

Running head: GENDER AND EXPERIENCE LEVEL ON EXPECTANCY EFFECTS

Gender and Experience Level on Expectancy Effects of Alcohol

Ashley Bane and Ashley Devers

Hanover College

Gender and Experience Level on Expectancy Effects of Alcohol

The percentage of college students who admit to binge drinking can be shocking, to parents, administrators and peers alike, specifically in the frequency that they drink and the quantity. An online report done at Hanover College showed that 42.9% of students admitted to binge drinking in the two weeks previous to the survey (“A binge is defined as consuming 5 or more drinks in one sitting.”) (SIUC/CORE, 2008). Alcohol is very prevalent on most campuses, but it brings negative effects with it such as behavior problems, academic problems, and injuries. Drinking in college is seen as a normal college experience for most people, but when it turns into a problem for the students and school who do you look at to blame. People point to the college. It is reported that 500,000 students between the ages of 18 to 24 are unintentionally injured under the influence of alcohol (NIAAA, 2002) and about 25 percent of college students report academic consequences of their drinking.

In 2006 it was reported that 61.6% of high school graduates were entering directly into college (NCHEMS, 2007), which means 2 million young adults are entering into the college scene. An interesting component to this transition period is that of this is their change in drinking habits. Previous research shows that college student’s drinking habits increase during the transition to college such that the average days a week the average amount a student consumed alcohol went from 0.90 senior years in high school to 1.23 spring term freshman year in college. Not only does the frequency increase, but also so does the quantity the students consume. It went from 32.7% of them binge drinking in high school to 46.1% binge drinking by the end of their freshman year in college (Fromme, Corbin, & Kruse, 2008).

As the use of alcohol increases, the negative choices that people make, and the kinds of negative choices, while under the influence become a higher concern. As mentioned, students increase their drinking in the transition from high school to college, but one surprising thing is that the percentage that chose to drive after drinking decreased from 26.3 % to in high school to 18.4% in the spring of their freshman year of college (Fromme, Corbin, & Kruse, 2008). This could however be attributed to the fact that in college most students stay at the location of the party, whereas in high school, their parents expect them to be home. However, the risk of having multiple sexual partners did increase from 7.3% in high school to 10.9% in the spring of their freshman year of college (Fromme, Corbin, & Kruse, 2008.) This all shows that some risks can be affected differently in the college scene. The risk of driving after drinking does not really affect a person's social status in the way that having multiple partners might, so perhaps the need for social acceptance in a new setting also has an affect on the kinds of decisions a person might make.

The attitudes that these students have towards risks are positively correlated with the number of drinks they have (Benton, Benton, & Downey, 2006). Which might lead one to wonder how much of that can be attributed to the actual drink. If the person is drinking beer they usually know how much alcohol content is in their drink. However, if they are drinking a mixed drink they cannot completely know the alcohol content of what they are drinking. This might imply that just expecting or anticipating how much, if any alcohol is in a drink, could alter a person's actions or perception of intoxication level. Some research suggests that the effects of expectancy are due to the cues present in the environment. These cues then cause people to exhibit effects that they have learned are

associated with alcohol. So when someone is drinking a mixed drink they look at others and model after their behavior, or exhibit behavior that they believe will increase their social status or standing (Nagoshi, Noll, & Wood, 1992). This would explain why some students may drink a little amount of alcohol but show large effects. The drinking and party atmosphere could lead them to show effects based on how much liquid they have consumed and the corresponding alcohol that they assume is in each drink.

Based on social learning theory, individuals learn behavior that is socially acceptable by observing or experiencing reinforcements and punishments. So, students who see others acting a certain way, they might mirror these actions, which might lead people to expect they are feeling the same kinds of effects as those around them, even if they have no evidence that they are consuming the same amounts of alcohol. People who have experience will continue to show these expectancy effects. Even the experienced heavy episodic drinkers experience expectancy effects with aggression (Parrott & Giancola, 2006) when given a placebo. Experience level with heavy episodic drinking does help predict for men the intoxicated aggression. Some research does show that there are no effects when it comes to physiological, psychomotor, and cognitive abilities in males (Nagoshi et al., 1992).

- Studies that expanded this research to both genders actually found a difference in the way that males and females react to alcohol. Men tend to show a feeling of stimulation, they are more alert and attentive, which might have an affect on their performance. Women on the other hand show a feeling of sedation, in which they feel more relaxed also creating an affect on their performance (Fillmore & Weafer, 2004). The purpose of this study was to examine how college students'

alcohol experience can affect one's expectancy effects with risk taking and reaction time. From this evidence, predictions can be made that expectancy will not cause a fall in performance level of certain tasks, but will increase anticipation of being involved in risky behaviors. Secondly, we expect that in self-report measures, males will report more stimulation and females will report sedation.

Method

Participants

Participants (N=23; 12 female, 11 male) were students attending a small Midwestern College. All participants were above the age of 21 and the age ranges of the participants were 21-23 years old. Ethnicity was 91% Caucasian, 8% Asian/ Pacific Islander. All of the participants lived in on the college campus either in dormitories or sororities/fraternities. Out of all the participants, 70% of the participants was affiliated in the Greek community. None of the participants were pregnant females and none were married. All students who were above the age of 21 were invited to participate by notices around campus during the winter quarter of 2009.

Measures

Alcohol Consumption. The drinking assessment survey was used to assess the quantity and frequency of alcohol. The drinking assessment survey was from NIAAA, "During the last 6 months, how often did you usually have any kind of drink containing alcohol? Everyday, 5 to 6 times a week, 3 to 4 times a week, twice a week, once a week, 2 to 3 times a month, once a month, and I did not drink any alcohol the past 6 months." Drinking habits were assessed by the responses and at the end of the experiment they

were then labeled as either with high experience (high frequency and high quantity) or low experience (low frequency and low quantity).

Behavioral Risks. To assess attitudes towards risks, participants completed the 34-item Attitudes Towards Risk Scale (ATRS; Franken et al., 1992), which measures carelessness and rebelliousness. The ATRS had high internal consistency with the Cronbach's $\alpha = .91$ (Benton, 2006). There were two different categories, psychological risks and physical risks. The questionnaire is based on a 5-point likert scale, where the participant indicates the degree which the statement describes them from 1 being not like me to 5 being like me. The Physical risks would be activities that might put one's body in harm. An example question that assess physical risk is, "The greater the risk the more fun the activity." Psychological risks would be engaging in activities that might be activities that others might disapprove of, "I often think about doing things that are illegal." (Franken et al., 1992). They were asked not only about their participation in these risks, but also about if they had thought about being involved in these risks. The Questionnaire was used to assess how the participant answered the top 5 Psychological risks questions and the top 5 Physical risks questions.

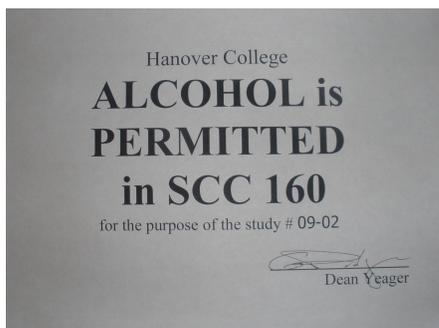
Performance. There were two behavioral performance measures also taken. These behavioral performances were reaction time and motor coordination. To test reaction time, the participants did a drop test. The drop test was done with the participant standing and a yardstick was placed between their forefinger and their thumb. Then, the yardstick was dropped and the participant had to catch it. The measurement was to see how far the stick had dropped, in inches, before it was caught. The drop test was done after the drinks had been administered. They completed the drop test 3 times and the

average was taken. In order to measure motor coordination, participants were timed on Purdue Pegboard, model #32020. The pegboard format consisted of two rows down the middle with 25 holes in each row. The participants had to put a peg in each hole, a washer over that, then a sleeve. The instruction was to complete the top 5 in the left row, then the top 5 in the right row, then the second 5 in the left row, and finally the second five in the right row. Only one piece was allowed in their hand at a time.



Environmental Cues.

Some of the most important factors in this study were the environment factors that would increase the participant's belief in the validity of the study. When the participants entered the room, their identifications were checked to make sure they were all over the age of 21. There was also a sign that indicated that permission was given to have alcohol in the designated room, signed by the dean of student life. A handheld Digital Alcohol Breathalyzer was used to make them believe they were at a desired blood alcohol level.



Procedure

Participants were asked to not consume any drugs (including alcohol) for 12 hours prior to showing up at the laboratory. Participants came into a small laboratory room and were given an informed consent and given verbal instructions. There were two laboratory rooms used for the study, one for the experiment group (alcohol) with the sign on the door and one for the control group with no sign. Each group had different oral instructions once they were in their experimental room (Appendix 1). Those in the control group were told they were in the control group and those in the experimental group were told that they would be receiving different amounts of alcohol. In both groups the participants were first given a demographics questionnaire (Appendix 2) along with a drinking assessment questionnaire (Appendix 3). The participants were then given three glasses with 6 ounces of lemonade, one at a time, and instructed that they had five minutes to finish each drink and no longer than those 5 minutes. The rate at which the participant was told to consume the drink was a full gulp of liquid every 45 to 60 seconds. The alcohol expectancy group received the same amount of lemonade with 1mL of vodka placed around the rim of their glass. After finishing the third drink the participants waited ten minutes and only in the participants in the alcohol expectancy group were given a breathalyzer test and the researcher pretended to write the results down. During the ten minutes the participants were given a choice of doing sudoku or find the word just to fill the time. The behavioral performance tests were then administered after ten minutes (Thomson, 1988) after their last drink was finished starting with the drop test and Purdue Pegboard. Then they were asked to complete an Attitudes Towards Risks Scale (Appendix 4). Finally, they were debriefed, thanked for

their time, and dismissed.

Results

The internal consistencies were measure of the self-report surveys based upon the current data set. The Attitudes Towards Risk Scale had an $\alpha = 0.95$. The two other risks were also measured for reliability with the top 5 psychological risks $\alpha = 0.84$ and the top 5 physical risks $\alpha = 0.88$. Then the drinking assessment questionnaire was measured and had an $\alpha = 0.86$. All the self-report measures had high reliability. Since the experiment had a small number of participants, an alpha value of 0.10 was used, so any $p < 0.1$ is considered to have a significant difference and findings will be considered tentative.

A 2 X 2 between subject analysis of variance was used with the factors being alcohol expectancy and gender. A two-way ANOVA was used to test significant differences for all the dependent variables. To test for the Attitudes Towards Risk Scale the average response of participants on the 34 questions was used. The main effect of gender on the Attitudes Towards Risk Scale was not significant ($F(1,19)=2.24, p = 0.15$) and the main effect alcohol expectancy on Attitudes Towards Risk Scale was not significant ($F(1,19)=0.12, p = 0.72$). There was no significant interaction between gender and alcohol expectancy for Attitudes Towards Risk Scale, $F(1,19)=0.075, p = 0.78$.

When the Attitudes Towards Risk Scale was broken up into top 5 Psychological risks and the top 5 Physical risks significant trends began to emerge. The main effect of gender on the top 5 Physical Risks was significant such that males reported being more likely to engage in physical risk behavior than females likelihood to engage in physical risk behavior, $F(1,19)=5.459, p = 0.03$. (See Figure 1). The main effect for alcohol expectancy on the top 5 Physical Risks was not significant,

$F(1,19) < 0.1$. There was no significant interaction between alcohol expectancy and gender on the top 5 Physical Risks, $F(1,19)=2.37, p = 0.14$.

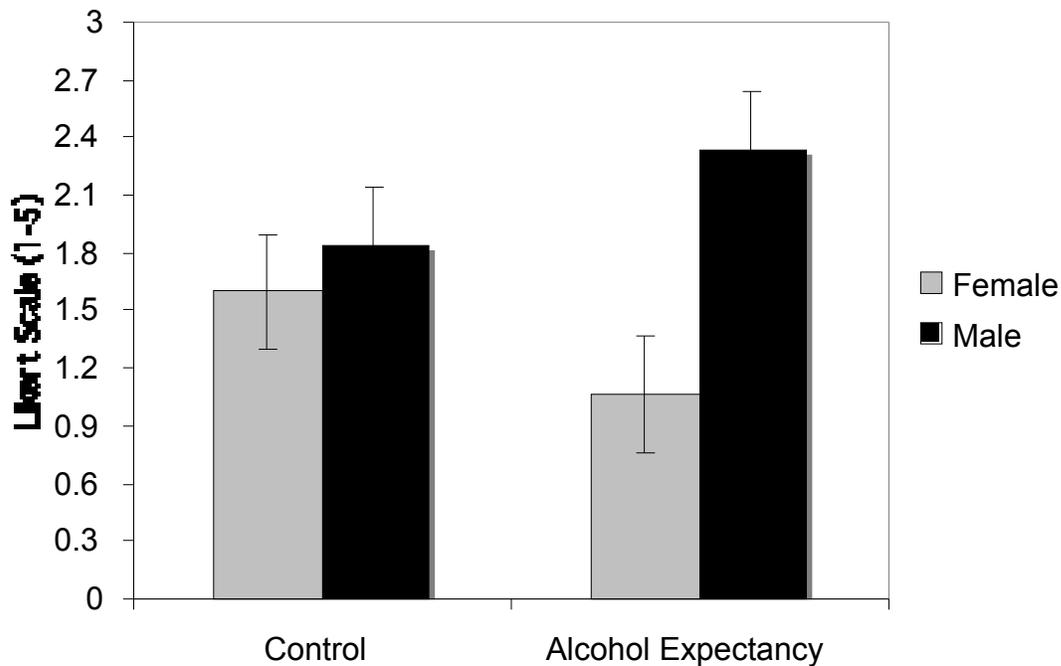


Figure 1: Average response on the top physical risks from the attitudes towards risk scale.

The main effect of gender on the top 5 Psychological Risks was not significant ($F(1,19) < 0.1$) and the main effect of alcohol expectancy on the top 5 Psychological Risks was not significant ($F(1,19)=0.31, p = 0.58$). Furthermore, there was not a significant interaction between gender and alcohol expectancy for the top 5 Psychological Risks, $F(1,19)=0.98, p = 0.33$.

Again, a two-way ANOVA was used to test the dependent variables with the factors being gender and alcohol expectancy. The main effect of gender on the average drop test was not significant ($F(1,19)=0.63, p = .43$) and the main effect for alcohol expectancy on the average drop test was not significant ($F(1,19)=0.04, p = 0.83$).

However, there was a significant interaction between gender and alcohol expectancy for average drop test, $F(1,19)=3.617, p = 0.072$. Males let the yardstick fall a shorter distance in the alcohol expectancy than in the control group, while females let the yardstick fall a farther distance in the alcohol expectancy than in the control group (See Figure 2). This data shows that the males perform better in the alcohol expectancy condition, while the females perform worse in the alcohol expectancy.

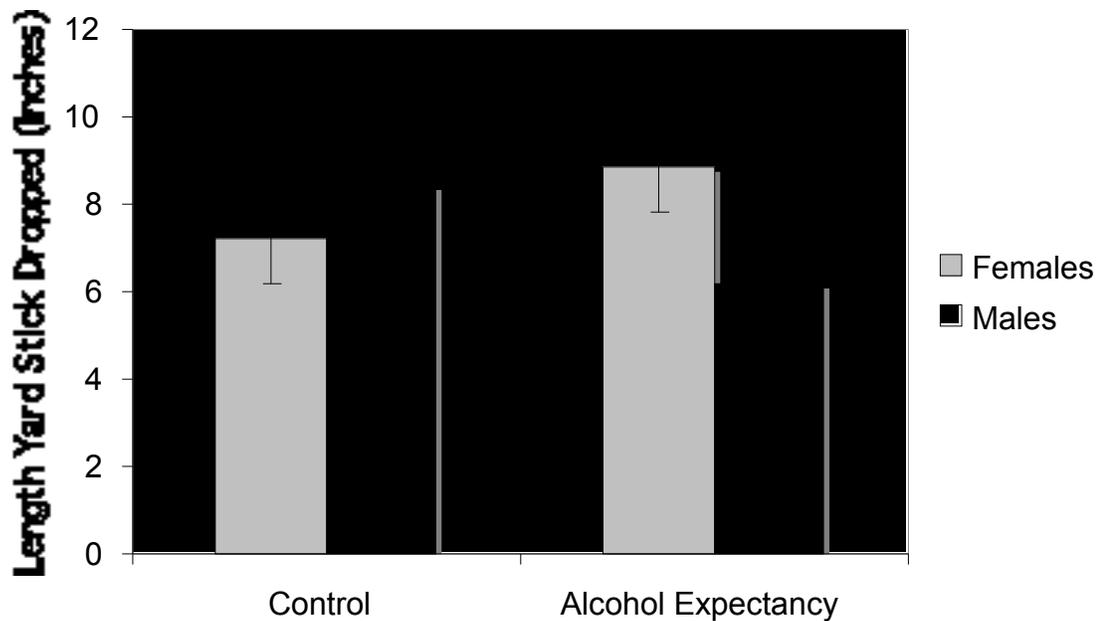


Figure 2: Length the yardstick was dropped in inches.

For the Pegboard, there was no main effect of gender on the pegboard ($F(1,19)=0.88, p = 0.36$) and there was no main effect for expectancy on the pegboard ($F(1,19)=2.39, p = 0.14$). There was no significant interaction gender and alcohol expectancy for the pegboard, $F(1,19)=0.39, p = 0.54$.

There appears to be a trend for the behavioral performance data. For both the average drop test and the pegboard the males do better in the alcohol expectancy. With this trend showing a new dependent variable was created that represented the overall

performance. With the scores for the pegboard and drop test being on different ranges a standardized score was created from both tasks. The standardized score was set for a mean of 10 and a standard deviation of 2. The reliability of the overall performance was measures and had an $\alpha = 0.78$. Then a combined score was created for the three-drop tests and pegboard for each participant. A two-way ANOVA was used, again with the factors being gender and alcohol expectancy. The main effect of gender on overall performance was not significant ($F(1,19) < 0.1$) and the main effect of alcohol expectancy on overall performance was not significant ($F(1,19)=0.44, p = 0.51$). There was a significant interaction between gender and alcohol expectancy for overall performance, $F(1,19)=3.23, p = 0.088$ (*See Figure 3*). The males perform worse in the control group than the females, while the males perform better in the alcohol expectancy than the females. The males are performing better when they believe they are receiving alcohol and the females perform worse when they believe they are receiving.

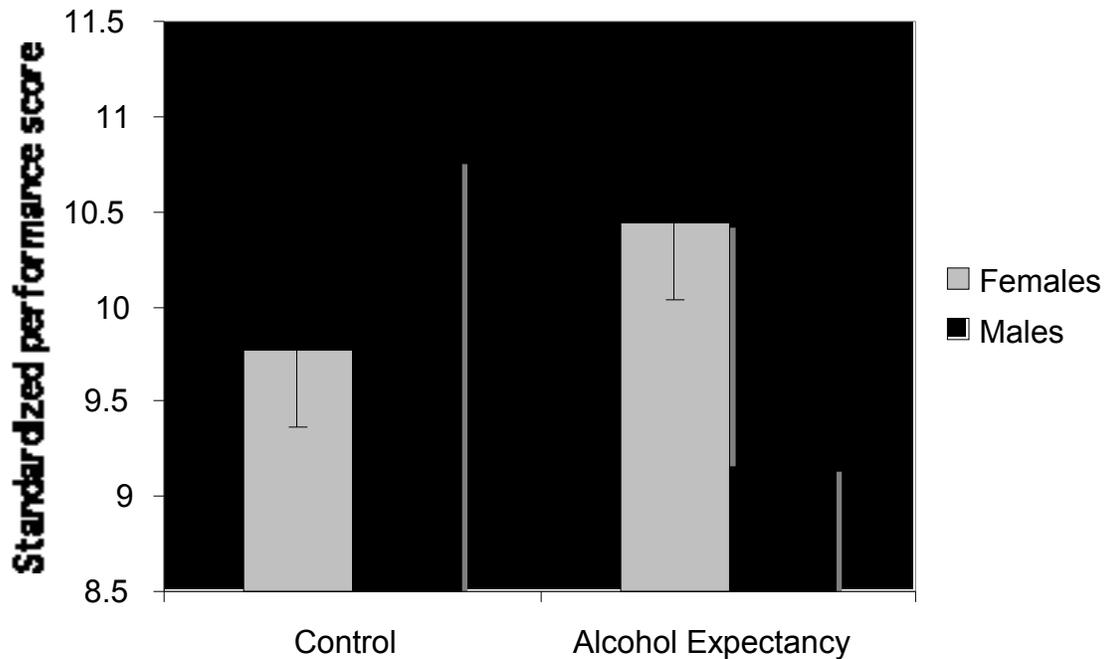


Figure 3: The overall performance measure with standardized score of 10.

Then to see if drinking experience played a role with expectancy effects. A median split was used to create the high experience drinkers and low experience drinkers. The median was 8-11 drinks, so if the participants average answers were above then they had a high experience level and if the participants average answers were below then they had a low experience level. A 2 X 2 ANOVA was used for all the dependent variables with the factors being drinking experience and alcohol expectancy. Nothing significant was found with the drinking experience level and all of the dependent variables.

Discussion

Much of the gender difference that was found might be attributable to some societal view. One of these attitudes held particularly by males, is a need to prove themselves in “macho” ways. Perhaps they have an attitude that they are beating the alcohol, by being able to drink a large amount but still have control over the situation.

This would be one explanation to their overall behavioral performance, and increased stimulation. At the same time, women might have a societal view that they can lower their levels of responsibility when consuming alcohol. Many times, women use their level of intoxication as a crutch, or an excuse for making bad decisions.

Even though the behavioral data does not support our hypothesis, there are a few explanations for this. This experiment asked participants to make different responses than those that were used in previous research. Instead of measuring tasks that might have required more time, like sentence checking, our participants were asked to do more short term tasks. This might have had an effect because they were not as fatigued and better able to concentrate on things they were asked to do. Also, previous research found no significant difference in each individual task much like this study. The real significance that was found in the present study was in overall behavioral performance, which was an element that was not previously examined.

One major limitation was that alcohol was not able to be used in this study. The main reason for this was the concern that alcohol would be given to women who might potentially be pregnant. Women could have been excluded from the study, but the gender issues were something that was an interest of exploration and females were needed to pursue this area. Another limitation was the fact that all participants had to be over 21 years old. It is difficult to find several people willing to devote 45-60 minutes to a study and even more so when a restriction is placed on who can participate. Another was that due to the size of the school, participants may have heard about the study or not believed that they were actually receiving alcohol. This could be due to the fact that the school is considered a “dry campus” and a sign on the door may not have been

convincing enough for some.

Future researchers might look into exploring these gender differences more. Using alcohol would be ideal in experiments that are similar to this one. Further more, researchers might give both groups alcohol, and instead of looking at expectancy, look at behavior differences. For example give one group more long term tasks and the other tasks that take less time. This might be interesting to compare how these different tasks are affected by alcohol. Another direction might be to see how people's attitudes correlate with their actual actions. An example would be to have people respond to how they would act with different scenarios of risky behaviors. Then find out how they would behave when given the opportunity, and then compare that to what their attitudes were. This method has been used to investigate things like employment, but it might be interesting to see how people's day to day attitudes match up to their actions.

APPENDIX 1

Verbal Instructions

Oral Instructions for Control group

You are in the control group. This means that you will not be receiving alcohol today, but we are going to run the study as normal. You will first fill out a questionnaire about your demographics and drinking habits. Then, you will receive three drinks, each containing 6oz of liquid and you will have five minutes to finish each drink. Ten minutes after you have finished your last drink, you will then be tested on motor coordination and reaction time. Finally we will ask that you fill out another brief questionnaire. If you have any questions during this process please ask.

Oral Instructions for Experimental group

You are in the experimental group and may be receiving different amounts of alcohol. If you are, or think there may be a chance you are pregnant please do not proceed in this study. We will first ask you to fill out a questionnaire about your demographics and drinking habits. Then, you will receive three drinks, each containing 6oz of liquid and you will have five minutes to finish each drink. Ten minutes after you have finished your last drink you will be given a Breathalyzer test. Then you will be tested on motor coordination and reaction time. Finally we ask that you fill out another brief questionnaire. If you have any questions during the process please ask.

APPENDIX 2

Demographics Questionnaire

1. Are you male or female?
2. What is your age?
3. What grade in college are you?
4. What is your ethnicity?
5. Are you Greek or non Greek

APPENDIX 3

Drinking Assessment Survey

Question 1 - (asks about frequency of past 6 month drinking)

During the last 6 months, how often did you usually have any kind of drink containing alcohol? **By a drink we mean half an ounce of absolute alcohol (e.g. a 12 ounce can or glass of beer or cooler, a 5 ounce glass of wine, or a drink containing 1 shot of liquor).** Choose only one.

- Every day
- 5 to 6 times a week
- 3 to 4 times a week
- Twice a week
- Once a week
- 2 to 3 times a month
- Once a month
- 3 to 11 times in the past year
- 1 or 2 times in the past year (IF RESPONDENT GIVES ANY OF THE ABOVE RESPONSES, GO TO QUESTION 2)
- I did not drink any alcohol in the past year, but I did drink in the past (GO TO QUESTION 1A) I never drank any alcohol in my life (GO TO QUESTION 1B)

1A - During your lifetime, what is the maximum number of drinks containing alcohol that you drank within a 24-hour period? (Asked here only of those who did not drink any alcohol during the past 12 months)

- 36 drinks or more
- 24 to 35 drinks
- 18 to 23 drinks
- 12 to 17 drinks
- 8 to 11 drinks
- 5 to 7 drinks
- 4 drinks
- 3 drinks
- 2 drinks
- 1 drink (DONE WITH ALCOHOL QUESTIONS)

1B - So you have never had a drink containing alcohol in your entire life. (Asked only of those who say they never drank alcohol in their lives)

- Yes, I never drank. (DONE WITH ALCOHOL QUESTIONS)
- No, I did drink (GO BACK TO QUESTION 1 AND REPEAT)

Question 2 - (asks about number of drinks on typical drinking day in past 6 months)

During the last 6 months, how many alcoholic drinks did you have on a typical day when you drank alcohol?

- 25 or more drinks
- 19 to 24 drinks
- 16 to 18 drinks
- 12 to 15 drinks
- 9 to 11 drinks
- 7 to 8 drinks
- 5 to 6 drinks
- 3 to 4 drinks
- 2 drinks
- 1 drink

Question 3 - (asks about maximum drinks in a 24 hour period in past 6 months)

During the last 6 months, what is the largest number of drinks containing alcohol that you drank within a 24-hour period?

- 36 drinks or more
- 24 to 35 drinks
- 18 to 23 drinks
- 12 to 17 drinks
- 8 to 11 drinks

- 5 to 7 drinks
- 4 drinks
- 3 drinks
- 2 drinks
- 1 drink

Question 4 - (asks about frequency of binge drinking in past 6 months)

During the last 6 months, how often did you have 5 or more (males) or 4 or more (females) drinks containing any kind of alcohol in within a two-hour period? [That would be the equivalent of at least 5 (4) 12-ounce cans or bottles of beer, 5 (4) five ounce glasses of wine, 5 (4) drinks each containing one shot of liquor or spirits - to be provided by interviewer if asked.] Choose only one.

- Every day
- 5 to 6 days a week
- 3 to 4 days a week
- Two days a week
- One day a week
- 2 to 3 days a month
- One day a month
- 3 to 11 days in the past year
- 1 or 2 days in the past year

APPENDIX 4

Attitudes Towards Risks Questionnaire

Instructions: Indicate, using a 5-point scale, the degree to which each of the following statements describes you. Use the letter 1 if the statement is a very good description of you (like me) and the letter 5 to indicate it does not describe you at all (not like me). Use remaining letters to indicate the varying degrees that the statement is like you or not like you.

Like Me Not like me
 1 2 3 4 5

1. I like the feeling that comes with taking physical risks.
2. I like the feeling that comes with taking psychological or social risks.
3. While I don't deliberately seek out situations or activities that involve physical risk, I often end up doing things that involve physical risk.
4. I often seek out situations or activities that society does not approve of.
5. While I don't deliberately seek out situations or activities that society disapproves of, I find that I often end up doing things that society disapproves of.
6. I often do things that I know my parents would disapprove of.
7. I often do things that I know some of my friends would disapprove of.
8. I often find that I am anxious or even scared of things that I am about to do.
9. I often do things that would hurt my reputation.
10. I often do things that would jeopardize my reputation.
11. I often do things that could jeopardize my friendships.
12. I never let fear get in the way of my doing things.
13. I like the feeling that comes from entering a new situation.
14. I don't let what other people think prevent me from doing new things.
15. I like to risk large sums of money.
16. I would be willing to risk my life in order to receive 10 million dollars.
17. I consider myself a risk-taker.
18. Being afraid of doing something new often makes it more fun in the end.
19. The greater the risk the more fun the activity.

20. I like to do things that almost paralyze me with fear.
21. I really don't care what people think of what I say and do.
22. I do not let the fact that something is illegal stop me from doing it.
23. I do not let the fact that something is considered immoral stop me from doing it.

Some people don't actually take risks but think about them. The following questions pertain to how much you think about risks.

24. I often think about doing activities that involve physical risks.
25. I often think about doing activities that involve social risk.
26. I often think about doing things that might jeopardize my health.
27. I often think about doing things that I know my friends would disapprove of.
28. I often think about doing things that I know my parents would disapprove of.
29. I often think about doing things that would arouse a great deal of fear or anxiety in me.
30. I often think about doing things that I know society would disapprove of.
31. I often think about doing things that are illegal.
32. I often think about doing things that are considered immoral.
33. I often think about doing things that would make me a lot of money.
34. I often think about things that would make me famous or notorious.

References

- Benton, Stephen L., Benton, Sherry A., & Downey, Ronald G. (2006). College student drinking, attitudes toward risks, and drinking consequences. *Journal of Studies on Alcohol*, 67(4) 543-551.
- Cole-Harding, S., Michels, V. J. (2007). Does expectancy effect alcohol absorption. *Addictive Behaviors*, 32(1), 194-198.
- Finnigan, F., Hammersley, R., & Millar, K. (1995). The effects of expectancy and alcohol on cognitive--motor performance. *Addiction*, 90(5), 661-672.
- Fraken, Robert E., Gibson, Kevin J., & Rowland, G. L. (1992). Sensation seeking and the tendency to view the world as threatening. *Personality and Individual Differences*, 13(1), 31-38.
- Fromme, Kim, Kruse, Marc I., & Corbin, William R. (2008). Behavioral risks during the transition from high school to college. *Developmental Psychology*, 44(5), 1497-

1504.

- Mckay, D. & Schare, M. L. (1999). The effects of alcohol and alcohol expectancies on subjective reports and physiological reactivity: A meta-analysis. *Addictive Behaviors*. 24(5), 633-647.
- Nagoshi, C. T., Noll, R. T., & Wood, M. D. (1992). Alcohol expectancies and behavioral and emotional responses to placebo versus alcohol administration. *Alcoholism: Clinical and Experimental Research*. 16(2), 255-260.
- National Center for Higher Education Management Systems. (2007) [College-Going Rates of High School Graduates – Directly from HS](#). Retrieved November, 17 2008 from <http://www.higheredinfo.org/dbrowser/index.php?year=2006&level=nation&mode=data&state=0&submeasure=63>
- National Institute on Alcohol Abuse and Alcoholism of the National Institutes of Health. [Task Force on Recommended Alcohol Questions - National Council on Alcohol Abuse and Alcoholism Recommended Sets of Alcohol Consumption Questions](#). Retrieved November, 17, 2008, from <http://www.niaaa.nih.gov/Resources/ResearchResources/TaskForce.htm>
- Parrott, Dominic J. & Giancola, Peter R. (2006). The effect of past-year heavy drinking on alcohol-related aggression. *Journal of Studies on Alcohol*. 67(1), 122-130.
- Ross, David F. & Pihl, R.O. (1988). Alcohol, self-focus and complex reaction-time performance. *Journal of Studies on Alcohol*. 49(2), 115-125.
- Thomson, J. B. & Newlin, D. B. (1988). Effects of alcohol conditioning and expectancy on a visuo-motor integration task. *Addictive Behaviors*. 13(1), 73-77.
- Wechsler, Henry, Lee, Jae Eun, Nelson, Toben F., Kuo, Meichun. (2002). Underage

college students' drinking behavior, access to alcohol, and the influence of deterrence policies. *Journal of American College Health*. 50(5), 223-236.

Informed Consent

Dear Research Participant:

The study in which you are about to participate is being carried out by students in an independent research class being taught this semester in the Psychology Department at Hanover College. The results generated by this study will be investigating the various behavioral elements in different conditions.

I agree to participate in the experiment. I will be asked to fill out a brief questionnaire that asks for basic demographic information, a survey assessing drinking habits, and a questionnaire about my attitudes towards risk taking. I will also take part in the performance tasks addressing reaction time and motor coordination.

Your participation is voluntary. Any information taken from you will be confidential. If at any time, you feel uncomfortable with your participation, you may exit the experiment without penalty and you will still receive extra credit. The experiment will last approximately 60 minutes.

If you would like any additional questions concerning the study, please contact Ashley Bane and Ashley Devers, Senior Psychology major, Hanover College. She can be reached by phone at 812-866-7933 or by email at banea@hanover.edu or deversa@hanover.edu. Questions can also be directed to Dr. John Krantz, Associate Professor of Psychology, Hanover College. He can be reached by phone at 812-866-7316 or by email at krantzj@hanover.edu. Thank you for your time. I appreciate your interest and cooperation.

Signature of Participant

Printed Name of Participant

Name of Researcher

Date

Debriefing Form

Expectancy Effects and Experience with Alcohol
Ashley Bane and Ashley Devers

The purpose of this study was to see if those who expect alcohol, and are in fact not given it, still show the effects of alcohol. In particular we are looking to examine the extent to which one is willing to engage in risky activities when expecting alcohol. You were in fact given alcohol, but it was a very small dose which would not impair your abilities. All information received in this study will remain completely confidential and in no way will your name be associated with the data collected. Also, to ensure future trials of this study run the same as this one, please do not discuss the nature of this study. If you have any questions, you can contact Ashley Bane at banea@hanover.edu or Ashley Devers at deversa@hanover.edu. Also, our advisor John Krantz can be contacted if there are any questions or concerns about this study. Thank you for your time and cooperation!