

2-15-2017

# A social norms study at Rowan University: alcohol and higher education

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**A SOCIAL NORMS STUDY AT ROWAN UNIVERSITY:  
ALCOHOL AND HIGHER EDUCATION**

by

Kristen N. Jassin

A Thesis

Submitted to the  
Department of Educational Services and Leadership  
College of Education  
In partial fulfillment of the requirements  
For the degree of  
Master of Arts in Higher Education  
Rowan University  
January 27, 2017

Thesis Chair: Burton R. Sisco, Ed.D.

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## **Dedication**

I would like to dedicate this thesis to my late father, Alan B. Jassin.

## Acknowledgments

I am grateful for the amazing support system that has stood by me for many years.

Jeff Gecker: You are the best thing to ever come into my life. You gave me the courage I needed to tackle this thesis and you believed in me when I didn't believe in myself. I love your beard and your sneakers and most importantly, I love you for exactly who you are every single second of the day.

Carol Jassin: Thank you for encouraging me to pursue my dreams and go to grad school. I could thank you a billion times and would never be enough for everything you have done for me. I love you, Mom.

Dr. Jennifer DeFini: I am forever appreciative of our friendship, your unconditional support, and wise advice through over 20 years of friendship.

Kristin Dickie Ciszski: Thank you for making me laugh, allowing me to vent, and always listening. I owe you a lifetime of latkes and a hat.

Dr. Susan Carroll Berck: Your guidance has helped me heal and grow and become a better version of myself.

Jan Friedman-Krupnick: Your dedication to the students of Rider University inspires me every day to become a better student affairs professional. Thank you for helping me discover this amazing profession and I still want your job.

Dr. MaryBeth Walpole: Thank you for the knowledge you have shared, the poignant discussions you facilitated in class, and your support.

Dr. Burton Sisco: Thank you for guiding me through this journey and all the wisdom you have imparted. I tremendously appreciate the time you have spent with me to finish this thesis and I will cherish the "Aha!" moments.

## **Abstract**

Kristen N. Jassin  
A SOCIAL NORMS STUDY AT ROWAN UNIVERSITY:  
ALCOHOL AND HIGHER EDUCATION  
2016-2017  
Master of Arts in Higher Education

Alcohol is a prominent issue on college campuses that has been studied in order to understand what contributes to alcohol consumption in the college setting. One of the theories that seeks to understand college alcohol consumption is social norms theory. It is the belief held by students that their peers consume more alcohol and more often than the actual reality. Students then feel pressure to consume greater quantities of alcohol more often because the social norm is an inaccurate portrayal of alcohol consumption.

In 2006, the CORE Institute completed a social norms survey of Rowan University students to assess their alcohol consumption and the perceived alcohol consumption of their friends at Rowan University and other peer groups at the college. The survey was adapted in 2013 and sent via email to a random sample of Rowan University undergraduates. There were 296 students that responded and the findings of the Rowan 2013 survey were similar in many ways to the results of the 2006 CORE survey results. However, the Rowan 2013 survey demonstrates a significant increase in binge drinking and slight uptake in the number of drinks consumed. The study also concluded that Rowan University students consume the most alcohol at off campus parties. Further social norms studies need to be completed on a regular basis and with a more significant response rate in order to understand the drinking culture at Rowan University.

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## **Chapter I**

### **Introduction**

Alcohol consumption is a multifaceted issue on college campuses. Alcohol consumption affects a student's education, mental health, and physical well-being. There are a number of factors that have been hypothesized to correlate a number of variables to increased alcohol consumption. One of these factors is social norms theory. Social norms theory when applied to alcohol consumption in college students is the belief held by students that their peers consume more alcohol and more often than the actual reality. Students then feel pressure to consume greater quantities of alcohol more often because the social norm is an inaccurate portrayal of alcohol consumption.

During the 2012-2013 academic year, Rowan University had numerous measures in place to deemphasize alcohol in the campus culture according to the 2012-2013 Student Handbook. Alcohol was not permitted in any of the residence halls, even if the resident is over 21 years of age. In apartment settings, students were only permitted to consume alcohol if all residents of the apartment are 21 years of age. Rowan University also prohibited kegs, open containers in public, and public intoxication during the time of this study and also prohibited drinking games such as beer pong and flip cup that encourage mass consumption of alcohol.

Rowan University also prohibited students that are under the age of 21 from being in the presence of alcohol, even if the student is abstaining from drinking. Students under the age of 21 that were found in the presence of alcohol or consuming alcohol are judicially sanctioned. According to the 2012-2013 Rowan University Student Handbook, the sanction for a first offense of underage drinking or being in the presence of alcohol

underage is a \$150 fine, parental notification, an alcohol awareness workshop, and 6 months of disciplinary probation where the student is not considered in good standing with the university.

However, despite all these policies, 95% of judicial cases at Rowan University involve alcohol, according to Rowan University's Associate Dean of Civic Involvement Joseph Mulligan (Personal interview, 2012, September 17). Rowan University students hold dual membership as part of the Rowan University community and Glassboro community. Due to this dual membership, Rowan University also judicially sanctions students that are cited for breaking the law in the Glassboro community. The most common citations are for public intoxication, underage alcohol consumption, or noise violations for off-campus students holding parties in their rented homes or apartments in the Glassboro community. Rowan University is provided this information from the Glassboro Police Department.

Rowan University has worked in partnership with the town of Glassboro to develop positive town-gown relations. According to Foley (2016), "town referring to the physical locale, which includes all local community members, and gown, referring to the academic regalia worn at universities, representing the higher education institution students and associated employees," (p. 1). The relationship between a university and the surrounding community is symbiotic and the actions of administrators and students at Rowan University can affect the Glassboro community and vice-versa.

Rowan University has not done a campus wide survey of students regarding their alcohol consumption since the CORE 2006 survey. A replication of the CORE survey of alcohol consumption is needed to understand the more current climate of alcohol

consumption at Rowan University. The university has a responsibility to its stakeholders, especially its students, to have an accurate understanding of alcohol consumption.

### **Statement of the Problem**

Rowan University conducted its last social norms survey in 2006. The CORE Institute was commissioned to survey Rowan University students and their CORE 2006 survey received 219 responses. The CORE Campus Survey of Alcohol and Other Drug Norms was then used to implement a social norms campaign at the college. An updated survey is needed since it has been more than 6 years since the previous survey.

### **Purpose of the Study**

The primary purpose of this study was to assess the state of alcohol consumption of Rowan University students during the Spring 2013 semester. A secondary purpose was to compare the results of the survey to the CORE 2006 survey results. The results can assist the university in implementing an updated social norms campaign and implementing other methods and programs to educate the Rowan University community about alcohol consumption.

### **Significance of the Study**

This study analyzes alcohol consumption from the perspective of selected Rowan University undergraduate students during the Spring 2013 semester. The findings of the study may be useful for student affairs professionals to determine how to launch an updated social norms campaign to educate the Rowan University community about alcohol consumption.

## **Assumptions and Limitations**

This study was limited to the student population at Rowan University in Glassboro, NJ during the Spring 2013 semester. Only those that submitted the survey participated. It is assumed that subjects were truthful.

It is also possible despite the necessary disclosures provided to potential subjects regarding the anonymity of the data, that some students may have believed their responses would be reported to the Glassboro police or some other form of authority at Rowan University and they could be in trouble for alcohol consumption.

Another limitation of the study is that the survey was distributed using an online format; such formats frequently result in lower response rates and subjects choosing to stop answering items while the survey is progressing. There is always the possibility that some students did not take the survey seriously, felt threatened, or had limited time to devote to the survey.

An additional limitation is that the survey was distributed only to a student's Rowan University issued email addresses. As happens to many individuals in the 21<sup>st</sup> century, especially in the United States, there are a plethora of emails received daily and by only sending the email to a student's university-issued email address, it lowers the attention and priority one may dedicate towards the email.

It is also assumed the survey instrument was both valid and reliable. It was patterned after the CORE Institute's *Campus Survey of Alcohol and Other Drug Norms*. The CORE Institute is comprised of five researchers that work at the Southern Illinois University Carbondale Student Health Center. The purpose of CORE is to improve the campus climate by assisting student affairs professionals and other college administrators

in programming efforts. According to the CORE Institute website, their database on college alcohol and illicit drug use is the largest in the United States.

### **Operational Definitions**

1. Actual: The authentic response reported by respondents at a college or university.
2. Binge Drinking: The consumption of 5 or more drinks in a row on a single occasion.
3. Freshman: Undergraduate student with 0-23.99 credit hours at the beginning of the spring 2013 semester at Rowan University.
4. Junior: Undergraduate student with 58-89.99 credit hours at the beginning of the spring 2013 semester at Rowan University.
5. Perceived: The assumed beliefs and behaviors of peers in a college or university setting.
6. Senior: Undergraduate student with 90 or more credit hours at the beginning of the spring 2013 semester at Rowan University.
7. Social Norms: The belief held by students that their peers are consuming more alcohol and more often than the reality, which encourages greater consumption of alcohol more often and in greater quantities.
8. Social Norms Campaign: The process of informing college students of the results of a survey of their peers regarding alcohol consumption.
9. Sophomore: Undergraduate student with 24-57.99 credit hours at the beginning of the spring 2013 semester at Rowan University.
10. Student: Undergraduate matriculated student at Rowan University who attends either part-time or full-time during the Spring 2013 semester.

## **Research Questions**

This study sought to address the following research questions:

1. What is the median frequency of alcohol consumption by Rowan University students and how does that compare to the CORE 2006 survey results?
2. What is the actual and perceived percentage of Rowan University students that abstain from alcohol consumption and how does that compare to the CORE 2006 survey results?
3. What is the actual and perceived percentage of Rowan University students that engaged in binge drinking and how does that compare to the CORE 2006 survey results?
4. What do selected Rowan University students report about alcohol consumption and how to the results compare to the CORE 2006 survey results?
5. What do selected Rowan University students report about their social drinking behaviors and how do the results compare to the CORE 2006 survey results?
6. What do selected Rowan University students estimate their typical consumption of alcoholic drinks in various social environments and how do the results compare to the CORE 2006 survey results?
7. What are the actual and perceived attitudes of selected Rowan University students towards alcohol beverages and how do the results compare to the CORE 2006 survey results.
8. What are the actual and perceived attitudes of selected Rowan University students towards Rowan University rules and regulations and how do the results compare to the CORE 2006 survey results?



## **Overview of the Study**

Chapter II is a scholarly literature review about alcohol and its effect on higher education through an in depth assessment of its history, campaigns to combat drinking, effects on students, and the impact of social norms.

Chapter III looks at the methodology of the study and the procedures used to collect data. It examines the context of the study, the population and sample, the instrumentation used to collect data, the procedures used to collect data, and how the data were analyzed.

Chapter IV explains the outcomes of the research study by answering the research questions listed in Chapter I. Statistical analysis and data tables present the findings of the study.

Chapter V provides a summary, conclusions and recommendations of the study. The findings of the study are discussed in the context of the knowledge base. Future proposals include suggestions for practice and further research.

## **Chapter II**

### **Literature Review**

#### **Introduction**

Alcohol consumption on college campuses has been a long-term problem. Campus culture and alcohol consumption are often intertwined and the effects of imbibing either underage or in excessive quantity often impact many facets of campus life. One study has even connected increased alcohol consumption by students that are living on campus and in suite style residence halls (Cross, Zimmerman, O'Grady, 2009).

According to Bouchard (2010), the purpose of the alcohol policies at American universities is to “enforce federal laws” (p. 6) and keep college students safe. Depending on the university, these policies are different because of decisions made by administrators. Some institutions forbid students who are under 21 years of old from even being in the presence of alcohol, whether the beverage is open or closed. Other institutions follow a different route. Students under 21 are permitted to be around alcohol but require those students to prove their sobriety by taking a breathalyzer test. Binge drinking is a problem associated with college students. Most college alcohol policies also attempt to thwart binge by banning kegs or other alcohol devices that encourage excessive consumption.

There is a two-pronged problem that colleges face: underage consumption of alcohol and excessive consumption of alcohol. Sometimes these two problems intersect. This literature review examines the complex problem of alcohol consumption and higher education.

## **Historical Perspective**

Drinking on college campuses has been a longstanding problem. According to Kelley, Fukushima, Spivak, and Payne (2009), it is ingrained as a “rite of passage” and is integral in students feeling that they have had the “college experience” (p. 420).

According to the 2007 report *The Surgeon General’s Call to Action to Prevent and Reduce Underage Drinking*, 80% of college students consume alcohol.

Binge drinking definitions are similar but do vary. According to Wechsler et al. (2002), binge or heavy episodic drinking became a problem on college campuses in the 1990s. Over 40% of college students have engaged in binge drinking as cited in Mitchell, Toomey, and Erickson in 2005. Binge drinking has been defined as consuming five or more alcoholic beverages during a single event (Kelley et al., 2009), or consuming four or more alcohol beverages at a time for women and consuming five or more alcoholic beverages at a time for men (Hustad et al., 2001). According to the National Institute on Alcohol Abuse and Alcoholism (NIAAA), binge drinking results in a blood alcohol concentration (BAC) of 0.08g/dL after two hours of consumption. Women usually reach a 0.08g/dL BAC after consumption of four alcoholic beverages in two hours. Men usually reach a 0.08g/dL BAC after consumption of five alcoholic beverages in two hours. According to Atwood (2011), a drink is usually defined as 12 ounces of beer, 5 ounces of wine, or 1.25 ounces of hard liquor, also known as a shot. While the definition of binge drinking is similar, there is no concrete definition in the research.

The Centers for Disease Control and Prevention (CDC) state that only 30% of binge drinking occurs in those under 26 years of age, so the majority of binge drinking is done outside of college. However, binge drinking is highest in the 18- to 20-year-old age

group and 90% of students that imbibe underage are consuming in excessive amounts that constitute binge drinking (CDC, 2012).

To combat binge drinking a number of initiatives have been formed. These initiatives are being implemented by the US Surgeon General, the NIAAA, Mothers Against Drunk Driving (MADD), The Robert Wood Johnson Foundation, and the National Association of State Universities and Land-Grant College to name a few. According to Wechsler et al. (2012), binge drinking had not decreased as of 2001. According to Cross, Zimmerman, and O’Grady (2009), women are more likely to consume alcohol more often and in greater quantities when they reside on floors that house men and women.

Some college campuses have decided to enact a “dry policy” that works to deter drinking and other college campuses have a “wet policy” to encourage responsible drinking (Kelley et al., 2009). “Dry policy” institutions report that 29% of students do not consume alcohol, while 16% of students at “wet policy” schools do not consume alcohol. Some universities offer alcohol free housing or alcohol free events to assist students with an alternative to alcohol consumption. When Resident Assistants are more visible as part of the residential community, it can curb student alcohol consumption. However, according to Toomey, Lenk, and Wagenaar (2007) the data do not demonstrate that students that live in alcohol free housing consume alcohol any less or in lesser quantities.

Universities can also work with the surrounding community to limit the number of businesses that sell alcohol, the amount of alcohol sold, and the hours it is sold (Toomey, Lenk, & Wagenaar, 2007).

*The Higher Educational Reauthorization Act of 1998* states that colleges are not required to notify parents of alcohol violators under 21 years of age; however, many colleges make parental notification a standard practice if a student is caught drinking under age (Palmer, Lohman, Gehring, Carlson, & Garrett, 2001).

### **Effects of Alcohol Consumption**

Students often consume alcohol for “thrill and adventure seeking, experience seeking, disinhibition, and boredom susceptibility” (Glazer, Smith, Atkin, & Hamel, 2010, p. 828). However, alcohol has effects on “health and brain development” (Cross, Zimmerman, & O’Grady, 2009, p. 583).

Alcohol statistics are sobering. The effects of alcohol consumptions are prolific and far-reaching. Per year, some 600,000 college students are injured accidentally after consuming alcohol, 700,000 are the victims of assault by college students that have consumed alcohol, and 100,000 sexually assaults on college students involve consumption of alcohol either by the victim or the perpetrator (Hingson, Heeren, Winter, & Wechsler, 2005).

There have been a number of studies done to comprehend how and why college student drink. Dodd, Glassman, Arthur, Webb, and Miller (2010) found that students enjoy the stories that come out of drunken nights. There is an impression with students that everyone is drinking and alcohol makes everyone more social. For women, there are an abundance of drink specials geared toward their gender that encourages alcohol consumption. Alcohol makes students feel more sociable and comfortable engaging in sexual behavior (Dodd, Glassman, Arthur, Webb, & Miller, 2010).

Freeman (2001) contends that alcohol is a large-scale problem for higher education administrators. Binge drinking and underage consumption can lead to “residence hall vandalism” and “sexual assault” (Freeman, 2001, p. 179). Garey, Prince, and Carey (2011) maintain that those college students that consume alcohol are more prone to negative consequences, especially those with excessive alcohol consumption. Hustad et al. (2010) refers to binge drinking as having a “deleterious impact” on college students. Mitchell, Toomey, and Erickson (2005) and Misch (2010) contend that alcohol consumption also affects those students that do not drink because they are often the victims of crimes such as assault that are perpetrated by inebriated students.

### **Analysis of Alcohol Policies**

Higher education has historically dealt with alcohol policy violations with judicial sanctions including alcohol education, suspension of guest and/or social privileges, monetary fines, and parental notification.

According to Hustad et al. (2010), citing students does not do enough to reduce collegiate alcohol consumption. Hustad et al. recommend that colleges enact appropriate alcohol interventions to educate students as an alternative to citation only punishment. In 2001, Wechsler et al. found that policies that were most supported by college students were a clear alcohol policy, social events on campus without alcohol, and alcohol free on-campus housing. Ten years later, Garey et al. (2011) also found that students wanted a clear alcohol policy, social events on campus without alcohol, and alcohol free on-campus housing.

At Rollins College, violators of the alcohol policy were required to attend a program with a graduate student counselor. This program was not beneficial because it

was a set format of repetitive and already known material that did not incur a behavioral change in the student (Freeman, 2001). Rollins College created a new model to address binge drinking. The 90-minute workshop not only concentrated on the student's "lifelong goals, personal values, and ambitions" but also built a bridge between the participant and the workshop leader (Freeman, 2001, p. 180). Graduate students in counseling still lead the program. The success of this program is based on allowing students to take personal responsibility for their actions and the facilitator purveying an empathetic attitude and personal experiences (Freeman, 2001). In addition, students are guided in a development of their personal values and long- and short-term goals. The program has a 9% recidivism rate (Freeman, 2001). The strengths of the program include that it is "nonconfrontational" and that it is separate from the judicial process and therefore provides an atmosphere of trust with the student population (Freeman, 2001). This program is most successful with first-time violators of whose violations are of a mild or moderate nature.

Colleges with successful programs provide a "win-win" scenario, according to Freeman. Garey et al. (2011) states that alcohol policies that provide students with a sense of autonomy are more likely to be supported by students.

According to Mitchell et al. (2010), the problem with higher education alcohol policies is that they are not full spectrum implementations. For example, collegiate web sites are lacking in presenting a full explanation of the institution's alcohol policies. Mitchell et al. (2005) feel that permitting a bar on campus and alcohol marketing at these bars detracts from the implementation of a comprehensive alcohol policy.

## **Campaigns to Combat Alcohol**

Students often perceive that the amount and frequency of alcohol consumption of their peers is much more than the reality. Numerous studies have demonstrated that students often overestimate how much and how often other students at their university drink alcohol. They often perceive specific student groups as consuming greater amounts of alcohol more often and underestimate their own alcohol consumption. When one recounts the story of their last social drinking occasion, they will exaggerate the details, such as number of drinks consumed, in order to make a more dramatic story. Students then feel they must emulate their peer groups and consume increased amounts of alcohol on more frequent occasions (Toomey, Lenk, & Wagenaar, 2007).

One of the benefits of social norms is that it can also be used to demonstrate that there are students that support the University's alcohol policy (Buettner, Bartle-Harin, Andrews, & Khurana, 2010). In this way, students are presented with the actual data through "campaign materials" that change misperceptions (Glazer et al., 2010, p. 825). Students often perceive others' drinking in excess as being the norm. This is due to students often seeing other students drinking in reaction to an event whether negative or "celebratory." Glazer et al. (2010) refer to a "pluralistic ignorance" that students have when they perceive that their behaviors are not normal (p. 827).

Vinci et al. (2010) concur that social norms "influence individual's behavior" because they are "directly influenced by their perceptions of peer thoughts and actions" (p. 29). In a study by Vinci et al. in 2010, a social norms campaign increased student knowledge of a Campus Alcohol Coalition from 25% to 75%. A benefit of social norms campaigns on college campuses is the domino effect of students that live in residence



halls to pass along the information to their peers. The most effective way to disseminate social norms campaigns is through “posters, educational brochures, and incentive promotional products” (Vinci et al., 2010, p. 36).

If students are exposed to the fact that the university alcohol policy is respected and fair, student would be more inclined to be aware of the policy and follow it.

It has been proposed that one limitation of social norms is that in certain style residence halls, the campaign can have a “paradoxical effect” (Cross, Zimmerman, & O’Grady, 2009, p. 600).

Deterrence Theory states that “humans are profit maximizes” and will compare the potential risk associated with a specific behavior. When applied to alcohol consumption in higher education, it is the idea that students will avoid consumption of alcohol if the punishment is seen as severe (Kelley et al., 2009).

In 2009, Kelley et al. found that deterrence theory does not work even for those students that have knowledge of the alcohol policy. However, students are deterred because a violation can negatively affect others’ perception of themselves. Monetary fines or suspension from the university do not deter students.

Campaigns that encourage responsible drinking instead of remaining sober are also better received by students instead of campaigns that only stress sobriety (Dodd, Glassman, Arthur, Webb, & Miller, 2010).

### **Summary of the CORE Study at Rowan University**

In Spring of 2006, the CORE Institute was contracted to complete a social norms study of alcohol and other drugs at Rowan University. There were 219 surveys sent back to the CORE Institute.

The study showed that the median frequency use of alcohol was once a week but that the perceived typical use of friends and the Rowan student community was 3 times a week. Students reported that they believed 16.89% of the Rowan student community does not consume alcohol; however, only 10.96% of the respondents abstained from using alcohol. There were 51.39% of students that reported consuming five or more drinks in a row in the two weeks prior to completing the survey. Respondents reported that 59.56% of the Rowan student community engaged in binge drinking in the previous two weeks. Students reported consuming an average of 4.56 alcoholic drinks at bars and parties and reported their friends consumed 6.08 alcoholic drinks at bars and parties and the Rowan student community consumed 5.85 alcoholic drinks at bars and parties.

Males reported consuming 5.73 alcoholic drinks at bars and parties but respondents reported that they believed males consumed 7.87 alcohol drinks at bars and parties. Females reported consuming 3.69 alcoholic drinks at bars and parties but respondents reported they believed females consumed 5.21 drinks at bars and parties.

Respondents reported drinking 5.2 drinks on their last social drinking occasion and perceived others as consuming 6.36 drinks on that occasion. There were 10.44% of respondents that reported that they would have preferred to drink more and 13.74% reported that they would have preferred to drink less on their last social drinking occasion. Respondents reported that 23.63% of others on that last social drinking occasion would have preferred to drink more and that 15.38% of others on that last social drinking occasion would have preferred to drink less.

## **Summary of the Literature Review**

Alcohol consumption is an extremely important issue on college and university campuses. There have been numerous studies regarding underage alcohol consumption and binge drinking. There should be a realization that the existing literature is not sufficient enough to tackle the issue of irresponsible alcohol consumption.

The CORE study in 2006 at Rowan University demonstrates that further research must be done in regards to alcohol consumption at Rowan University.

The literature demonstrates that colleges must reduce the consumption of underage alcohol use, reduce amount of alcohol consumed by students that are of legal drinking age, address the problems that stem from alcohol consumption, and provide an environment on campus that highlights a positive alcohol-free campus experience (Toomey, Lenk, & Wagenaar, 2006). Thus, a replication study is warranted to better understand the attitude and behavioral norms of Rowan University undergraduate students associated with alcohol consumption and binge drinking.

## **Chapter III**

### **Methodology**

#### **Context of the Study**

According to Rowan University Fast Facts, Rowan University's main campus is located in Glassboro, NJ in Southern New Jersey located off of exit 2 on the New Jersey Turnpike and 20 minutes southeast of Philadelphia. Rowan University also has a campus located in Camden, NJ, which is also home to Cooper Medical School of Rowan University. As of Spring 2013, Rowan University had 97 student clubs and organizations in addition to 24 Greek Letter organizations.

In Spring 2013, Rowan University had 10,750 undergraduate students and 1,383 graduate students. There were over 4,000 students living on campus. According to the Rowan University Student Handbook 2012-2013, students were required to live on campus until completion of 58 credit hours unless they commuted from a parent's or legal guardians' residence that was within 40 miles of the university. There were 5 residence halls dedicated to freshmen, 1 residence hall for freshmen and upperclassmen students, 2 residence halls for upperclassmen students and 5 apartment complexes dedicated to upperclassmen students. As upperclassmen are comprised of sophomores, juniors, and seniors, many apartments house students that are over 21 years of age and under 21 years of age. Freshmen that also require a medical accommodation such as a kitchen or air conditioning are also housing with upperclassmen, as the freshmen residence halls cannot accommodate these students.

According to Bouchard (2010), the Landmark Americana is a local restaurant and bar in Glassboro, NJ that is within walking distance for residential students. The

Landmark Americana often offers alcohol-based promotions that encourage excessive drinking such as cheaply priced drink or 2 for 1 drink specials during specified hours of operation.

### **Population and Sample**

The total number of undergraduate matriculated students at Rowan University for Spring 2013 was 10,058. In order to obtain a confidence level of 95% with a confidence interval of 3%, a total of 965 students were randomly selected. An email survey was sent to these students via their Rowan University email asking for their participation in this study. Vovici, an online survey collection tool, was used to collect the data.

### **Instrumentation**

Through numerous discussions with Associate Dean of Civic Involvement on the Glassboro campus regarding the research needed to assess the status of alcohol consumption at Rowan University, he was able to provide a copy of the 2006 CORE Institute *Campus Survey of Alcohol and Other Norms* distributed at Rowan University. Permission was sought and granted by Laura A. Rowald, Ph.D., a researcher at the CORE Institute, to use and modify questions from the *Campus Survey of Alcohol and Other Drug Norms* for this Master's thesis and to prepare derivative works based upon the copyrighted work, and to display the copyrighted work in this Master's thesis (Appendix C). Questions regarding illicit drug use were discarded so that the participants were only surveyed to assess use and beliefs regarding alcohol.

The survey (Appendix A) began with an introductory paragraph that the purpose of the study was to collect information regarding alcohol attitude and usage at Rowan University. Potential respondents were notified that the survey would not take more than

15 minutes and the data from the study were confidential. Participation was completely voluntary.

The first question on the survey asked students how often they consume alcohol and the next set of questions asked how often they believe their friends, the Rowan student community, male Rowan students, female Rowan students, on campus Rowan students, off campus Rowan students, Rowan fraternity members, Rowan sorority members, and Rowan athletes consume alcohol. The next questions asked what percentage of Rowan students consume no alcoholic beverages at all, what percentage of Rowan students consumed five or more drinks in a row on a least one occasion in the past two weeks, and how many times over the past two weeks the respondent consumed 5 or more drinks in a row. The next set of questions asked about how much alcohol the respondent consumes at bar and parties. It also asked the respondent how much alcohol their friends, the Rowan student community, male Rowan students, female Rowan students, on campus Rowan students, off campus Rowan students, Rowan fraternity members, Rowan sorority members, and Rowan athletes consume at bars and parties. The next set of questions asked respondents to think about their last social drinking occasion with other Rowan students. The first question in the set asks the respondent how many drinks they consumed on that occasion, the next question asks the respondent how many drinks did other students consume, the next question asks the respondent if they would have preferred to drink more drinks, the same amount, or less drinks, and the final question asks the respondent if they think other Rowan students would have preferred to drink more drinks, the same amount, or less drinks. The next set of questions asks respondents how many drinks are typically consumed by them and other Rowan

students in various locations: the bar, Athletic events, Fraternity social functions, Sorority social functions, off campus parties, and on campus parties. The next set of questions asks respondents about their attitudes and opinions and other Rowan students attitudes and opinions regarding alcohol consumption and the rules and regulations about alcohol at Rowan University.

There were nine questions used to gather demographic data at the end of the survey. It asked respondents about their class year, age, ethnicity, living arrangements, gender, full/part-time student status, extracurricular activities, and grade point average (GPA). Due to the perceived nature of personal information gathering or placement at the end of the survey, nearly 25% of the respondents did not answer the questions regarding demographic information.

This tool was determined to be valid and reliable because of its similarity to the CORE Institute survey. To determine face validity, several higher education professional associates were asked to review the survey. These associates confirmed the survey was formatted correctly, readable, and the content reflective of the knowledge-base on alcohol attitudes and behavior on college campuses.

### **Data Collection**

In January 2013, in preparation to submit an Institutional Review Board Application, the Collaborative Institutional Training Initiative course was satisfactorily completed with a grade of 100%. The Institutional Review Board Application was completed and approved to conduct the research study (Appendix B).

Permission was granted from Rowan University's Office of Institutional Effectiveness Research and Planning to assist in distributing the survey to Rowan

University students via their Rowan University student email. A staff member in the office provided assistance to upload the survey in Vovici and helped generate a random sample and send informational emails to the sample. Data were collected through several e-mail requests. Potential participants were assured that confidentiality would be upheld when completing the survey. There were three reminders sent to the random sample over the course of April and May 2013. The staff member provided the responses through a SPSS document.

### **Data Analysis**

The Statistical Package for the Social Science (SPSS) was used to compile and analyze the data. Statistical analysis was done using percentages, means, medians, and frequencies. The independent variables in this study included the respondent's class year, age, ethnic origin, living arrangements, gender, extracurricular participation, grade point average, and if they were a full or part-time student at Rowan University. The dependent variables were the attitudes regarding alcohol consumption of others and the amount of alcohol they consumed. Data comparing the CORE 2006 and Rowan 2013 data are presented in tables with narrative explanation in Chapter IV.



## Chapter IV

### Findings

#### Profile of the Sample

The subjects of the sample were undergraduates who were matriculated at Rowan University during the Spring 2013 semester. Of the 965 surveys that were emailed, 296 surveys were submitted, yielding a return rate of 30.7%. As depicted in Table 4.1, of those that responded to the question regarding gender, 99 were male (43.8%) and 126 (55.8%) were female. Of those that responded to the question regarding student status, 215 (95.1%) were full-time students and 10 (4.4%) were part-time. Of those that responded to the question regarding class status, 21 (9.3%) were freshmen, 38 (16.8%) were sophomores, 69 (30.5%) were juniors, and 98 (43.4%) were seniors. Of those that responded to the question regarding age, 13 (5.8%) were 18 years old, 31 (13.9%) were 19 years old, 34 (15.2%) were 20 years old, 58 (26%) were 21 years old, 33 (14.8%) were 22 years old, 17 (7.6%) were 23 years old, 8 (3.6%) were 24 years old, and 29 (13.1%) were 25 years old or older. Of the 226 students that responded to the question about ethnicity, 169 (74.8%) were White, 23 (10.2%) were Black, 19 (8.4%) were Hispanic, 6 (2.7%) were Multiracial, 5 (2.2%) were Asian/Pacific Islander, and 3 (1.3%) were American Indian/Alaskan Native. Of the 226 students that responded to the question about their living arrangements, 109 (48.2%) lived in an off campus house, 50 (22.1%) lived in an on campus apartment, 40 (17.7%) lived in an on campus residence, 27 (11.9%) lived in an off campus apartment. Of the 226 students that responded, 215 (95.1%) were full-time students and 10 (4.4%) were part-time students. Thirty-three (14.6%) of the 226 respondents were athletes, 11 (4.9%) were fraternity members, and 9

(4%) were sorority members. Of the 226 students that responded, 111 (49.1%) had a GPA of A- through A+, 101 (44.6%) had a GPA of B- through B+, 12 (5.2%) had a GPA of C- through C+, and 1 (0.4%) had a D GPA.

One of the challenges of the collection of the data is that questions collecting demographic information were listed at the end of the survey. None of the questions on the survey were required. There were approximately 70-73 students that opted out of answering each demographic question which raises measurement problems noted in Chapter V under recommendations for further research.

Table 4.1

*Demographics of Respondents*

Variable	Category	<i>f</i>	%
Age ( <i>n</i> =223, <i>Missing</i> =73)	18	13	5.8
	19	31	13.9
	20	34	15.2
	21	58	26
	22	33	14.8
	23	17	7.6
	24	8	3.6
	25 & older	29	13.1
Gender ( <i>n</i> =225, <i>Missing</i> =71)	Female	126	56
	Male	99	44
Class Year ( <i>n</i> =226, <i>Missing</i> =70)	Freshman	21	9.3
	Sophomore	38	16.8
	Junior	69	30.5
	Senior	98	43.4

Table 4.1(continued)

Variable	Category	<i>f</i>	%
Ethnicity ( <i>n</i> =225, <i>Missing</i> =71)	White	169	74.8
	Black	23	10.2
	Hispanic	19	8.4
	Multiracial	6	2.7
	Asian/Pacific Islander	5	2.2
	American Indian/ Alaskan Native	3	1.3
	Living Arrangements ( <i>n</i> =226, <i>Missing</i> =70)	Off campus house	109
On campus apartment		50	22.1
On campus residence		40	17.7
Off campus apartment		27	11.9
Student Status ( <i>n</i> =225, <i>Missing</i> =71)	Full-time	215	95.6
	Part-time	10	4.4
Extracurricular activities ( <i>n</i> =226, <i>Missing</i> =70)	Not applicable	173	76.5
	Athlete	33	14.6
	Fraternity member	11	4.9
	Sorority member	9	4
Approximate GPA ( <i>n</i> =225, <i>Missing</i> =71)	A+	11	4.9
	A	48	21.3
	A-	52	23.1
	B+	48	21.3
	B	38	16.9
	B-	15	6.7
	C+	10	4.4
	C	1	0.4
	C-	1	0.4
	D	1	0.4

### Analysis of the Data

**Research question 1.** What is the median frequency of alcohol consumption by Rowan University students and how does that compare to the CORE 2006 survey results?

To answer this research question, data were analyzed in a median frequency consistent with CORE data analysis in order to be able to compare the CORE 2006 survey responses to the Rowan 2013 survey responses. The answer choices were never, 1-2 times a year, 6 times a year, once a month, twice a month, once a week, 3 times a week, 5 times a week, and everyday.

Table 4.2 demonstrates that the perceived consumption of alcohol stayed the same for all subgroups except for athletes. The respondents in the Rowan 2013 survey perceived that athletes consumed alcohol more frequently than the respondents in the CORE 2006 survey.

Table 4.2

*Frequency of Perceived Use of Alcohol: Rowan & CORE Data*

Variable	Rowan 2013	CORE 2006
Friends	3 times a week	3 times a week
Rowan Student Community	3 times a week	3 times a week
Males	3 times a week	3 times a week
Females	Once a week	Once a week
On campus students	3 times a week	3 times a week
Off campus students	Once a week	Once a week
Fraternity members	5 times a week	5 times a week
Sorority members	3 times a week	3 times a week
Athletes	3 times a week	Once a week

Table 4.3 demonstrates that the actual frequency of alcohol use has decreased for males, on campus students, off campus students, and sorority members from 2006 to 2013. The actual frequency of alcohol use has not changed from 2006 to 2013 for the

overall population of Rowan students, including the subgroups of females, fraternity members, and athletes.

Table 4.3

*Frequency of Actual Use of Alcohol: Rowan & CORE Data*

Variable	Rowan 2013	CORE 2006
Yourself	Once a week	Once a week
Males	Twice a month	Once a week
Females	Twice a month	Twice a month
On campus students	Twice a month	Once a week
Off campus students	Twice a month	Once a week
Fraternity members	Once a week	Once a week
Sorority members	Twice a month	Once a week
Athletes	Twice a month	Twice a month

**Research question 2.** What is the actual and perceived percentage of Rowan University students that abstain from alcohol consumption and how does that compare to the CORE 2006 survey results?

In Table 4.4, the perceived percentage of Rowan University students that abstain from alcohol increased significantly from 2006 to 2013. However, the actual percentage of Rowan University students that abstain from alcohol increased insignificantly from 2006 to 2013.

Table 4.4

*Frequency of Campus Abstainers: Rowan & CORE Data*

Variable	Rowan 2013	CORE 2006
Perceived Abstainers	28.25%	16.89%
Actual Abstainer	11.2%	10.96%

**Research question 3.** What is the actual and perceived percentage of Rowan University students that engaged in binge drinking and how does that compare to the CORE 2006 survey results?

As previously discussed, binge drinking is when one consumes five or more alcoholic beverages during a single social occasion (Kelley et al., 2009), or consuming four or more alcoholic beverages at one social occasion for women and consuming five or more alcoholic beverages at a social occasion for men (Hustad et al., 2001). For the purposes of this analysis, binge drinking is defined as consuming 5 or more drinks at a single social outing. Respondents were asked how many days over the previous two weeks they consumed 5 or more drinks.

Table 4.5 demonstrates that the perception of binge drinkers decreased slightly from 2006 to 2013. This table also demonstrates that actual binge drinking increased significantly from 2006 to 2013 on the Rowan campus.

In comparison to the 2013 CORE national survey results, 42.8% of college students nationally stated that they engaged in binge drinking in the two weeks preceding the survey.

Table 4.5

*Frequency of Campus Binge Drinkers: Rowan & CORE Data*

Variable	Rowan 2013	CORE 2006
Perceived Binge Drinkers	56.2%	59.56%
Actual Binge Drinkers	73.6%	51.39%

**Research question 4.** What do selected Rowan University students report about alcohol consumption and how to the results compare to the CORE 2006 survey results?

To answer this research question, data were analyzed to determine averages consistent with CORE data analysis in order to be able to compare the 2006 survey responses to the 2013 survey responses. Table 4.6 demonstrates the alcohol consumption of the Rowan University community as a whole and for all subgroups increased from 2006 to 2013 except for fraternity members.

Table 4.6

*Actual Average Quantity of Alcohol Consumption*

Variable	Rowan 2013	CORE 2006
Yourself	5.34 drinks	4.56 drinks
Males	6.26 drinks	5.73 drinks
Females	4.57 drinks	3.69 drinks
On campus students	5.3 drinks	4.51 drinks
Off campus students	5.59 drinks	4.59 drinks
Fraternity members	6.27 drinks	6.9 drinks
Sorority members	6.11 drinks	4.47 drinks
Athletes	5.55 drinks	5 drinks

**Research question 5.** What do selected Rowan University students report about their social drinking behaviors and how do the results compare to the CORE 2006 survey results?

To answer this research question, data were analyzed to determine averages and percentages consistent with CORE data analysis in order to be able to compare the 2006 survey responses to the 2013 survey responses. Respondents were asked to refer to their last social drinking occasion with other Rowan University students.

Table 4.7 demonstrates that the average of amount of drinks perceived to be consumed by other students only slightly increased from 2006 to 2013. The actual number of drinks consumed by students from 2006 to 2013 only slightly decreased.

Table 4.7

*Consumption of Alcohol During Last Social Drinking Occasion*

Variable	Rowan 2013	CORE 2006
Perception of Other Students	6.79 drinks	6.36 drinks
Actual by Self	5.05 drinks	5.2 drinks

Respondents were asked if they thought other Rowan University students during their social drinking occasion together would have preferred to consume more or less alcohol. Table 4.8 demonstrates that there was an increase from 2006 to 2013 in the perceived percentage of others that would have preferred to consume less alcohol on their last social drinking occasion and the perceived percentage of others that would have preferred to consume more alcohol increased slightly.



Table 4.8

*Perceived Desired Alcohol Consumption During Last Social Drinking Occasion*

Variable	Rowan 2013	CORE 2006
Preferred to Drink Less	18.3%	15.38%
Preferred to Drink More	25.3%	23.63%

Respondents were asked if they would have preferred to consume more or less alcohol during their last social drinking occasion with other Rowan University students.

Table 4.9 demonstrates that there was an increase from 2006 to 2013 in the percentage of Rowan University students that would have preferred to consume less alcohol on their last social drinking occasion with other Rowan University students. The percentage of Rowan University students that would have preferred to consume more alcohol on their last social drinking occasion with other Rowan University students increased slightly from 2006 to 2013.

Table 4.9

*Actual Desired Alcohol Consumption During Last Social Drinking Occasion*

Variable	Rowan 2013	CORE 2006
Preferred to Drink Less	18.7%	13.74%
Preferred to Drink More	11.2%	10.44%

**Research question 6.** What do selected Rowan University students estimate their typical consumption of alcoholic drinks in various social environments and how do the results compare to the CORE 2006 survey results?

To answer this research question, data were analyzed to determine averages consistent with CORE data analysis in order to be able to compare the 2006 survey responses to the 2013 survey responses.

Respondents were asked about how much alcohol they think other Rowan University students consume at bars, athletic events, fraternity social functions, sorority social functions, and off campus parties. Table 4.10 demonstrates the perceived average number of alcohol drinks consumed by social location increased from 2006 to 2013.

Table 4.10

*Perceived Consumption of Alcohol by Location*

Variable	Rowan 2013	CORE 2006
Bars	6.7 drinks	5.65 drinks
Athletic Events	4.86 drinks	4.19 drinks
Fraternity Social Functions	7.93 drinks	7.04 drinks
Sorority Social Functions	7.15 drinks	6.38 drinks
Off Campus Parties	8.20 drinks	7.44 drinks

Respondents were asked about how much alcohol they consume at bars, athletic events, fraternity social functions, sorority social functions, and off campus parties.

Table 4.11 demonstrates the actual average number of alcohol drinks consumed by social location decreased from 2006 to 2013.

Table 4.11 also demonstrates that off campus parties is where the most alcohol is consumed with 5.58 drinks in 2013 and 5.65 drinks in 2006. The least amount of alcohol consumption occurs at athletic events.

Table 4.11

*Actual Consumption of Alcohol by Location*

Variable	Rowan 2013	CORE 2006
Bars	3.95 drinks	4.42 drinks
Athletic Events	2.36 drinks	2.37 drinks
Fraternity Social Functions	3.38 drinks	4.66 drinks
Sorority Social Functions	2.41 drinks	4.45 drinks
Off Campus Parties	5.58 drinks	5.65 drinks

**Research question 7.** What are the actual and perceived attitudes of selected Rowan University students towards alcohol beverages and how do the results compare to the CORE 2006 survey results.

To answer this research question, data were analyzed in a median frequency consistent with CORE data analysis in order to be able to compare the 2006 survey responses to the 2013 survey responses. Respondents were asked about what they thought other Rowan University students believed about alcohol consumption and their own attitudes about alcohol consumption. The answer choices were drinking is never a good thing to do, drinking is all right but a person should not get drunk, occasionally getting drunk is okay as long as it doesn't interfere with academics or other responsibilities, occasionally getting drunk is okay even if it does interfere with

academics or responsibilities, and frequently getting drunk is okay if that's what the individual wants to do.

Table 4.12

*Attitudes Regarding Alcohol Consumption*

Variable	Rowan 2013	CORE 2006
Perception of Other Students	Occasionally getting drunk is okay as long as it doesn't interfere with academics or other responsibilities	Occasionally getting drunk is okay as long as it doesn't interfere with academics or other responsibilities
Actual by Self	Occasionally getting drunk is okay as long as it doesn't interfere with academics or other responsibilities	Occasionally getting drunk is okay as long as it doesn't interfere with academics or other responsibilities

There was no change in the perceived or actual attitudes regarding alcohol consumption from 2006 to 2013. "Occasionally getting drunk is okay as long as it doesn't interfere with academics or other responsibilities" was the perceived and actual attitude of Rowan University students for both surveys.

**Research question 8.** What are the actual and perceived attitudes of selected Rowan University students towards Rowan University rules and regulations and how do the results compare to the CORE 2006 survey results?

To answer this research question, data were analyzed in percentages consistent with CORE data analysis in order to be able to compare the 2006 survey responses to the 2013 survey responses.

Respondents were asked about Rowan University alcohol rules and regulations and the perceived percentage of Rowan University students that generally know of and support these rules and regulations, generally know of and oppose these rules, generally know of these rules but have no opinion, and aren't really aware of these rules.

Table 4.13

*Perceived Attitudes Regarding Campus Rules and Regulations*

Variable	Rowan 2013	CORE 2006
Generally know of and support these rules and regulations.	26.22%	26.3%
Generally know of and oppose these rules	39.51%	38.33%

In the Table 4.13, the perceived percentage of Rowan University students that generally know of and support these rules and regulations was almost the same in 2006 and 2013. The perceived percentage of Rowan University students that generally know of and oppose these rules was almost the same in 2006 and 2013.

Respondents were asked their attitudes regarding Rowan University alcohol rules and regulations. The answer choices were I generally know of and support these rules and regulations, I generally know of and oppose these rules, I generally know of these rules but have no opinion, and I am not really aware of these rules.

Table 4.14

*Actual Attitudes Regarding Campus Rules and Regulations*

Variable	Rowan 2013	CORE 2006
Generally know of and support these rules and regulations.	35.7%	40.74%
Generally know of and oppose these rules	13.7%	14.81%

Table 4.14 demonstrates that from 2006 to 2013, the percentage of Rowan University students that generally know of and support these rules and regulations and generally know of and oppose these rules decreased.

## **Chapter V**

### **Summary, Discussion, Conclusions, and Recommendations**

#### **Summary of the Study**

In 2006, the CORE Institute completed a study of social norms at Rowan University in Glassboro, NJ focusing on alcohol consumption. The study demonstrated social norms theory that students overestimate the alcohol consumption of their peers and therefore feel pressured to increase their own personal consumption of alcohol.

The goal of this study was to assess the state of alcohol consumption of Rowan University students during the Spring 2013 semester and also to compare the results of the survey to the CORE 2006 survey results. The outcomes of the Rowan 2013 survey can guide the college in enacting updated social norms campaigns and educating the Rowan University community about alcohol consumption.

This study investigates alcohol consumption through the viewpoint of selected Rowan University undergraduate students enrolled during the Spring 2013 semester. The assumption is that since participation was voluntary, respondents answered truthfully. However, despite the required disclosures, some student may have perceived their answers would be relayed to those in authority at Rowan University

One challenge of this study is that the data were collected via an email request sent from the Office of Institutional Effectiveness. This type of data collection often results in lower response rates and respondents electing to not answer all questions on the survey or to stop answering the survey. The survey was only sent to students' Rowan University email address and due to the deluge of emails they receive, the request to complete the survey may have easily been disregarded.

The survey instrument is assumed to be valid and reliable because it was designed to mimic the CORE Institute's Campus Survey of Alcohol and Other Drug Norms. The CORE Institute employs five researchers that are based out of the Southern Illinois University Carbondale Student Health Center. CORE gathers data on alcohol and drug use at college campuses across the United States. Their goal is to assist student affairs professionals and other college administrators in understanding their campus climates and enact programming efforts in regards to alcohol and drug consumption. According to the CORE Institute, their database on college alcohol and illicit drug use is the largest in the United States.

### **Discussion of the Findings**

In 2006, a social norms study entitled "Survey of Students' Perceptions of Campus Alcohol and Other Drugs" was conducted at Rowan University by the CORE Institute. The survey received 219 responses compared with 296 responses from the 2013 study discussed in this thesis. In the CORE 2006 study, 42.59% of respondents were male and 57.41% were female. The Rowan 2013 study had a similar gender response rate of 44% male and 56% female. In the CORE 2006 survey, 11.57% of respondents were freshmen, 10.65% were sophomores, 39.81% were juniors, and 35.65% were seniors versus the Rowan 2013 survey which was comprised of 9.3% freshmen, 16.8% sophomores, 30.5% juniors, and 43.4% seniors. The average age of the respondents in the CORE 2006 survey was 21.74 and 36.15% were under the age of 21. In the Rowan 2013 survey, the average age was 22.59 and 34.15% were under 21 years of age.



In the CORE 2006 survey, 87.91% of respondents were white, 2.79% were black, 2.79% were Hispanic, 2.33% were Asian, 0.47% were American Indian, and 3.72% identified as other. In the Rowan 2013 survey, 75.1% of respondents were white, 10.2% were black, 8.4% were Hispanic, 1.3% were Asian, 1.3% were American Indian, and 2.7% identified as other.

In the CORE 2006 survey, 60.19% lived off campus and 39.1% lived on campus. The response rate was similar for the Rowan 2013 survey and 60.1% lived off campus and 39.8% lived on campus. In the CORE 2006 survey, 6.85% of respondents were fraternity members, 10.05% of respondents were sorority members, and 7.76% of respondents were Rowan athletes. In the Rowan 2013 survey, 3.7% of respondents were members of a fraternity, 3% were members of a sorority, and 11.1% were Rowan athletes. In the CORE 2006 survey, 93.02% of respondents were full-time students and 6.98% of respondents were part-time students. In the Rowan 2013 survey, 95.6% of respondents were full-time students and 4.4% were part-time students.

**Research question 1.** What is the median frequency of alcohol consumption by Rowan University students and how does that compare to the CORE 2006 survey results?

The median perception of alcohol consumption for males in the CORE 2006 survey was three times a week, however, the actual median alcohol consumption by males was once a week. The median perception of alcohol consumption for males in the Rowan 2013 survey was three times a week, however, the actual median alcohol consumption by males was two times per month. The median perception of alcohol consumption for females in the CORE 2006 survey was once a week, however, the actual median alcohol consumption for females was two times per month. The median

perception of alcohol consumption for females in the Rowan 2013 survey was also once a week and the actual consumption of alcohol by females was also two times per month.

The median perception of alcohol consumption for on campus students in the CORE 2006 survey was three times a week, however, the actual median alcohol consumption for on campus students was once a week. The median perception of alcohol consumption for on campus students in the Rowan 2013 students was also three times a week and the actual consumption by on campus students was two times per month. The median perception of alcohol consumption for off campus students in the CORE 2006 survey was once a week and the actual median alcohol consumption for off campus student was the same. In the Rowan 2013 survey, the median perception of alcohol consumption for off campus students was once a week and the actual median alcohol consumption was two times a month.

The median perception of alcohol consumption for fraternity members in the CORE 2006 survey was five times a week, however, the actual median alcohol consumption was once a week. In the Rowan 2013 survey, the same findings were reported. The median perception of alcohol consumption for sorority members in the CORE 2006 survey was three times a week, however, the actual median alcohol consumption was once a week. In the Rowan 2013 survey, the median perception of alcohol consumption for sorority members was also three times a week but the actual median alcohol consumption was twice per month.

In the CORE 2006 survey, the median perception of alcohol consumption for Rowan athletes was once a week and the actual median alcohol consumption was twice per month. The Rowan 2013 survey demonstrated that the perceived median

consumption was three times a week and the actual medial alcohol consumption was the same as the CORE 2006 actual median consumption of twice a month.

**Research question 2.** What is the actual and perceived percentage of Rowan University students that abstain from alcohol consumption and how does that compare to the CORE 2006 survey results?

In the CORE 2006 survey, respondents reported that they believe 16.89% of Rowan students abstain from alcohol consumption. The Rowan 2013 survey demonstrated that respondents believe 28.25% of Rowan students abstain from alcohol. The 2006 survey demonstrated that 10.96% of Rowan student abstain from alcohol consumption, which is similar to the Rowan 2013 survey results of 11.2% of respondents abstaining from alcohol.

**Research question 3.** What is the actual and perceived percentage of Rowan University students that engaged in binge drinking and how does that compare to the CORE 2006 survey results?

The CORE 2006 survey showed that 51.39% of respondents engaged in binge drinking in the two weeks preceding the survey. The Rowan 2013 survey showed that 73.6% of respondents engaged in binge drinking in the two week preceding the survey. In the CORE 2006 survey, 59.56% of respondents believed that other Rowan students engaged in binge drinking in the two weeks preceding the survey and 56.20% of respondents reported believing the same in the Rowan 2013 survey.

**Research question 4.** What do selected Rowan University students report about alcohol consumption and how to the results compare to the CORE 2006 survey results?

When asked about the quantity of alcohol consumed, CORE 2006 survey respondents stated that they typically consume 4.56 drinks at bars and parties compared with Rowan 2013 survey respondents that stated they typically consume 5.34 drinks at bars and parties. The CORE 2006 survey respondents reported a number of drinks just under the threshold for binge drinking and the Rowan 2013 survey respondents reported just over the definition of binge drinking. In the CORE 2006 survey, respondents perceived their friends consuming 6.08 drinks at bars and parties and other students in the Rowan community consuming 5.85 drinks at bars and parties. The Rowan 2013 survey demonstrated that respondents perceived their friends consuming 6.66 drinks at bars and parties and other students in the Rowan community consuming 7.06 drinks at bars and parties.

When asked about the quantity of alcohol consumed, CORE 2006 survey respondents stated they believed males consumed an average of 7.87 drinks at bars and parties. Males in the CORE 2006 survey reported they consumed an average of 5.73 drinks at bars and parties. When asked about the quantity of alcohol consumed, CORE 2006 survey respondents stated they believed females consumed an average of 5.21 drinks at bars and parties. Females in the CORE 2006 survey reported they consumed an average of 3.69 drinks at bars and parties. When asked about the quantity of alcohol consumed, CORE 2006 survey respondents stated they believed on campus students consumed an average of 6.31 drinks at bars and parties. On campus students in the CORE 2006 survey reported they consumed an average of 4.51 drinks at bars and parties. When asked about the quantity of alcohol consumed, CORE 2006 survey respondents stated they believed off campus students consumed 5.87 drinks at bars and parties. Off

campus students in the CORE 2006 survey reported they consumed an average of 4.59 drinks at bars and parties. When asked about the quantity of alcohol consumed, CORE 2006 survey respondents stated they believed fraternity members consumed an average of 9.38 drinks at bars and parties. Fraternity members in the CORE 2006 survey reported they consumed an average of 6.9 drinks at bars and parties. When asked about the quantity of alcohol consumed, CORE 2006 survey respondents stated they believed sorority members consumed an average of 7.3 drinks at bars and parties. Sorority members in the CORE 2006 survey reported they consumed an average of 4.47 drinks at bars and parties. When asked about the quantity of alcohol consume, CORE 2006 survey respondents stated they believed Rowan athletes consumed an average of 6.12 drinks at bars and parties. Athletes in the CORE 2006 survey reported they consumed an average of 5 drinks at bars and parties.

When asked about the quantity of alcohol consumed, Rowan 2013 survey respondents stated they believed males consumed an average of 8.43 drinks at bars and parties. Males in the Rowan 2013 survey reported they consumed an average of 6.26 drinks at bars and parties. When asked about the quantity of alcohol consumed, Rowan 2013 survey respondents stated they believed females consumed an average of 6.59 drinks at bars and parties. Females in the Rowan 2013 survey reported they consumed an average of 4.57 drinks at bars and parties. When asked about the quantity of alcohol consumed, Rowan 2013 survey respondents stated they believed on campus students consumed an average of 7.29 drinks at bars and parties. On campus students in the Rowan 2013 survey reported they consumed an average of 5.3 drinks at bars and parties. When asked about the quantity of alcohol consumed, Rowan 2013 survey respondents

stated they believed off campus students consumed 6.62 drinks at bars and parties. Off campus students in the Rowan 2013 survey reported they consumed an average of 5.585 drinks at bars and parties. When asked about the quantity of alcohol consumed, Rowan 2013 survey respondents stated they believed fraternity members consumed an average of 9.57 drinks at bars and parties. Fraternity members in the Rowan 2013 survey reported they consumed an average of 6.27 drinks at bars and parties. When asked about the quantity of alcohol consumed, Rowan 2013 survey respondents stated they believed sorority members consumed an average of 8.4 drinks at bars and parties. Sorority members in the Rowan 2013 survey reported they consumed an average of 6.11 drinks at bars and parties. When asked about the quantity of alcohol consumed, Rowan 2013 survey respondents stated they believed Rowan athletes consumed an average of 6.98 drinks at bars and parties. Athletes in the Rowan 2013 survey reported they consumed an average of 5.55 drinks at bars and parties.

**Research question 5.** What do selected Rowan University students report about their social drinking behaviors and how do the results compare to the CORE 2006 survey results?

In the CORE 2006 survey, respondents reported consuming 5.2 drinks on their last social drinking occasion compared with 5.05 drinks reported by respondents in the Rowan 2013 survey. In CORE 2006, 10.44% would have preferred to drink more on their last social drinking occasion compared with 11.2% reported by respondents in the Rowan 2013 survey. In CORE 2006, 13.74% would have preferred to drink less on their last social drinking occasion compared with 18.7% reported by respondents in the 2013 survey. When asked about the perceived consumption of alcohol by other students,

CORE 2006 respondents believed others consumed an average of 6.36 drinks during the same social drinking occasion and Rowan 2013 respondents believed others consumed an average of 6.79 drinks during the same social drinking occasion. The respondents in the CORE 2006 survey believed that 23.63% of others during that same social drinking occasion would have preferred to drink more and 15.38% would have preferred to drink less during the same social occasion. The respondents in the Rowan 2013 survey believed that 25.3% of others during that same social drinking occasion would have preferred to drink more and 25.3% would have preferred to drink less during the same social occasion.

**Research question 6.** What do selected Rowan University students estimate their typical consumption of alcoholic drinks in various social environments and how do the results compare to the CORE 2006 survey results?

Respondents were asked about how much alcohol they consume at various social events and locations and how much they perceive others to drink at the same social events and locations. In the CORE 2006 survey, respondents reported they perceived others consuming an average of 5.65 drinks at bars when the actual consumption was an average of 4.42 drinks. In the Rowan 2013 survey, respondents reported they perceived others consuming an average of 6.7 drinks at bars when the actual consumption was an average of 3.95 drinks. In the CORE 2006 survey, respondents reported they perceived others consuming an average of 4.19 drinks at athletic events when the actual consumption was an average of 2.37 drinks. In the Rowan 2013 survey, respondents reported they perceived others consuming an average of 4.86 drinks at athletic events when the actual consumption was an average of 2.36 drinks. In the CORE 2006 survey,

respondents reported they perceived others consuming an average of 7.04 drinks at fraternity social functions when the actual consumption was an average of 4.66 drinks. In the Rowan 2013 survey, respondents reported they perceived others consuming an average of 7.93 drinks at fraternity social functions when the actual consumption was an average of 3.38 drinks. In the CORE 2006 survey, respondents reported they perceived other students consuming an average of 6.38 drinks at sorority social functions when the actual consumption was an average of 4.45 drinks. In the Rowan 2013 survey, respondents reported they perceived other students consuming an average of 7.15 drinks at sorority social functions when the actual consumption was an average of 2.41 drinks. In the CORE 2006 survey, respondents reported they perceived other students consuming an average of 7.44 drinks at off campus parties when the actual consumption was an average of 5.65 drinks. In the Rowan 2013 survey, respondents reported they perceived other students consuming an average of 8.2 drinks at off campus parties when the actual consumption was an average of 5.58 drinks.

**Research question 7.** What are the actual and perceived attitudes of selected Rowan University students towards alcohol beverages and how do the results compare to the CORE?

Respondents were asked about their attitudes toward alcohol consumption and what other students at Rowan University believed regarding alcohol consumption. The five statements were: drinking is never a good thing to do, drinking is all right but a person should not get drunk, occasionally getting drunk is okay as long as it doesn't interfere with academics or other responsibilities, occasionally getting drunk is okay even if it does interfere with academics or responsibilities, and frequently getting drunk is okay



if that's what the individual wants to do. For the CORE 2006 and Rowan 2013 surveys, the median attitude held by respondents was occasionally getting drunk is okay as long as it doesn't interfere with academics or other responsibilities. The median perceived attitude of other Rowan students on both the 2006 and 2013 surveys was also occasionally getting drunk is okay as long as it doesn't interfere with academics or other responsibilities.

**Research question 8.** What are the actual and perceived attitudes of selected Rowan University students towards Rowan University rules and regulations and how do the results compare to the CORE 2006 survey results?

Respondents were asked about their attitudes toward the Rowan University campus rules and regulations. In the CORE 2006 survey, 40.74% of respondents reported they generally know and support the campus' rules and regulations compared with 35.7% of respondents in the 2013 survey. In the CORE 2006 survey, 14.81% of respondents reported they generally know of and oppose these rules compared with 13.7% in Rowan 2013 survey. Respondents in the CORE 2006 survey believed that 26.3% of other Rowan students generally know and support the campus' rules and regulations compared with 26.22% of respondents in the Rowan 2013 survey. Respondents in the CORE 2006 survey believed that 38.33% of other Rowan students generally know of and oppose these rules compared with 39.51% of respondents in the Rowan 2013 survey.

## **Conclusions**

The original CORE survey was correct in terms of trends and social norms theory and its use appears to be validated. Social norms theory is a valid theory in helping to understand the link between the attitudes of students and behavior.

The Rowan 2013 study demonstrated that the perception of frequency of alcohol consumption stayed the same but that some subgroups the frequency of alcohol consumption either stayed the same or increased. When asked to estimate the perceived amount of alcohol consumed, Rowan University students consistently overestimated the actual consumption of their peers. The perception of Rowan University students that abstained from alcohol consumption increased significantly but the actual number of Rowan University students that abstained from alcohol consumption only slightly increased.

The most significant finding of the Rowan 2013 study is that the percentage of Rowan University students that engage in binge drinking increased over 22%, even though the perception of Rowan University binge drinkers actually decreased slightly. The average amount of alcohol consumed slightly increased for all subgroups except fraternity members; however, fraternity members only comprised 4.9% of the respondents and this may not be an accurate portrayal of alcohol consumption.

The Rowan 2013 study showed an increase in the perceived percentage of students that would have preferred to consume more or less alcohol; however, the actual percentage of students that would have preferred to drink more only increased slightly and the preferred percentage of students that would have preferred to drink less increased over 5%.

The Rowan 2013 study also confirmed the findings of the CORE 2006 study when it comes to the location where the most amount of alcohol consumed. The perceived number of drinks was higher than the actual number of drinks consumed and there was an increase in the perceived consumption of drinks by location. However, the number of drinks consumed by location slightly decreased. Off campus parties was the only location where students consumed over 5 drinks and therefore the only location where binge drinking occurred in the Rowan 2013 and CORE 2006 studies.

When the findings of the study are analyzed, there is an overall trend in unsafe consumption of alcohol at Rowan University. While Rowan University students are not consuming alcohol every day and the number of drinks they report consuming by location has slightly decreased, they are engaging in unsafe drinking practices on the occasions when they do consume alcohol. Almost three-quarters of the Rowan University student population has engaged in binge drinking. The percentage of Rowan University students that engage in binge drinking is significantly higher than the percentage of college students that engage in binge drinking nationally when compared to the CORE 2013 aggregate national survey results from colleges across the United States.

The perceived and actual attitudes regarding alcohol were very similar as well as the attitudes regarding campus rules and regulations. The findings have not changed much from the findings of the CORE 2006 study to the findings of the Rowan 2013 study. Students believe it is acceptable to occasionally get drunk and they are correct in their perception that their fellow students have the same belief. They are engaging in binge drinking at off campus parties and because of the significant number of students that live off campus, off campus parties are common. There was a decrease in the

percentage of students that know of and support campus rules and regulations and there was also a decrease in the percentage of students that generally know of and oppose campus rules and regulations. This demonstrates an increase in students reporting that they know of campus rules and regulations but have no opinion or are not really aware of these rules. Apathy and lack of knowledge towards campus policies combined with the prevalent belief that occasionally getting drunk is acceptable has led to a toxic drinking culture at Rowan University.

Rowan University has done well to hold students accountable for their dual community membership. Rowan University has numerous departments, including Community Standards, Healthy Campus Initiatives, Student Activities, and Residential Learning and University Housing, that work to provide a safe, healthy culture where students can thrive. However, the data demonstrate that more proactive and creative measures need to be enacted in order to take the focus off of excessive alcohol consumption.

### **Recommendations for Practice**

Based upon the findings and conclusions of this study, the following recommendations for practice are presented:

1. Rowan University should initiate a social norms campaign to reduce consumption of alcohol using the data from the Rowan 2013 study.
2. Rowan University's Residential Learning & University Housing is recommended to train their staff including Residential Learning Coordinators and Resident Directors to understand the drinking culture at Rowan University.

3. Healthy Campus Initiatives is recommended to have programming to educate the Rowan University student population on healthy drinking behaviors.
4. Rowan University is encouraged to work with restaurants and other establishments in the Glassboro area that primarily sell alcohol to Rowan University students to enact policies that encourage responsible alcohol consumption.
5. Rowan University's Office of Community Standards and Commuter Services should work to educate students on the campus policies and why they benefit the campus community. There should also be an effort to curb off campus parties or encourage responsible hosting of these events, such as registering social events and encouraging hosts to provide enough non-alcoholic beverages.
6. There should be an exploration of how other colleges deal with their campus drinking culture in order to establish new policies at Rowan University to positively change the attitudes of students when it comes to alcohol.

### **Recommendations for Further Research**

Based upon the findings and conclusions of this study, the following recommendations for further research are presented:

1. Social norms studies should be completed by the university more regularly in an effort to understand the drinking culture of Rowan University as the college continues rapid enrollment. In order to obtain more robust data response rates, an instrument should be presented with demographic data first.

2. Comparison studies using this instrument should be completed at all public higher education institutions in the state of New Jersey.
3. There should be tactics utilized to receive a stronger response rate from social norms studies, including partnering with Greek life, athletics, and residence life, in order to have students understand the value in responding accurately to social norms research requests.

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## Appendix A

### Survey Instrument

I agree to participate in a study entitled *Alcohol and Higher Education: A Social Norms Study at Rowan University*, which is being conducted by Kristen Jassin, to fulfill the thesis requirements for the Master of Arts degree of Higher Education Administration. The purpose of the study to survey of students' alcohol attitudes and usage at Rowan University. My participation in this study is completely voluntary and my cooperation and participation is important to the success of a graduate student thesis and is greatly appreciated.

I understand that I will be required to complete a brief survey that should not exceed 15 minutes. The data collected will be confidential and no personally identifiable information is being requested. The data from this study may be used to educate the Rowan University community. I understand my name is not being associated with any data collected and my responses will not be associated with my name.

I understand there are no physical or psychological risks involved in this study. I am free to not continue with completing the survey at any time. I understand my participation does not affect my status as a student at Rowan University. I understand there are no correct responses and my honesty is requested in responding to the survey questions.

If I have any questions or concerns, I may contact Kristen Jassin at [jassin93@students.rowan.edu](mailto:jassin93@students.rowan.edu) or 856-256-4269 or the chair of this thesis, Dr. Burton Sisco at [sisco@rowan.edu](mailto:sisco@rowan.edu) or 856-256-4500 x.3717.

**How often do you think students in of the following categories typically consume alcohol (including beer, wine, wine coolers, liquor, and mixed drinks)? Just give your best estimate for each category.**

	Never	1-2 times per year	6 times per year	Once per month	Twice per month	Once per week	3 times per week	5 times per week	Every day
<b>Yourself</b>									
<b>Your friends</b>									
<b>Rowan student community</b>									
<b>Male Rowan students</b>									
<b>Female Rowan students</b>									
<b>On campus Rowan students</b>									

Off campus Rowan students															
Rowan Fraternity members															
Rowan Sorority members															
Rowan athletes															

The next set of questions asks about the quantity of alcohol consumed.

**Overall, what percentage of Rowan University students do you think consume no alcoholic beverage at all? Just give your best estimate.**

**Overall, what percentage of Rowan University students do you think consumed five or more drinks in a row on at least one in occasion in the last two weeks?**

Scale from 0-100%

**Over the last two weeks, how many times have you had 5 or more drinks in a row?**

Scale from 0-14

**How many alcoholic drinks, on average, do you think each of the following students typically consume at parties and bars? A drink is defined as a bottle of beer, a glass of wine, a wine cooler, a shot glass of liquor, or a mixed drink**

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15+
Yourself																
Your friends																
Rowan student community																
Male Rowan students																
Female Rowan students																
On campus Rowan students																
Off campus Rowan students																
Rowan Fraternity members																
Rowan Sorority members																
Rowan athletes																

**Think about your last social drinking occasional with other Rowan students.**

How many drinks did you consume on that occasion?

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15+
---	---	---	---	---	---	---	---	---	---	----	----	----	----	----	-----

How many drinks did other Rowan students consume on that occasion?

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15+
---	---	---	---	---	---	---	---	---	---	----	----	----	----	----	-----

Looking back, how many drink would you have preferred to drink?

More	The same	Less
------	----------	------

Looking back, how many drink do you think the other Rowan students would have preferred to drink?

More	The same	Less
------	----------	------

**On any given occasion, how many alcoholic drinks are most typically consumed by you and by other Rowan students in each of the following places? Just give your best estimate.**

	Never Attend	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15+
You at the bar																	
Rowan students at the bar																	
You at Athletic events																	
Rowan students at Athletic events																	
You at Fraternity social functions																	
Rowan students at Fraternity social functions																	
You at Sorority social functions																	
Rowan students Sorority social functions																	
You at off campus parties																	
Rowan students at off campus parties																	
You at on campus parties																	
Rowan students at on campus parties																	

**Which statement below about drinking alcoholic beverages do you feel best represents your own attitude?**

- a. Drinking is never a good thing to do.
- b. Drinking is all right but a person should not get drunk.
- c. Occasionally getting drunk is okay as long as it doesn't interfere with academics or other responsibilities
- d. Occasionally getting drunk is okay even if it does interfere with academics or responsibilities
- e. Frequently getting drunk is okay if that's what the individual wants to do

**Which statement below about drinking alcoholic beverages do you feel best represents the most common attitude among Rowan University students in general?**

- a. Drinking is never a good thing to do.
- b. Drinking is all right but a person should not get drunk.
- c. Occasionally getting drunk is okay as long as it doesn't interfere with academics or other responsibilities
- d. Occasionally getting drunk is okay even if it does interfere with academics or responsibilities
- e. Frequently getting drunk is okay if that's what the individual wants to do

*Consider those campus rules and regulations regarding alcohol at Rowan University.*

**What response best represents your position?**

- a. I generally know of and support these rules and regulations.
- b. I generally know of and oppose these rules.
- c. I generally know of these rules but have no opinion.
- d. I am not really aware of these rules.

**What percentage of Rowan University students do you believe:**

- a. generally know of and support these rules and regulations.
- b. generally know of and oppose these rules.
- c. generally know of these rules but have no opinion.
- d. aren't really aware of these rules.

**Class year at the end of the end of the fall 2012 semester.**

Freshman (0-23.99 credits)

Sophomore (24-57.99 credits)

Junior (58-89.99 credits)

Senior (90 credits +)

**Age**

**Ethnicity**

American Indian/Alaskan Native  
Hispanic  
Asian/Pacific Islander  
White (non-Hispanic)  
Black (non-Hispanic)  
Multiracial

**Living Arrangements**

On campus residence hall  
On campus apartment  
Off campus apartment  
Off campus house

**Gender**

Male  
Female

**Student status**

Full-time  
Part-time

**Extracurricular activities**

Fraternity member  
Sorority member  
Athlete

**Approximate cumulative grade point average at the end of the fall 2012 semester.**

A+  
A  
A-  
B+  
B  
B-  
C+  
C  
C-  
D+  
D  
D-  
F



## Appendix B

### IRB Approval Letter



February 27, 2013

Kristen Jassin  
244 Ravenswood Road  
Englishtown, NJ 07726

Dear Kristen Jassin:

In accordance with the University's IRB policies and 45 CFR 46, the Federal Policy for the Protection of Human Subjects, I am pleased to inform you that the Rowan University Institutional Review Board (IRB) has exempted your project, category 4.

IRB application number: 2013-154

Project Title: Alcohol and Higher Education: A Social Norms Study at Rowan University

If you need to make significant modifications to your study, you must notify the IRB immediately. Please reference the above-cited IRB application number in any future communications with our office regarding this research.

If, during your research, you encounter any unanticipated problems involving risks to subjects, you must report this immediately to Dr. Harriet Hartman ([hartman@rowan.edu](mailto:hartman@rowan.edu) or call 856-256-4500, ext. 3787) or contact Dr. Shreekanth Mandayam, Associate Provost for Research ([shreek@rowan.edu](mailto:shreek@rowan.edu) or call 856-256-5150).

If you have any administrative questions, please contact Karen Heiser ([heiser@rowan.edu](mailto:heiser@rowan.edu) or 856-256-5150).

Sincerely,

A handwritten signature in cursive script that reads "Harriet Hartman".

Harriet Hartman, Ph.D.  
Chair, Rowan University IRB

c: Burton Sisco, Educational Services, Administration, Higher Education, James Hall

Office of Research  
Bole Hall  
201 Mullica Hill Road  
Glassboro, NJ 08028-1701

856-256-5150  
856-256-4425 fax

## Appendix C

### CORE Institute Approval Letter

#### CORE Institute

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*measuring change, delivering results*

March 21, 2013

To Whom It May Concern:

Provided by the laws of the United States (title 17, U.S. Code) to the authors of original works of authorship and the exclusive rights under Section 106 of the 1976 Copyright Act, the Core Institute authorizes **Kristen Jassin of Rowan University** to do the following:

- To *use and modify* questions from the *Campus Survey of Alcohol and Other Drug Norms* to collect data for her Master's thesis.
- To prepare *derivative works* based upon the copyrighted work.
- To display the copyrighted work within her Master's thesis.

Permission applies to the:

- *Campus Survey of Alcohol and Other Drug Norms*

Limitations of the permission are:

- *Permission applies only to scholarly work.*

If you have any questions or need additional information please do not hesitate to call. I can be reached at 618.453.4390.

Sincerely,

Laura A. Rowald, Ph.D.

Researcher III

Core Institute, SIUC

[lrowald@siu.edu](mailto:lrowald@siu.edu)

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