study, emails were sent to instructors and listservs at the university. Using the snowball method allowed for a diverse population of students in the study.

2.2 Participants:

There were a total of 349 total participants of this study. Of the total participants, females comprised 74.1% of the total survey population. The average age of this study was 21 (±3.8). The ethnicity breakdowns, 87.4% of the participants reported to being of Caucasian descent with all other ethnicities regarding in other. Participants of this survey, reported with an 18.5% of parents' income above $200,000 and a 22.4% of not knowing the income salary of their parents. The overall breakdown of class years is represented as follows; 20% of participants comprising the freshman class, 23.8% comprising the sophomore class, 23.8% comprising the junior class, 26.7% comprising the senior class, and 5.5% comprising "super seniors" and graduate students. In taking this survey, the participants were asked a multitude of questions. These questions required the estimation of amount of drinks one thought they consumed, on which day, and if they plan to participate in this activity again.

3. Results

As a whole, the population of the participants of the survey drank a mean of 4.13 drinks per day (SD=3.08). Within the last thirty days, the highest number of drinks consumed was 7.38 (SD= 6.93). The days of the week with the highest number of alcohol consumption occurred on Friday and Saturday with a mean of 3.93 drinks consumed (SD= 3.35) and 3.93 (SD = 3.45) respectively. The lowest amount of alcohol consumption was consumed on Sunday and Monday with an overall mean of .11 drinks consumed (SD= .51 and SD=.48 respectively). Approximately, 86.3 % of the participants had tried alcohol and 69.6% planned to get intoxicated again.

The descriptive studies show that the seniors consumed the most alcohol for most days of the week and the sophomore class consumed the next highest amount of alcohol. The senior class also held the highest number of drinks consumed within the past thirty days, with the sophomores again following behind. The descriptive studies show that on Monday, the senior class drank the most and the freshman class drank the least. On Tuesday, Wednesday, and Thursday the senior class drank the most and the freshman class drank the least. However, on Friday and Saturday the sophomore class drank the most and the freshman class drank the least.

There was a significant difference across year in school for the typical number of drinking days in a week, $F(3, 310) = 5.64$, $p = .001$ in which the seniors drank significantly more than the freshmen. There was a significant difference in the typical number of drinks throughout class year, $F(3, 309) = 3.43$, $p=.02$ in which the seniors drank significantly more than the freshmen. Monday there was no significant difference between class years in alcohol consumption, $F(3, 304) = 1.74$, $p = .16$. On Tuesday there was a significant difference between the senior and junior class years in which the seniors drank more, $F(3, 303) = 3.27$, $p = .02$. There was a significant difference across year in school in alcohol consumption on Wednesdays in which the senior class drank more than the junior class, $F(3, 303) = 3.18$, $p = .02$. On Thursdays the senior and sophomore classes drank significantly more than the freshmen class, $F(3, 303) = 5.29$, $p= .001$. On Fridays the senior and sophomore class drank significantly more than the freshmen class, $F(3, 303) = 5.49$, $p= .001$. On Saturdays the sophomore class drank significantly more than the freshmen class, $F(3, 303) = 3.43$, $p=.02$. There was no significant difference in alcohol consumption among year in school on Sunday, $F(3, 301) = .86$, $p = .46$.

Interestingly, follow up tests (Tukey HSD) also indicated that there was a significant difference of alcohol consumption on Tuesday between the junior and senior class, in which the senior class drank significantly more. The same results appeared on Wednesday and Thursday as well. There was a significant difference in alcohol consumption on Friday in which the senior and sophomore classes drank significantly more than the freshman class. Following to Saturday, there was a significant difference in alcohol consumption among the sophomore and freshman class in which the sophomore class drank significantly more.

This overall shows a trend that in general on most days of the week, seniors drink a significantly more than freshman, and specifically on Saturdays, sophomores consume more alcohol than any other class years (see above p-values). Ultimately, the freshman class consumes the least amount of alcohol of the days of the week, the junior follows close after the freshman class, the sophomore class drinks close to comparison to the junior class, yet reaches an increased amount on Friday and Saturday. The senior class consumes the most alcohol among most days.
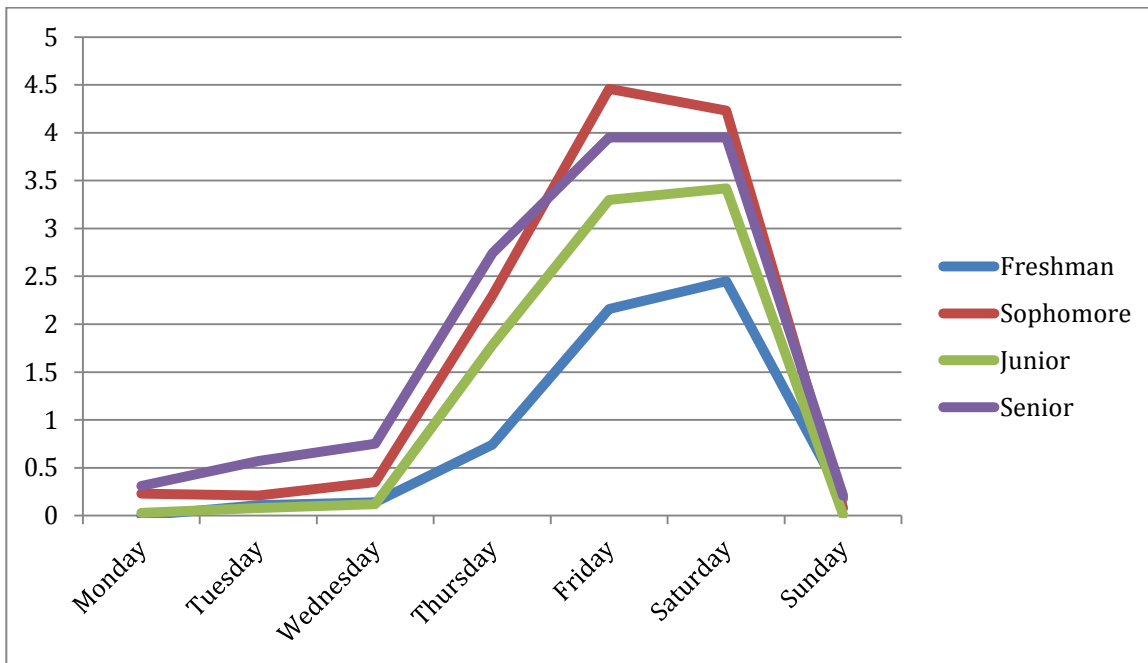

Figure 1. comparison of average alcoholic drinks consumed on every day of the week per class year

4. Discussion

Overall, the purpose of this study was to examine alcohol consumption among college class years. The results of this study show that the sophomore class does indeed consume more alcohol than other class years on the weekdays of Friday and Saturday. This further calls for implication into why specifically the sophomore class consumes more on these days than their legal age counterparts of the junior and senior class.

The results of this study show that overall the senior class consumes the most alcohol on most days of the week by a significant amount in comparison to other classes. The second highest alcohol consumption came from the sophomore class. On most days of the week, alcohol consumption was found the least in the freshman class.

Components of the theory of Ham et al [4] seem to be concurrent with the result findings and other aspects of this theory are not explained by the results. The theory of Ham et al describes college-aged students to eventually "mature out" of problematic drinking as they progress through class years due to academic, maturing, alternative motives.[4] The high amount of alcohol consumption could be explained by the increase of alcohol consumption due to a lessening amount of academic responsibility of the sophomore class by which typically these students aren't into the major core of their studies. This however would disregard the results found for the freshman class in which according to Ham's theory the freshmen class would have been seen to have high levels of alcohol consumption, yet as seen through the results, the freshmen had the lowest numbers of alcoholic drinks throughout the week. Ham's theory would also indicate a gradual moderation of alcohol consumption throughout advancing college years because of increased responsibility; however, in the results the seniors were seen to have the highest levels of alcohol consumption. Alcohol consumption was readily accessible to those under the legal drinking age regardless of the Minimum Legal Drinking Age law, which is displayed through the high consumption of alcohol by the sophomore class.

This study did not go without limitation. This study was homogenous among ethnic groups with a majority of the participants being of Caucasian ethnicity, which could have skewed the results in a biased way. Also, the study was not evenly represented among genders; females conducted a majority of this study. Furthermore, this study used self-report data. Though this method obtains advantages, this method also indicates variability and disadvantages in the participant's honesty of answers through the survey. The data findings cannot be generalized to other colleges or geographical areas due to the specific demographics of this population. In conclusion, it is predicted through the results of this study, that there should be an emphasis on earlier alcohol prevention and training at and throughout college. Through the results, it's displayed that the problematic drinking significantly occurs as students reach their sophomore year, as seen through the high amounts of alcohol consumption of the sophomore class compared to the other class years. This also implicates substantial evidence for prevention of underage drinking at college campuses. Earlier intervention would not only target those groups who are most at risk for problematic drinking, which would include the underage sophomore class, but could help reduce this high fluctuation of alcohol consumption as a transition from the freshman class year to the sophomore class year and therefore help reduce alcohol related problems as a whole. This is a topic that needs further research including areas in examining why there is a significant jump of alcohol consumption from freshman year to sophomore year and the general drinking motives of the sophomore class.

5. Acknowledgments

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