

University of Arkansas, Fayetteville  
**ScholarWorks@UARK**

---

School of Social Work Undergraduate Honors  
Theses

School of Social Work

---

5-2016

# The Effects of Alcohol Consumption and Perception of Normative Behaviors on Risky Sexual Behavior Among College Students

Taylor E. Pollock Ms.  
*University of Arkansas, Fayetteville*

Follow this and additional works at: <http://scholarworks.uark.edu/scwkuht>

 Part of the [Social Work Commons](#)

---

## Recommended Citation

Pollock, Taylor E. Ms., "The Effects of Alcohol Consumption and Perception of Normative Behaviors on Risky Sexual Behavior Among College Students" (2016). *School of Social Work Undergraduate Honors Theses*. 1.  
<http://scholarworks.uark.edu/scwkuht/1>

This Thesis is brought to you for free and open access by the School of Social Work at ScholarWorks@UARK. It has been accepted for inclusion in School of Social Work Undergraduate Honors Theses by an authorized administrator of ScholarWorks@UARK. For more information, please contact [scholar@uark.edu](mailto:scholar@uark.edu).

**The Effects of Alcohol Consumption and Perception of Normative Behaviors on  
Risky Sexual Behavior Among College Students**

An Honors Thesis submitted in partial fulfillment of the requirements for Honors Studies  
in Social Work

By

Tayler Pollock

Spring 2016

Social Work

J. William Fulbright College of Arts and Sciences

**The University of Arkansas**



## Abstract

Recent research suggests that a majority of college students report having sex with multiple partners while practicing inconsistent condom use. These reports can be attributed to heavy drinking habits and perceived approval of behavior based on social interactions. The purpose of this study was to examine the effects that alcohol consumption and perceptions of peer behavior have on risky sexual behavior among college students. The present study recruited 50 students from the University of Arkansas to participate in an anonymous survey on their drinking habits, risky sexual behavior, and their perception of normative risky sexual behavior. Correlational analyses revealed a positive relationship between risky sexual behavior and alcohol consumption. Regression analysis suggests that drinking behavior and perception of peer risky sexual behavior influence actual risky sexual behavior. Implications for future research and educational programming are presented.

## Acknowledgements

I would like to thank Dr. April Rand for supporting me through this research as my thesis director. Dr. Rand, without your endless support and encouragement throughout this study, I would have been so lost. The endless guidance and time you provided me with were crucial to my education and my development as a social worker. I am so thankful to have had the opportunity to work with you and learn from you.

Support from Dr. Ana Bridges, Professor Anna Piazza, and Dr. Laurence Hare are also very much appreciated. I thank you all for agreeing to serve on my thesis committee, and for encouraging me through the completion of my thesis. I could not have asked for a better team to end my final undergraduate semester with. Thank you all.

I would also like to thank my parents, Tom and Debbie Pollock. I can't thank you two enough for providing me with the means for a college education, and for constantly supporting and reassuring me along the way. I have become the woman I am today because of you two, and I am so happy to have made you proud. I could not have asked for better parents or better role models.

Lastly, I would like to thank my best friend and boyfriend, Jack Gillison. I am so thankful to have met you and to have you in my life. Your patience and appreciation for the small things in life have kept me grounded through stressful times over the last two years. Thank you for sharing our sweet pup, Buddy, with me, his constant joy and playfulness has reminded me to smile throughout this journey.

## Contents

CHAPTER ONE: INTRODUCTION.....	1
Alcohol Consumption, Perception, and Risky Sexual Behavior .....	1
CHAPTER TWO: LITERATURE REVIEW.....	3
Alcohol and Risky Sexual Behavior.....	3
Perceptions of Peer Behavior.....	4
Social Learning Model.....	4
Misperceptions of Peer Behavior.....	5
Analysis of the Literature .....	6
CHAPTER THREE: METHODOLOGY .....	8
Research Design & Questions .....	8
Method and Procedures .....	9
Sampling .....	9
Data Collection .....	10
Creation of Variables .....	11
Correlational Analysis .....	12
Regression Analysis.....	13
CHAPTER FOUR: RESULTS .....	14
Descriptive Statistics.....	14
Correlational Results.....	16
Multiple Regression Model .....	19
CHAPTER FIVE: DISCUSSION.....	21

General Discussion .....	21
Significant Findings .....	21
Limitations .....	23
Implications.....	23
Conclusion .....	24
REFERENCES .....	26
APPENDICES .....	28
Appendix A: Institutional Review Board Protocol Form .....	28
Appendix B: IRB Approval Letter.....	32
Appendix C: Consent Form .....	33
Appendix D: Recruitment Email .....	36
Appendix E: Survey.....	37

## CHAPTER ONE: INTRODUCTION

### **Alcohol Consumption, Perception, and Risky Sexual Behavior**

Adolescents and young adults have reported an increase in contraction of HIV and/or STDs in recent years (Desiderato & Crawford, 1995). Despite the prevalence of prevention programs and public health efforts regarding risky sexual behavior, these numbers continue to rise (Scott-Sheldon, Carey, & Carey, 2008). Ninety percent of undergraduate students report they have had sex during college, with a significant amount of these students reporting they have had more than one partner (LaBrie, Earleywine, Schiffman, Pedersen, & Marriot, 2005). Additionally, young adults, particularly college-aged, represent approximately half of all newly diagnosed STDs in the U.S. (Scott-Sheldon et al., 2008). This increase could be attributed to young adults not using condoms and/or engaging in sexual activity with multiple sexual partners (Lewis, Lee, Patrick, & Fossos, 2007).

Inconsistent condom use and having multiple sexual partners puts individuals at a higher risk of contracting STDs, HIV/AIDS, and unintended pregnancy (Lewis et al., 2007). Two factors that are believed to impact risky sexual behavior are the use of alcohol and perceived behaviors among one's peers. One explanation for the influence of perceived peer behaviors is that young adults frequently discuss social events and behaviors with one another including relationships, parties, and sexual activity. During these discussions, individuals shape what they judge as acceptable behaviors through perceived normative behaviors, or norms, among their peers, and this could serve as a basis to shape one's own behaviors. Norms can be described as a group's set of beliefs about what behaviors are acceptable and standard (Neighbors, Dillard, Lewis, Bergstrom,



& Neil, 2008). Bandura's Social Learning Model (1986) posits that individuals behave in ways that they observe their peers to engage in or approve of, and that these behaviors are acceptable among the group's norms (Lewis et al., 2007).

The purpose of this study is to examine the effects that alcohol consumption and perceptions of peer behavior have on risky sexual behavior among college students. Chapter Two provides a review and analysis of the literature discussing risky sexual behavior, alcohol consumption, and perception of peer behavior, as well as how these variables may influence one another. Later, Chapter Three will discuss the research design, methods, and the procedure for the study. Lastly, Chapter Four will provide a discussion of the results, limitations, and implications.

## CHAPTER TWO: LITERATURE REVIEW

**Alcohol and Risky Sexual Behavior**

Research suggests that between eighty and ninety percent of college students under the age of twenty-one drink alcohol, and over eighty percent of both male and female collegiate students report inconsistent condom use with multiple partners (LaBrie, Earleywine, Schiffman, Pedersen, & Marriot, 2005). LaBrie et al. (2005) examined a sample of 315 male collegiate students who participated in a Timeline Followback (TLFB) interview over sexual behavior and substance use. The authors found that participants reported using condoms with new and casual partners more often than with regular partners. Reports of drinking before sexual intercourse revealed that alcohol consumption was related to a decrease in condom use among all partner types. Moreover, this study found a relationship between alcohol consumption and expectancies involving sexual behavior. For example, participants who reported drinking larger amounts of alcohol also reported that alcohol enhances their sexual behavior and makes them more likely to engage in risky sexual behavior, such as not using a condom (LaBrie et al., 2005).

A study involving 221 undergraduate students at Syracuse University also used a TLFB interview to explore the relationship between alcohol and risky sexual behavior (Scott-Sheldon, Carey, & Carey, 2008). The TLFB interview was used to review the last twelve weeks of the participants' behaviors including use of alcohol and drugs and sexual relationships. This study found that condom use was less frequent among women who were having sex with a steady partner rather than a casual partner. Further, this study demonstrated that women who had been drinking before having sexual intercourse with a

steady partner were even less likely to use a condom than if alcohol had not been involved.

In addition to lack of condom use, another common element of risky sexual behavior is sexual partners failing to disclose risky sexual behavior that they have had in the past (Desiderato & Crawford, 1995). In Desiderato and Crawford's study, one fourth of the participants reported inconsistent condom use while one third of the participants reported failure to disclose past risky sexual behavior to their present sexual partner. Cooper (2002) also recognized this failure to disclose past risky behavior with a focus on alcohol myopia theory, which claims that alcohol effects an individual in a sense that only the most salient, or noticeable social cues are absorbed, while less obvious and important cues become more distal. Weinhardt and Carey (2008) also support alcohol myopia theory as an explanation to why individuals take less precautions when engaging in sexual activity. Further, their work found that individuals who claimed that drinking disinhibited their sexual behavior also reported that they would receive a greater benefit from engaging in risky sexual behavior (Weinhardt & Carey, 2008).

### **Perceptions of Peer Behavior**

#### **Social Learning Model**

Expectancies of the use of alcohol are often attributed to a social learning model (Leigh, 1999; Bandura, 1986). The social learning model posits that individuals learn and shape their behaviors according to the behaviors and attitudes of individuals around them, or their peers (Leigh, 1999; Bandura, 1986). In this case, individuals learn how to act during and after the consumption of alcohol through reinforcement and modeling among their peers and culture. This social learning model can be compared to Festinger's

discussion on the theory of social comparison processes (1954). Festinger claims that humans have a drive for self-evaluation, and this self-evaluation can only take place through comparison of ourselves to other individuals. Individuals tend to seek out groups that are similar to them in behavior and ability. When an individual finds a similar group to belong to, they are then able to find satisfaction in holding the same opinions and judgment as those that they surround themselves with (Festinger, 1954).

### **Misperceptions of Peer Behavior**

Recent research has demonstrated that perceptions of similar behaviors and attitudes, or norms, within groups are often misjudged (Martens, Page, Mowry, Damann, Taylor, & Cimini, 2006). A study with a sample of 833 undergraduate students from Northeastern America found that the majority of participants perceived their peers as engaging in more alcohol and drug use along with increased sexual activity. In short, the participants of this study reported that they engaged in less extreme behaviors than a typical student at their university. Another study of 164 collegiate participants also largely overestimated the normative frequency and quantity of alcohol consumption (Neighbors, Dillard, Lewis, Bergstrom, & Neil, 2008). This study found a mutual influence in that perception of alcohol use among peers predicted later drinking behaviors among the participants, and drinking behaviors also predicted their perception of peer use of alcohol.

A study on normative misperceptions recruited participants from an online marijuana intervention for students transitioning into their first year of college (Lewis, Lee, Patrick, & Fossos, 2007). A survey was administered to 687 participants who completed a six-month assessment with the marijuana intervention. Results of this study,

again, found that both male and female individuals perceive their peers as engaging in riskier sexual behavior than they engage in themselves (Lewis et al., 2007). These misperceptions include number of casual sexual partners, frequency of sexual intercourse, and risky sexual behavior related to alcohol. Additionally, it was found that female participants showed greater misperceptions of sexual behavior among men compared to the male participants. This study also found a relationship between same-sex and opposite-sex misperceptions among participants. Both male and female participants perceived that both male and female peers engaged in riskier behaviors than they did themselves. However, both men and women reported that peers of their own sex engaged in more frequent casual sexual intercourse as well as more frequent risky sexual behavior related to alcohol (Lewis et al., 2007).

### **Analysis of the Literature**

One weakness of the research literature is the lack of an experimental design. Data have been collected through self-report surveys with no manipulation of a variable, therefore the majority of past research on this topic has been correlational. It is difficult to find an ethical way to manipulate variables among the concepts of alcohol use, perception of peer behavior, and risky sexual behavior. Without an experimental design, a causal relationship cannot be established. However, the research literature presents fairly consistent findings, and there has not been a considerable amount of debate over findings in this area of interest.

Additional research in this area of interest is important as there needs to be a shift in the current educational and prevention programs for young adults concerning risky sexual behavior. Despite the current programs in place, STD and HIV rates continue to

rise among the young adult population (LaBrie, Earleywine, Schiffman, Pedersen, & Marriot, 2005). There is reason to suggest that this rise could be attributed to risky sexual behavior, especially in relation to the use of alcohol, as a significant majority of college students report being sexually active. Over eighty percent of this college population report inconsistent condom use, and many of these college students also report having multiple partners (LaBrie et al., 2005). Over eighty percent of college students report that they use alcohol, and over forty percent binge drink (LaBrie et al., 2005). Misperception of peer behavior is an important area of interest as social groups among young adults shape normative behavior. Due to misperceptions of peer behavior, individuals are able to justify heavier uses of alcohol and engagement in riskier sexual behaviors.

Continued research in this field is the next step in establishing relationships among alcohol consumption, perceptions of peer behavior, and risky sexual behavior. By establishing these relationships, future educational and prevention programs can emphasize areas that need more attention among social groups and sexual partners. When working with young adults in the college population, it is important to stress open and honest communication along with responsible decision-making among individuals and their peers and sexual partners. This research will help specify the areas that need the most attention in these educational and prevention programs for young college aged adults.

## CHAPTER THREE: METHODOLOGY

**Research Design & Questions**

The purpose of this study is to examine the effects of alcohol consumption and perception of peer behaviors on risky sexual behavior among college students. Approval from the Institutional Review Board (IRB) was received on October 26, 2015.

Submission forms to the IRB can be found in Appendix A, and IRB approval can be found in Appendix B. This study used a cross-sectional survey design to answer the following research questions and hypotheses.

**Research Question One:** Is there a relationship between drinking behavior and risky sexual behavior?

**Hypothesis One:** Participants who report higher levels of drinking will engage in more risky sexual behavior.

**Research Question Two:** Is there a relationship between actual sexual behavior and perception of peers' sexual behavior?

**Hypothesis Two:** Participants who perceive their peers as engaging in risky sexual behavior will engage in more risky sexual behavior of their own.

**Research Question Three:** Does drinking behavior and perception of peer sexual behavior influence actual risky sexual behavior?

**Hypothesis Three:** A participant's drinking behavior and perception of peer risky sexual behavior will influence his or her actual risky sexual behavior.

## Method and Procedures

### Sampling

Convenience sampling was used to recruit the sample for this study. Criteria for inclusion in this study included (1) University of Arkansas Student and (2) Between the ages of 18-24 years. A recruitment email (see Appendix D) was sent out through several University of Arkansas student listservs. Participation was voluntary and informed consent (see Appendix C) was received prior to participation in the study. A sample of 50 participants were recruited for the study ( $M_{\text{age}} = 20.5$ , age range: 18-24 years). The sample was restricted to an age range of 18-24 years in order to keep the sample representative of the typical ages of students at the University of Arkansas.

Approximately ninety-eight percent of the participants ( $n=49$ ) identified as female and two percent self-identified as agender ( $n=1$ ). The sample consisted of twelve percent freshmen ( $n=6$ ), twenty-four percent sophomores ( $n=12$ ), twenty-four percent juniors ( $n=12$ ), thirty-four percent seniors ( $n=17$ ), and six percent graduate students ( $n=3$ ). Of the participants, ninety percent were white ( $n=45$ ), six percent were Black or African American ( $n=3$ ), two percent were Asian/Pacific Islander ( $n=1$ ), and two percent multiple races ( $n=1$ ). Four percent identified as Hispanic/Latino ( $n=2$ ). Demographic information is included in Table 1 below.



Table 1

*Demographic Characteristics of Study Sample*

Characteristic	Frequency	Percentage
Gender		
Female	49	98%
Agender	1	2%
Age		
18 years	4	8%
19 years	11	22%
20 years	10	20%
21 years	13	26%
22 years	7	14%
23 years	3	6%
24 years	2	4%
Class		
Freshman	6	12%
Sophomore	12	24%
Junior	12	24%
Senior	17	34%
Graduate	3	6%
Race		
White	45	90%
Black or African American	3	6%
American		
Asian/Pacific Islander	1	2%
Multiple	1	2%
Ethnicity		
Hispanic/Latino	2	4%
Not Hispanic/Latino	48	96%

**Data Collection**

Data were collected through the distribution of an anonymous online survey examining the participants' personal alcohol consumption, risky sexual behaviors, and perceptions of their peers' risky sexual behaviors. A copy of the survey can be found in Appendix E. The survey used a combination of pre-existing measurement tools and researcher developed questions. To measure quantity and frequency of alcohol

consumption, items from the Daily Drinking Questionnaire (DDQ) (Collins, Parks, & Marlatt, 1985) were used. Items from the Sexual Activities and Attitudes Questionnaire (SAAQ) were used to measure a participant's sexual history and behaviors (Noll, Trickett, & Putnam, 2003). These questions were used in addition to new, researcher developed items that captured specific behaviors and areas of interest in this study that were not addressed by the DDQ or SAAQ questions. Researcher developed items were used to collect information on what age an individual's drinking began, how often an individual asked about their sexual partners' sexual history prior to engaging in sexual intercourse, and how often an individual perceives his/her peers to ask about their sexual partners' sexual history prior to engaging in sexual intercourse. Perception of peer risky sexual behavior was measured through questions addressing how frequently a typical student at the University of Arkansas engaged in the same risky sexual behavior, using the same questions for the participant's own sexual behaviors. Questions based on likeliness and frequency incorporated Likert-type scales for the participants' responses.

### **Creation of Variables**

For more condensed analyses, the scores of several items were added to create a total variable. This was done for "Actual Risky Sexual Behavior," "Perceived Risky Sexual Behavior," and "Total Weekly Drinking." All of the items that were combined to create a totaled variable were measured on a Likert-type scale. In order to remain consistent, riskier behaviors were measured on the higher end of the scale. For example, when measuring how frequently a participant used birth control methods for the purpose of preventing pregnancy or transmission of STDs, 1 indicated "always" because this was the safer behavior, and 5 indicated "never" because this was the riskier behavior.

“Actual Risky Sexual Behavior” was created by combining scores on the following items: number of partners, number of events of sexual intercourse, use of birth control, tendency to question sexual history prior to intercourse, and frequency of engaging in sexual intercourse while intoxicated. “Perceived Risky Sexual Behavior” was created by combining scores on the following items: perceived risky sexual behavior among the participant’s peers, perceived number of partners, perceived number of events of sexual intercourse, perceived use of birth control, perceived tendency to question sexual history prior to engaging in sexual intercourse, and perceived frequency of engaging in sexual intercourse while intoxicated. Lastly, “Total Weekly Drinking” was measured by totaling the number of drinks the participant reported consuming on each day of a typical week.

### **Correlational Analysis**

Several analyses were conducted on the study data. “Total Weekly Drinking” was analyzed with the sexual activity variables, which is the number of sexual partners and number of times the individual had intercourse over the last year. Next, “Total Weekly Drinking” was analyzed with each of the specific risky sexual behaviors, including how often the individual used birth control methods, how often he/she asked his or her partner’s sexual history before engaging in sexual intercourse, and how often he/she had intercourse while intoxicated.

Following the analyses with “Total Weekly Drinking,” “Actual Risky Sexual Behavior” was analyzed with “Perceived Risky Sexual Behavior.” Then an analysis was conducted for each of the risky sexual behaviors individually, including number of partners and number of times the individual had sexual intercourse, in order to examine

any relationships among risky sexual behaviors. This analysis was done to see if there were relationships between certain risky sexual behaviors. Another analysis of the individual's sexual activity and individual risky sexual behaviors was then run with perceived sexual activity and risky sexual behaviors for the individual's peers. Each variable was analyzed separately. This analysis was done to determine if there was a relationship between the individual's actual sexual behaviors and their perceived sexual behaviors among their peers.

### **Regression Analysis**

Lastly, a standard multiple regression was conducted to determine the effects of drinking and perceived risky sexual behavior on actual risky sexual behavior. This analysis was done in order to examine if drinking behaviors and/or perceptions of risky sexual behavior among an individual's peers influenced actual risky sexual behavior. In this model, each of the predictor variables would be examined separately as well as combined.

## CHAPTER FOUR: RESULTS

### **Descriptive Statistics**

Data analysis revealed fairly low risk characteristics of the sample. The majority of participants responded on the low risk end of the scale when answering questions of their actual risky sexual behavior. However, when answering questions about perceived risky sexual behaviors among their peers, participants responded on the high risk end of the scale for the majority of behaviors, excluding perceived number of partners and perceived use of birth control.

When analyzing the three grouped variables, a range of scores was calculated based on the participants' scaled responses in order to observe a mean score for each variable. The range for the "Total Weekly Drinking" scores was seven to forty-two. Within this scale, the mean "Total Weekly Drinking" score was 9.56, and the highest score reported was 19.00. Because the minimum score was seven, indicating consumption of zero drinks in a typical week, and the maximum score was a forty-two, the mean score indicated a low level of alcohol consumption. "Actual Risky Sexual Behavior" and "Perceived Risky Sexual Behavior" were scored on a five to twenty-seven scale. The mean score for "Actual Risky Sexual Behavior" was 11.36, and the mean score for "Perceived Risky Sexual Behavior" was 18.32. The mean score for "Actual Risky Sexual Behavior" indicated a relatively low risk sample. Additionally, the mean score for "Perceived Risky Sexual Behavior" indicated that participants generally perceived their peers as engaging in more risky sexual behaviors than they did themselves. A summary of these descriptive statistics can be found in Table 2.

Table 2

*Frequencies and Proportions for Individual Variable Responses and Means and Standard Deviations for Grouped Variable Responses*

Variable	N = 50	%
<b>Partners</b>		
1. None	20	40
2. 1 partner	19	19
3. 2-3 partners	7	7
4. 4-7 partners	2	2
5. 8-10 partners	0	0
6. More than 10 partners	2	2
<b>Intercourse</b>		
1. None	22	44
2. 1 time	2	4
3. 2-3 times	2	4
4. 4-7 times	7	14
5. 8-10 times	2	4
6. More than 10 times	15	30
<b>Birth Control</b>		
1. Always	26	52
2. Often	0	0
3. Sometimes	0	0
4. Rarely	2	4
5. Never	19	38
<b>History</b>		
1. Never	38	76
2. Rarely	4	8
3. Sometimes	3	6
4. Often	1	2
5. Always	4	8
<b>Intoxicated</b>		
1. Never	31	62
2. Rarely	8	16
3. Sometimes	10	20
4. Often	1	2
5. Always	0	0
<b>Perceived Partners</b>		
1. None	0	0
2. 1 partner	4	8
3. 2-3 partners	27	54
4. 4-7 partners	15	30
5. 8-10 partners	3	6

6. More than 10 partners	1	2
Perceived Intercourse		
1. None	0	0
2. 1 time	0	0
3. 2-3 times	2	4
4. 4-7 times	11	22
5. 8-10 times	6	12
6. More than 10 times	31	62
Perceived Birth Control		
1. Always	4	8
2. Often	31	62
3. Sometimes	10	20
4. Rarely	5	10
5. Never	0	0
Perceived History		
1. Never	1	2
2. Rarely	8	16
3. Sometimes	10	20
4. Often	27	54
5. Always	4	8
Perceived Intoxicated		
1. Never	0	0
2. Rarely	1	2
3. Sometimes	11	22
4. Often	36	72
5. Always	2	3
	Mean (SD)	Range
Total Weekly Drinking	9.56 (3.10)	7-42
Actual Risky Sexual Behavior	11.36 (2.99)	5-27
Perceived Risky Sexual Behavior	18.32 (2.35)	5-27

### Correlational Results

Several significant correlations were found (see Table 3). Correlational analyses revealed a positive relationship ( $r=.398$ ,  $p=.004$ ) between drinking behavior and sexual partners. Thus, as drinking behavior increased, the number of sexual partners increased.

For example, individuals who reported heavier drinking habits also reported more sexual partners. There was also a positive relationship ( $r=.405$ ,  $p=.004$ ) between drinking behavior and events of sexual intercourse. Again, individuals who reported heavier drinking habits also reported more events of sexual intercourse.

Correlational analyses also revealed a positive relationship ( $r=.590$ ,  $p<.001$ ) between drinking behavior and events of sexual intercourse while intoxicated. For example, individuals who reported heavier drinking habits also reported engaging in sexual intercourse while intoxicated more often. After these analyses, the weekly drinking variable was then examined with the actual risky sexual behavior variable. This analysis revealed a positive relationship ( $r=.489$ ,  $p<.001$ ) between drinking behavior and overall risky sexual behavior, meaning that individuals who reported heavier drinking habits also reported more risky sexual behavior.

When examining actual risky sexual behavior and its relationship to perceived risky sexual behavior, analysis showed there was a positive relationship between asking about sexual history prior to intercourse and perceiving peers to question sexual history prior to intercourse ( $r=.370$ ,  $p=.008$ ). For example, individuals who reported asking about sexual history less frequently also reported that they perceive their peers to ask about sexual history less frequently. However, when “Actual Risky Sexual Behavior” was analyzed with “Perceived Risky Sexual Behavior,” there was not a significant relationship found.



Table 3

*Bivariate Correlations of Studied Variables*

	1	2	3	4	5	6	7	8	9	10	11	12
1 Perceived Risky Sexual Behavior	--											
2 Risky Sexual Behavior Grouped Weekly Drinking Grouped	.286	--										
3 Perceived Risky Sexual Behavior Grouped	-.042	.489**	--									
4 Perceived Risky Sexual Behavior Grouped	.153	.735**	.405**	--								
5 Perceived Risky Sexual Behavior Grouped	.077	.802**	.398**	.611**	--							
6 Perceived Risky Sexual Behavior Grouped	-.169	-.482**	-.374**	-.811**	-.534**	--						
7 Perceived Risky Sexual Behavior Grouped	.370**	.588**	.205	.246	.382**	-.369*	--					
8 Perceived Risky Sexual Behavior Grouped	.208	.708**	.590**	.662**	.470**	-.595**	.345*	--				
9 Perceived Risky Sexual Behavior Grouped	.598**	.238	-.007	.192	.024	-.118	.136	.221	--			
10 Perceived Risky Sexual Behavior Grouped	.715**	.151	.039	-.023	.138	-.029	.300*	.046	.174	--		
11 Perceived Risky Sexual Behavior Grouped	.417**	.116	-.146	.046	.053	.023	.016	.002	.024	.217	--	
12 Perceived Risky Sexual Behavior Grouped	.680**	.096	-.085	.089	-.047	-.212	.370**	.112	.252	.434**	-.029	--
13 Perceived Risky Sexual Behavior Grouped	.454**	.233	.123	.139	.089	-.132	.258	.248	.099	.250	.074	.181

Note. \* $p < .05$ . \*\* $p < .01$

### Multiple Regression Model

A standard multiple regression was conducted to determine the effects of alcohol consumption and perceived normative risky sexual behavior on an individual's actual risky sexual behavior. For this analysis, the three grouped variables were used. Alcohol consumption, an independent variable, was measured using the grouped drinking variable as discussed in data analysis. The other independent variable, perceived risky sexual behavior, was measured using the grouped perceived risky sexual behavior variable. The dependent variable, actual risky sexual behavior, was measured using the grouped actual risky sexual behavior variable.

Regression results indicated that drinking and perception of risky sexual behavior significantly predict an individual's actual risky sexual behavior ( $R^2 = .333$ ,  $R^2_{adj} = .303$ ,  $\beta_{\text{perception}} = .308$ ,  $\beta_{\text{drinking}} = .502$ ,  $F(1, 44) = 10.999$ ,  $p < .001$ ). The regression model indicated that when perceived risky sexual behavior increased by one unit, risky sexual behavior increased by .398 units, all other variables constant. Additionally, it was indicated that when drinking behavior increased by one unit, risky sexual behavior increased by .469 units, all other variables constant. This regression model accounted for 33.3% of variance in actual risky sexual behavior. A summary of the regression model can be found in Table 4 and Table 5.

Table 4

#### Regression ANOVA

Model	<i>df</i>	<i>F</i>	<i>η</i>	<i>p</i>
1		10.999		
Regression	2		0.58	<.001
Residual	44		0.82	
Total	46			

Table 5

*Regression Coefficients Table*

	<i>B</i>	<i>SE B</i>	$\beta$	<i>p</i>
Constant	-.407	3.181		.899
Perceived Risky Sexual Behavior (grouped)	.398	.159	.308	.016
Weekly Drinking (grouped)	.469	.115	.502	<.001

## CHAPTER FIVE: DISCUSSION

**General Discussion****Significant Findings**

Results of this study supported two of the three hypotheses addressed in the research questions. First, the hypothesis that individuals who reported higher levels of drinking would engage in more risky sexual behavior was supported by correlational analyses. There was a significant, positive relationship suggesting that individuals who report heavier drinking behaviors also reported more risky sexual behavior. Additionally, the hypothesis that an individual's drinking behavior and perception of peer risky sexual behavior would significantly influence his or her actual risky sexual behavior was supported in the regression analysis. The hypothesis that there would be a positive relationship between an individual's risky sexual behavior and the perception of their peers' risky sexual behaviors was not supported. There was a trend in the data towards this relationship, however it was not significant. The regression model demonstrated that drinking behavior and perception of peer risky sexual behavior influenced an individual's actual risky sexual behavior. Although the direction of the relationship cannot be determined through this study, the results imply that individuals who have heavier drinking behaviors and perceive their peers as engaging in more high risk sexual behavior also engage in more risky sexual behaviors themselves.

Consistent with previous findings, the majority of individuals who participated in this study reported that they consume alcohol and are sexually active (LaBrie, Earleywine, Schiffman, Pedersen, & Marriot, 2005). LaBrie et al., (2005) found that after consuming alcohol, individuals were more likely to engage in risky sexual behaviors.

This was supported through results that showed a positive relationship between drinking behavior and risky sexual behavior. However, previous research that demonstrated individuals who engage in intercourse while intoxicated are less likely to use a condom was not consistent with the present study (Scott-Sheldon, Carey, & Carey, 2008). In the current study, participants who reported having sexual intercourse while intoxicated more often also reported more use of birth control.

Weindhardt and Carey's (2008) perspective on alcohol myopia theory was supported in this study, such that heavier drinking behaviors were associated with more risky sexual behavior. Although there was not a significant correlation between perceived risky sexual behavior and actual risky sexual behavior, the regression model suggested that perceived risky sexual behavior did influence an individual's actual risky sexual behavior. For example, individuals who perceive their peers as engaging in more risky sexual behavior were more likely to engage in more risky sexual behavior themselves. This relationship supports Bandura's Social Learning Model (1986) and Festinger's Theory of Social Comparison Processes (1954). Bandura and Festinger's models demonstrate that individuals rely on behaviors and approval among their peers to shape their own behaviors. This raises concern because as previous research demonstrated, the present research also showed that individuals perceived that their peers engage in higher rates of risky sexual behavior than they do themselves. If young adults perceive more risky behavior among their peers and use these perceptions to shape their own behaviors, then they may consequently engage in more risky sexual behavior of their own.

**Limitations**

The use of researcher created questions was a limitation in this study due to lack of reliability or previous testing. When variables were grouped to represent one measurement of a behavior, such as the total weekly drinking variable, results were generalized, and detailed effects were lost. Additional limitations of this study include a small sample size. In addition to the small size, most participants were female, with one participant being agender. The sample was limited to mostly psychology and social work students due to limited access to additional Listservs. With the exception of a few, there were not many individuals with extreme drinking habits or individuals who had several sexual partners. This limited the study such that only a fairly low risk sample was studied.

**Implications**

Although the hypothesis that there would be a positive relationship between an individual's risky sexual behavior and the perception of their peers' risky sexual behaviors was not supported, future research could address this concept with a larger and more diverse sample in order to offer more insight. Additionally, had the sample consisted of more sexually active participants, there may have been more support for Bandura's Social Learning Model (1986). For example, had there been more participants who reported higher rates of sexual activity and risky sexual behaviors, theoretically, there would have been more participants who perceived higher rates of sexual activity and risky behaviors among their peers.

The nature of the study, such that it was a self-report survey, limited the ability to observe a direct relationship between intoxication and perception of peers. Future

research could examine the relationship between these two variables by asking individuals to report normative perceptions after they have consumed alcohol, for example. Previous education was not examined in this study. It would be interesting to see if individuals who report more risky behavior also report less involvement in preventative and/or educational programs. This study also did not address past contraction of STDs. It could be useful to examine if individual's who report contraction of an STD within the last year also report more risky sexual behavior over the last year.

Results of this study show that there are significant relationships among alcohol consumption, perception of normative behavior, and risky sexual behavior. This communicates a strong need for educational and preventative programs focusing on the importance of drinking habits and normative perceptions within social groups. As individuals misperceive the amount of risky sexual behavior among peers, this may result in their own engagement in more risky sexual behavior. With programs that focus on the importance of open, honest communication among peers and sexual partners and the need for extra precaution when engaging in sexual activity while consuming alcohol, young adults may normalize less risky behaviors, and engage in more responsible decision-making when it comes to sexual activity.

### **Conclusion**

Due to the sensitive nature of the study, the research was limited by the variables that could be tested. Although significant findings emerged from the survey, there was not an opportunity to manipulate the variables in order to get a better understanding of the relationships and interactions. Consistent with past research, this study demonstrated a significant relationship between risky sexual behavior, alcohol consumption behaviors,

and perception of normative risky sexual behavior, and provided directions for future research and improving educational programming. With HIV and STD rates on the rise among the young adult population, public health programs need to consider the past and present research, and incorporate a focus on alcohol consumption and normative perceptions as factors of risky sexual behavior.



## REFERENCES

- Bandura, A (1986). *Social foundations of thought and actions: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Collins, R., Parks, G., & Marlatt, G. (1985). Social determinants of alcohol consumption: The effects of social interaction and model status on the self-administration of alcohol. *Journal of Consulting and Clinical Psychology*, 53(2), 189-200.
- Cooper, L. (2002). Alcohol use and risky sexual behavior among college students and youth: Evaluating the evidence. *Journal of Studies on Alcohol*, 14, 101-117.
- Desiderato, L., & Crawford, H. (1995). Risky sexual behavior in college students: relationships between number of sexual partners, disclosure of previous risky behavior, and alcohol use. *Journal of Youth and Adolescence*, 24(1), 55-68.
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7, 117-140.
- LaBrie, J., Earleywine, M., Schiffman, J., Pedersen, E., & Marriot, C. (2005). Effects of alcohol, expectancies, and partner type on condom use in college males: event level analyses. *The Journal of Sex Research*, 42(3), 259-266.
- Leigh, B. (1993). Peril, chance, adventure: concepts of risk, alcohol use and risky and risky behavior in young adults. *Addiction*, 94(3), 371-383.
- Lewis, M., Lee, C., Patrick, M., & Fossos, N. (2007). Gender-specific normative misperceptions of risky sexual behavior and alcohol-related risky sexual behavior. *Sex Roles*, 57, 81-90.
- Martens, M., Page, J., Mowry, E., Damann, K., Taylor, K., & Cimini, D. (2006) Differences between actual and perceived student norms: An examination of alcohol

use, drug use, and sexual behavior. *Journal of American College Health*, 54(5), 295 - 300.

Neighbors, C., Dillard, A., Lewis, M., Bergstrom, R., & Neil, T. (2008). Normative misperceptions and temporal precedence of perceived norms and drinking. *Journal of Studies on Alcohol*, 67(2), 290-299.

Noll, J., Trickett, P., & Putnam, F. (2003). A prospective investigation of the impact of childhood sexual abuse on the development of sexuality. *Journal of Consulting and Clinical Psychology*, 71(3). 575-586. Retrieved May 26, 2015 from [www.cincinnatichildrens.gov/workarea/linkit.aspx?linkidentifier=id&itemid=76455&libid=76137](http://www.cincinnatichildrens.gov/workarea/linkit.aspx?linkidentifier=id&itemid=76455&libid=76137)

Scott-Sheldon, L., Carey, M., & Carey, K. (2008). Alcohol and risky sexual behavior among heavy drinking college students. *AIDS and Behavior*, 14, 845-853.

Weinhardt, L., & Carey, M. (2000). Does alcohol lead to sexual risk behavior? Findings from event-level research. *Annual Review of Sex Research*, 11, 125-157.

## APPENDICES

**Appendix A: Institutional Review Board Protocol Form**

IRB Project Number

UNIVERSITY OF ARKANSAS INSTITUTIONAL REVIEW BOARD  
PROTOCOL FORM

The University Institutional Review Board recommends policies and monitors their implementation, on the use of human beings as subjects for physical, mental, and social experimentation, in and out of class. . . . Protocols for the use of human subjects in research and in class experiments, whether funded internally or externally, must be approved by the (IRB) or in accordance with IRB policies and procedures prior to the implementation of the human subject protocol. . . . Violation of procedures and approved protocols can result in the loss of funding from the sponsoring agency or the University of Arkansas and may be interpreted as scientific misconduct. (see Faculty Handbook)

Supply the information requested in items 1-14 as appropriate. **Type** entries in the spaces provided using additional pages as needed. In accordance with college/departmental policy, submit the original **and** one copy of this completed protocol form and all attached materials to the appropriate Human Subjects Committee. In the absence of an IRB-authorized Human Subjects Committee, submit the original of this completed protocol form and all attached materials to the IRB, Attn: Compliance Officer, MLKG 109, 575-2208. Completed form and additional materials may be emailed to [irb@uark.edu](mailto:irb@uark.edu). The fully signed signature page may be scanned and submitted with the protocol, by FAX (575-6527) or via campus mail.

## 1. Title of Project

The Effects of Alcohol Consumption and Perception of Normative Behaviors on Risky Sexual Behavior Among College Students

2. (Students **must** have a faculty member supervise the research. The faculty member must sign this form and all researchers and the faculty advisor should provide a campus phone number.)

Name	Department	Email Address	Campus Phone
Dr. April Marie Rand	Social Work	<a href="mailto:amrand@uark.edu">amrand@uark.edu</a>	(479) 575-6417

Principal Researcher  
Tayler Pollock

Co-Researcher

Co-Researcher

Co-Researcher

Faculty Advisor  
Dr. April Marie Rand

## 3. Researcher(s) status. Check all that apply.

Faculty    Staff    Graduate Student(s)    Undergraduate Student(s)

## 4. Project type

**RSSP Project Number**Faculty Research  
Staff ResearchThesis / Dissertation ✓  
M.A.T. ResearchClass Project  
Honors ProjectIndependent Study /  
Educ. Spec. Project

5. Is the project receiving extramural funding? (Extramural funding is funding from an external research sponsor.)

No ✓ Yes. Specify the source of funds

6. Brief description of the purpose of proposed research and all procedures involving people. Be specific. Use additional pages if needed. (**Do not** send thesis or dissertation proposals. Proposals for extramural funding must be submitted in full.)

## Purpose of research:

The purpose of this research is to examine the effects that alcohol consumption and misperception of normative sexual behaviors have on the engagement in risky sexual behaviors among college students. By determining these effects, steps can then be taken to target these patterns of alcohol consumption and misperceptions in order to better prevent and decrease risky sexual behavior among this population.

## Procedures involving people:

Data for this study will be collected through an online, anonymous survey. Qualtrics will be used for the development of the survey. The sample will be collected through an email recruitment, and participants will be students at the University of Arkansas between the ages of 18 and 24 years old. Participants will be asked to report information on their personal habits of alcohol consumption and sexual behaviors, as well as their perception of sexual behavior among their peers.

7. Estimated **number of participants** (complete all that apply)

14 \_\_\_\_\_ Children under \_\_\_\_\_ Children 14-17 \_\_\_\_\_ 200 \_\_\_\_\_ UA students \_\_\_\_\_ Adult non-students  
(18yrs and older)

8. Anticipated dates for contact with participants:

First Contact October 2015 Last Contact March 2016

9. Informed Consent procedures: The following information must be included in any procedure: identification of researcher, institutional affiliation and contact information; identification of Compliance Officer and contact information; purpose of the research, expected duration of the subject's participation; description of procedures; risks and/or benefits; how confidentiality will be ensured; that participation is voluntary and that refusal to participate will involve no penalty or loss of benefits to which the subject is otherwise entitled. See *Policies and Procedures Governing Research with Human Subjects*, section 5.0 Requirements for Consent.

Signed informed consent will be obtained. **Attach copy of form.**

Modified informed consent will be obtained. **Attach copy of form.**

Other method (e.g., implied consent). **Please explain on attached sheet.**

Not applicable to this project. **Please explain on attached sheet.**

10. Confidentiality of Data: All data collected that can be associated with a subject/respondent must remain confidential. Describe the methods to be used to ensure the confidentiality of data obtained.



**IRB Project Number**

All data will be stored on either my personal computer with a personal passcode, or on my private student account on the University of Arkansas computer base. Information collected will be kept confidential to the extent allowed by law and University policy.

**11. Risks and/or Benefits:**

**Risks:** Will participants in the research be exposed to more than minimal risk? Yes  No  Minimal risk is defined as risks of harm not greater, considering probability and magnitude, than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests. Describe any such risks or discomforts associated with the study and precautions that will be taken to minimize them.

Risks of this study include discomfort disclosing past or present risky sexual behaviors and/or alcohol consumption. In order to minimize this risk, confidentiality will be ensured, and the survey will be anonymous and distributed online.

**Benefits:** Other than the contribution of new knowledge, describe the benefits of this research, especially any benefits to those participating.

Based on knowledge gained from this study, we will be able to better understand how perception of normative behavior and alcohol consumption effects engagement in risky sexual behavior among college students. With this understanding, we can learn what areas need to be targeted in minimizing risky sexual behavior among this population.

**12. Check all of the following that apply to the proposed research. Supply the requested information below or on attached sheets:**

- A. Deception of or withholding information from participants. Justify the use of deception or the withholding of information. Describe the debriefing procedure: how and when will the subject be informed of the deception and/or the information withheld?
- B. Medical clearance necessary prior to participation. Describe the procedures and note the safety precautions to be taken.
- C. Samples (blood, tissue, etc.) from participants. Describe the procedures and note the safety precautions to be taken.
- D. Administration of substances (foods, drugs, etc.) to participants. Describe the procedures and note the safety precautions to be taken.
- E. Physical exercise or conditioning for subjects. Describe the procedures and note the safety precautions to be taken.
- F. Research involving children. How will informed consent from parents or legally authorized representatives as well as from subjects be obtained?
- G. Research involving pregnant women or fetuses. How will informed consent be obtained from both parents of the fetus?
- H. Research involving participants in institutions (cognitive impairments, prisoners, etc.). Specify agencies or institutions involved. Attach letters of approval. Letters must be on letterhead with original signature; electronic transmission is acceptable.
- I. Research approved by an IRB at another institution. Specify agencies or institutions involved. Attach letters of approval. Letters must be on letterhead with original signature; electronic transmission is acceptable.
- J. Research that must be approved by another institution or agency. Specify agencies or institutions involved. Attach letters of approval. Letters must be on letterhead with original signature; electronic transmission is acceptable.

**RSSP Project Number**

13. Checklist for Attachments

The following are attached:

- Consent form (if applicable) or
- Letter to participants, written instructions, and/or script of oral protocols indicating clearly the information in item #9.
- Letter(s) of approval from cooperating institution(s) and/or other IRB approvals (if applicable)
- Data collection instruments

14. Signatures

I/we agree to provide the proper surveillance of this project to insure that the rights and welfare of the human subjects/respondents are protected. I/we will report any adverse reactions to the committee. Additions to or changes in research procedures after the project has been approved will be submitted to the committee for review. I/we agree to request renewal of approval for any project when subject/respondent contact continues more than one year.

Principal Researcher Tanya Kolleck Date 10/15/2015  
Co-Researcher \_\_\_\_\_ Date \_\_\_\_\_  
Co-Researcher \_\_\_\_\_ Date \_\_\_\_\_  
Co-Researcher \_\_\_\_\_ Date \_\_\_\_\_  
Faculty Advisor AJ Date 10/15/2015

**Appendix B: IRB Approval Letter**

Office of Research Compliance  
Institutional Review Board

October 26, 2015

## MEMORANDUM

TO: Tayler Pollock  
April Rand

FROM: Ro ~~Windwalker~~  
IRB Coordinator

RE: New Protocol Approval

IRB Protocol #: 15-10-181

Protocol Title: *The Effects of Alcohol Consumption and Perception of Normative Behaviors on Risky Sexual Behavior among College Students*

Review Type:  EXEMPT  EXPEDITED  FULL IRB

Approved Project Period: Start Date: 10/23/2015, Expiration Date: 10/22/2016

Your protocol has been approved by the IRB. Protocols are approved for a maximum period of one year. If you wish to continue the project past the approved project period (see above), you must submit a request, using the form *Continuing Review for IRB Approved Projects*, prior to the expiration date. This form is available from the IRB Coordinator or on the Research Compliance website (<https://vpred.uark.edu/units/rscp/index.php>). As a courtesy, you will be sent a reminder two months in advance of that date. However, failure to receive a reminder does not negate your obligation to make the request in sufficient time for review and approval. Federal regulations prohibit retroactive approval of continuation. Failure to receive approval to continue the project prior to the expiration date will result in Termination of the protocol approval. The IRB Coordinator can give you guidance on submission times.

**This protocol has been approved for 200 participants.** If you wish to make *any* modifications in the approved protocol, including enrolling more than this number, you must seek approval *prior to* implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

If you have questions or need any assistance from the IRB, please contact me at 109 MLKG Building, 5-2208, or [irb@uark.edu](mailto:irb@uark.edu).

## Appendix C: Consent Form

### **The Effects of Alcohol Consumption and Perception of Normative Behaviors on Risky Sexual Behavior Among College Students**

#### **Consent to Participate in a Research Study**

Principal Researcher: Tayler Pollock

Faculty Advisor: April Rand MSW, PhD

#### **INVITATION TO PARTICIPATE**

You are invited to participate in a research study about how the consumption of alcohol and perceptions of peer behavior effect risky sexual behavior among college students. You are being asked to participate in this study because you are a student at the University of Arkansas between the ages of 18 and 24.

#### **WHAT YOU SHOULD KNOW ABOUT THE RESEARCH STUDY**

##### *Who is the Principal Researcher?*

Tayler Pollock  
School of Social Work  
University of Arkansas  
[tep002@uark.edu](mailto:tep002@uark.edu)  
(214) 808-5397

##### *Who is the Faculty Advisor?*

April Rand MSW, PhD  
School of Social Work, SCSW 106B  
University of Arkansas  
[amrand@uark.edu](mailto:amrand@uark.edu)  
(479) 575-6417

##### *What is the purpose of this research study?*

The purpose of this study is to examine the effects of alcohol consumption and perceptions of normative sexual behaviors on risky sexual behavior among college students.

##### *Who will participate in this study?*

This study will recruit a sample of 200 participants. Participants will be students at the University of Arkansas between the ages of 18 and 24.

##### *What am I being asked to do?*

Your participation will require completion of an anonymous, 29-question online survey.

##### *What are the possible risks or discomforts?*



Risks of this study may include discomfort disclosing past or present risky sexual behaviors and/or alcohol consumption. However, you may choose not to respond and/ or exit the survey at any time if you experience discomfort.

*What are the possible benefits of this study?*

Based on knowledge gained from this study, we will be able to better understand how perceptions of normative behavior and alcohol consumption influences engagement in risky sexual behavior among college students. With this understanding, we can develop more targeted interventions and programming to address risky sexual behavior among college students.

*How long will the study last?*

The survey should not require more than 30 minutes of your time.

*Will I receive compensation for my time and inconvenience if I choose to participate in this study?*

You will not be compensated for your time.

*Will I have to pay for anything?*

There are no costs associated with participation in this study.

*What are the options if I do not want to be in the study?*

Participation is voluntary. If you do not want to be in this study, you may refuse to participate. Also, you may refuse to participate at any time during the study. Your job, your grade, your relationship with the University, etc. will not be affected in any way if you refuse to participate.

*How will my confidentiality be protected?*

All information will be kept confidential to the extent allowed by applicable State and Federal law.

The online software, Qualtrics, has the ability to keep responses anonymous. The survey will be recorded anonymously, and information collected will be kept confidential to the extent allowed by law and University policy. All data will be stored electronically with a passcode only known to the primary researcher.

*Will I know the results of the study?*

At the conclusion of the study you will have the right to request feedback about the results. You may contact the faculty advisor, Dr. April Rand at [amrand@uark.edu](mailto:amrand@uark.edu), or Principal Researcher, Tayler Pollock at [tep002@uark.edu](mailto:tep002@uark.edu) or (214) 808-5397. You will receive a copy of this form for your files.

*What do I do if I have questions about the research study?*

You have the right to contact the Principal Researcher or Faculty Advisor as listed below for any concerns that you may have.

Principal Research's name and contact information

Taylor Pollock  
School of Social Work  
University of Arkansas  
[tep002@uark.edu](mailto:tep002@uark.edu)  
(214) 808-5397

Faculty Advisor's name and contact information

April Rand MSW, PhD  
School of Social Work, SCSW 106B  
University of Arkansas  
[amrand@uark.edu](mailto:amrand@uark.edu)  
(479) 575-6417

You may also contact the University of Arkansas Research Compliance office listed below if you have questions about your rights as a participant, or to discuss any concerns about, or problems with the research.

Ro Windwalker, CIP  
Institutional Review Board Coordinator  
Research Compliance  
University of Arkansas  
109 MLKG Building  
Fayetteville, AR 72701-1201  
479-575-2208  
[irb@uark.edu](mailto:irb@uark.edu)

I have read the above statement and have been able to ask questions and express concerns, which have been satisfactorily responded to by the investigator. I understand the purpose of the study as well as the potential benefits and risks that are involved. I understand that participation is voluntary. I understand that significant new findings developed during this research will be shared with the participant. By completing this survey, I agree to have my responses used in this research study. I have been given a copy of the consent form.

**Appendix D: Recruitment Email**

Dear students,

You have been invited to participate in an anonymous survey as part of a study on risky sexual behavior among college students. The purpose of this study is to examine how risky sexual behavior among the University of Arkansas population is effected by the consumption of alcohol and perception of peer behavior. The population of interest for this study includes students between the ages of 18 and 24 who are currently attending the University of Arkansas.

Your time and participation would be much appreciated. A link at the bottom of this email will direct you to the online survey, please copy and paste the link into an internet browser. Completion of the survey should not require more than 30 minutes of your time. Your participation in this study is anonymous and completely voluntary. You may discontinue participation at any point in time while completing the survey.

If you have any questions, please email the Principal Researcher, Tayler Pollock, at [tep002@uark.edu](mailto:tep002@uark.edu).

Thank you for your time.

[http://uark.qualtrics.com/SE/?SID=SV\\_bHjisVWcd2UgK2N](http://uark.qualtrics.com/SE/?SID=SV_bHjisVWcd2UgK2N)

**Appendix E: Survey**

1. What is your gender?
  1. Female
  2. Male
  3. Transgender
  4. Other: \_\_\_\_\_
  5. Prefer not to answer
2. How old are you?
  1. (insert age here)
3. What class are you in?
  1. Freshman
  2. Sophomore
  3. Junior
  4. Senior
  5. Graduate
4. What is your race/ethnicity?
  1. White
  2. Hispanic or Latino
  3. Black or African American
  4. Native American or American Indian
  5. Asian/Pacific Islander
  6. Other
5. How old were you when you had your first alcoholic drink?
  1. Before the age of 12
  2. 12-14
  3. 15-17
  4. 18-20
  5. 21 or older
6. How old were you when consuming alcohol became a regular behavior for yourself?
  1. Before the age of 12
  2. 12-14

3. 15-17
4. 18-20
5. 21 or older

**Please answer the following questions, adapted from the Daily Drinking Questionnaire (Collins, Parks, & Marlatt, 1985) according to your typical drinking habits during a typical week:**

- One standard alcoholic drink is equal to:
  - One 12 oz. can, bottle, or glass of standard beer
  - One 4 oz. glass of wine or one 10 oz. wine cooler bottle
  - One 1-1/2 oz. hard liquor (one standard shot)
  
- 7. On average, how many standard alcoholic drinks did you consume on each day of the week?
  - a. Monday
    1. None
    2. 1-2 drinks
    3. 3-4 drinks
    4. 5-6 drinks
    5. 7-8 drinks
    6. More than 8 drinks
  - b. Tuesday
    1. None
    2. 1-2 drinks
    3. 3-4 drinks
    4. 5-6 drinks
    5. 7-8 drinks
    6. More than 8 drinks
  - c. Wednesday
    1. None

2. 1-2 drinks
3. 3-4 drinks
4. 5-6 drinks
5. 7-8 drinks
6. More than 8 drinks

d. Thursday

1. None
2. 1-2 drinks
3. 3-4 drinks
4. 5-6 drinks
5. 7-8 drinks
6. More than 8 drinks

e. Friday

1. None
2. 1-2 drinks
3. 3-4 drinks
4. 5-6 drinks
5. 7-8 drinks
6. More than 8 drinks

f. Saturday

1. None
2. 1-2 drinks
3. 3-4 drinks
4. 5-6 drinks
5. 7-8 drinks
6. More than 8 drinks

g. Sunday

1. None
2. 1-2 drinks
3. 3-4 drinks
4. 5-6 drinks

5. 7-8 drinks
  6. More than 8 drinks
8. On average, how many hours did you spend drinking on each day of the week?
- a. Monday
    1. None
    2. 1-2 hours
    3. 3-4 hours
    4. 5-6 hours
    5. 7-8 hours
    6. More than 8 hours
  - b. Tuesday
    1. None
    2. 1-2 hours
    3. 3-4 hours
    4. 5-6 hours
    5. 7-8 hours
    6. More than 8 hours
  - c. Wednesday
    1. None
    2. 1-2 hours
    3. 3-4 hours
    4. 5-6 hours
    5. 7-8 hours
    6. More than 8 hours
  - d. Thursday
    1. None
    2. 1-2 hours
    3. 3-4 hours
    4. 5-6 hours
    5. 7-8 hours

6. More than 8 hours

e. Friday

1. None

2. 1-2 hours

3. 3-4 hours

4. 5-6 hours

5. 7-8 hours

6. More than 8 hours

f. Saturday

1. None

2. 1-2 hours

3. 3-4 hours

4. 5-6 hours

5. 7-8 hours

6. More than 8 hours

g. Sunday

1. None

2. 1-2 hours

3. 3-4 hours

4. 5-6 hours

5. 7-8 hours

6. More than 8 hours

9. On average, how many days did you consume alcohol during the last month?

1. None

2. 1-3 days

3. 4-6 days

4. 7-9 days

5. 10-12 days

6. More than 12 days



10. On a typical weekend night during the last month, how many drinks did you consume that night?

1. None
2. 1-2 drinks
3. 3-4 drinks
4. 5-6 drinks
5. 7-8 drinks
6. More than 8 drinks

**Please answer the following questions, adapted from the Sexual Activities and Attitudes Questionnaire (Noll, Trickett, & Putnam, 2003) based on your personal behavior:**

11. In the past year, how many times have you had sexual intercourse?

1. None
2. 1 time
3. 2-3 times
4. 4-7 times
5. 8-10 times
6. More than 10 times

12. In the past year, how many sexual partners have you had?

1. None
2. 1 partner
3. 2-3 partners
4. 4-7 partners
5. 8-10 partners
6. More than 10 partners

13. In the past year, how often did you use condoms or an alternative type of birth control (birth control pills, timing menstruation, “pull out” method, vaginal ring, etc.) when having sexual intercourse?

6. Never
  7. Rarely
  8. Sometimes
  9. Often
  10. Always
14. In the past year, how often have you had sexual intercourse without asking your partner about their past sexual history (number of partners, STD history, frequency of unprotected sex, etc.)?
1. Never
  2. Rarely
  3. Sometimes
  4. Often
  5. Always
15. In the past year, how often have you had sexual intercourse while intoxicated?
1. Never
  2. Rarely
  3. Sometimes
  4. Often
  5. Always
16. If you were to have sexual intercourse with someone in the next year, how likely is it that you would use a condom or an alternative form of birth control (birth control pills, timing menstruation, “pull out” method, vaginal ring, etc.)?
1. Extremely unlikely
  2. Unlikely
  3. Neutral
  4. Likely
  5. Extremely likely
17. If you were to have sexual intercourse with someone in the next year, how likely is it that you would first ask your sexual partner about their past sexual history (number of partners, STD history, frequency of unprotected sex, etc.)?
1. Extremely unlikely

2. Unlikely
  3. Neutral
  4. Likely
  5. Extremely likely
18. If you were to have sexual intercourse with someone in the next year, how likely is it that you would be intoxicated during the sexual event?
1. Extremely unlikely
  2. Unlikely
  3. Neutral
  4. Likely
  5. Extremely likely
19. How confident are you that your method(s) of birth control over the last year is/are reliable to effectively prevent pregnancy?
1. Not confident at all
  2. Not very confident
  3. Neutral
  4. Confident
  5. Completely confident
20. How confident are you that your method(s) of birth control over the last year is/are reliable to prevent the spread of sexually transmitted diseases?
1. Not confident at all
  2. Not very confident
  3. Neutral
  4. Confident
  5. Completely confident

**The following section of questions is designed to measure how you perceive certain behaviors among your peers. In the context of this study, the term “peer” is meant to represent the average student at the University of Arkansas. Please answer the questions based on your impression of your peers’ behaviors.**

**Please answer the following questions based on your impression of the behavior of a typical student at the University of Arkansas:**

22. Based on your perception of your peers, how often does a typical student have sexual intercourse?
1. Never
  2. 1 time a year
  3. 2-3 times a year
  4. 4-7 times a year
  5. 8-10 times a year
  6. More than 10 times a year
23. Based on your perception of your peers, how many sexual partners has a typical student had in the last year?
7. None
  8. 1 partner
  9. 2-3 partners
  10. 4-7 partners
  11. 8-10 partners
  12. More than 10 partners
24. Based on your perception of your peers, how often does a typical student use a condom or an alternative type of birth control method (birth control pill, “pulling out” method, contraceptive ring, etc.) when having sexual intercourse?
1. Never
  2. Rarely
  3. Sometimes
  4. Often
  5. Always

25. Based on your perception of your peers, how often has a typical student had sexual intercourse without asking their partner about their past sexual history (number of partners, STD history, frequency of unprotected sex, etc.)?
1. Never
  2. Rarely
  3. Sometimes
  4. Often
  5. Always
26. Based on your perception of your peers, how often has a typical student had sexual intercourse while intoxicated?
1. Never
  2. Rarely
  3. Sometimes
  4. Often
  5. Always
27. Based on your perception of your peers, if a typical student were to have sexual intercourse with someone in the next year, how likely is it that he or she would use a condom or an alternative type of birth control method (birth control pills, timing menstruation, “pull out” method, vaginal ring, etc.)?
1. Extremely unlikely
  2. Unlikely
  3. Neutral
  4. Likely
  5. Extremely likely
28. Based on your perception of your peers, if a typical student were to have sexual intercourse with someone in the next year, how likely is it that he or she would first ask their sexual partner about their past sexual history (number of partners, STD history, frequency of unprotected sex, etc.)?
1. Extremely unlikely
  2. Unlikely

3. Neutral
  4. Likely
  5. Extremely likely
29. Based on your perception of your peers, if a typical student were to have sexual intercourse with someone in the next year, how likely is it that he or she would be intoxicated during the sexual event?
1. Extremely unlikely
  2. Unlikely
  3. Neutral
  4. Likely
  5. Extremely likely