Old Dominion University

ODU Digital Commons

Educational Foundations & Leadership Theses & Dissertations

Educational Foundations & Leadership

Spring 2012

An Examination of Alcohol Expectations and Social Desirability in Fraternity Members on American College Campuses

Pietro A. Sasso Old Dominion University

Follow this and additional works at: https://digitalcommons.odu.edu/efl_etds

Part of the Educational Sociology Commons, Health and Physical Education Commons, and the Higher Education Commons

Recommended Citation

Sasso, Pietro A.. "An Examination of Alcohol Expectations and Social Desirability in Fraternity Members on American College Campuses" (2012). Doctor of Philosophy (PhD), Dissertation, Educational Foundations & Leadership, Old Dominion University, DOI: 10.25777/v72w-en22 https://digitalcommons.odu.edu/efl_etds/163

This Dissertation is brought to you for free and open access by the Educational Foundations & Leadership at ODU Digital Commons. It has been accepted for inclusion in Educational Foundations & Leadership Theses & Dissertations by an authorized administrator of ODU Digital Commons. For more information, please contact digitalcommons@odu.edu.

AN EXAMINATION OF ALCOHOL EXPECTATIONS

AND SOCIAL DESIRABILITY

IN FRATERNITY MEMBERS

ON AMERICAN COLLEGE CAMPUSES

By

Pietro A. Sasso
B.A. May 2006, Christopher Newport University
M.S. May 2008, University of Rochester

A Dissertation Submitted to the Faculty of Old Dominion University in Partial Fulfillment of the Requirements for the Degree of

DOCTOR OF PHILOSOPHY

EDUCATION-HIGHER EDUCATION

OLD DOMINION UNIVERSITY May 2012

Approved By:	
Alan Schwitzer, Ph.D. (Chair)	
Corrin Richels, Ph.D. (Member)	*****
oseph Devitis, Ph.D. (Member)	
Berndt Bohm, Ed.D. (Member)	

ABSTRACT

AN EXAMINATION OF ALCOHOL EXPECTATIONS AND SOCIAL DESIRABILITY IN FRATERNITY MEMBERS ON AMERICAN COLLEGE CAMPUSES

Pietro A. Sasso Old Dominion University, 2012 Chair: Dr. Alan Schwitzer

Males who are members of American college fraternal organizations remain one of the heaviest drinking populations among college students (Wall, 2006). Within fraternities, alcohol use is ceded to social status (Larimer et al., 1997). This culturally ingrained alcohol misuse has confounded interventions and programming to address this phenomenon and response to these attempts have been low or nonexistent by fraternity members. This study investigated alcohol expectations and social desirability among fraternity members. It was hypothesized that as members enter and remain in the fraternity culture, distorted expectations and socially desirable behaviors may occur as demonstrated by differences between pledges and active members. Participants took the Brown et al. (1987) Alcohol Expectancy Questionnaire-Adult version and the Marlowe and Crowne (1964) Social Desirability inventory. Results revealed that pledges engaged in higher levels of socially desirable behaviors and conformed towards exaggerated expectations of alcohol related to overall alcohol use, sexual ability, and socialization. Implications for advisors, health education professionals, college administrators, and counselors are suggested.

DEDICATION

This dissertation is dedicated to the faculty at the many institutions that I have traversed and resided within. This dissertation is dedicated to Drs. Regina Gerstman, Anita Tieman, and Robert Hasbrouck who supported my undergraduate experience. This dissertation is especially dedicated to the faculty at the University of Rochester and Old Dominion University who supported, educated, and mentored me during my tenure as a master's and doctoral student.

Drs. Logan Hazen, Bruce Kimball, and Andrew Wall at the University of Rochester all in multiple capacities challenged me to become a stronger practitioner and emerging scholar. The faculty at Old Dominion University in the higher education graduate program, especially Dr. Joseph DeVitis, were especially responsible for recognizing my potential and assuming responsibility and risk for taking a chance on a much younger, but capable doctoral student.

This dissertation is also dedicated to my fraternity. You invited me into your brotherhood and I have never regretted my membership experience as a national staff member, an alumnus, or as an active member. I would not have been able to understand the complexities of the traditional undergraduate fraternity experience if not for my trials and tribulations as a legacy chapter founder and leader.

AKNOWLEDGEMENTS

Committee

I would like to thank my committee for their support in the completion of this dissertation. I would like to thank foremost, Dr. Schwitzer, for assuming the burden of chair of this dissertation. I also would also like to thank Dr. Bohm for his candor, Dr. Richels for her continued support in the development of the methodology and the analyses procedures, and Dr. DeVitis for his wonderful mentorship. Without their continued cooperation and support, this dissertation would have proved much more difficult and challenging.

Colleagues

This dissertation could not be done with without the support of those who came before me as a part of the Greek movement. Their contributions to the field of fraternity and sorority advising along with the Association of Fraternity/Sorority Advisors have paved the way for me to complete this study. I would like to recognize and provide a special thanks to board of the Center of the Study for the College Fraternity who helped fund this dissertation. Without their generosity, this study would have not remained possible. A special recognition needs to be given to Dr. Charles Eberly, Professor Emeritus at Eastern Illinois University in Counseling and Student Development, for his mentorship in the initial and later stages of the dissertation process. His support was instrumental.

Others

I would to like to recognize the two law enforcement officers who provided me with speeding citations during the many miles I traveled during my data collection while in the field.

I would also like to thank my girlfriend, Megan Kettyle, for the many nights she sacrificed my presence and who now has an informal education regarding the subject-matter of this dissertation. Her support was appreciated and unwavering through the dissertation process.

DISCLOSURE STATEMENT

The researcher authoring this dissertation is a member of a fraternity and joined as an undergraduate. He originally was the victim of extreme hazing and considerable forced drinking in pledging an initial fraternity. He disassociated and later became the primary founder of a chartered chapter of another fraternity.

As an undergraduate he served his chapter as president, community service chair, chaplain, secretary, and recruitment chair. He served on the Interfraternity Council and as the standards chairperson. He additionally interned for the student activities office at his undergraduate alma mater, assisting with fraternity and sorority administration as well as programming.

Professionally, he was also a traveling leadership consultant for a small fraternity and later became the chief administrative officer as its national vice president. In addition, he has served as a consultant to an emerging national sorority and as a faculty/staff advisor to another fraternity chapter. He also has served as a fraternity and sorority advisor to a community at a music conservatory and has also worked in student activities as both a career and academic advisor to freshmen sophomore undergraduate students. Additionally, the researcher is a certified commercial alcohol educator and served as an alcohol educator for a large state-assisted university.

TABLE OF CONTENTS

ABSTRACT	11
DEDICATION	iii
AKNOWLEDGEMENTS	iv
DISCLOSURE STATEMENT	vi
TABLE OF CONTENTS	Vii
LIST OF TABLES	xii
Chapter I	
INTRODUCTION	14
Background	14
Statement of the Problem	19
Purpose of the Study	21
Research Questions	24
Significance	25
Assumptions	26
Conclusion	28
Definition of Terms	29

Chapter II

LITERATURE REVIEW	32
Introduction	32
Historical Context	32
History of Fraternities	32
History of Alcohol Use	39
National Data and Trends	43
Binge Drinking and the College Environment	50
Tertiary Effects	52
Fraternities and Alcohol Use	54
Early Studies	56
Alcohol and Hazing	58
Alcohol and Sexual Assault	60
Alcohol Use Patterns	61
Alcohol & Membership Selection	64
Alcohol Consumption Population Comparisons	65
Alcohol & Cultural Studies	68

	Alcohol in Other Contexts	71
	Interventions and Programs	77
	Social Desirability	83
	Alcohol Expectations	91
	Social Desirability and Alcohol Expectations in Fraternities	96
	Current Study	98
Chapter III		
MET	HODOLOGY	102
	Introduction	102
	Sample	102
	Participants	102
	Exclusionary Criteria	102
	Instrumentation	103
	Sampling Procedures & Data Collection	107
	Sampling Procedure	107
	Data Collection	108
	Research Design & Analysis	110

	Research Question One	110
	Research Question Two	110
	Research Question Three	111
	Conclusion	112
Chapter IV		
RESU	JLTS	113
	Introduction	113
	Sample	115
	Participants	116
	Research Questions	116
	Research Question One	116
	Research Question Two	116
	Research Question Three	119
	Relation of Variables Predicted	119
	Relation of Variables Not Predicted	120
	Conclusion	121

Chapter V

DISCUSSION AND CONCLUSION	124
Introduction	124
Summary of the Study	124
Major Findings	126
Implications	128
Implications for Fraternity/Sorority Advisors	128
Health Education Professionals	130
Implications for Counselors	134
Implications for Senior Student Affairs Officers	128
Limitations and Directions for Future Research	139
Conclusion	141
REFERENCES	144

LIST OF TABLES

Ta	ıble	Page
1.	Research Methodology and Analysis Summary	197
2.	Hypothesis for Research Question 3	198
3.	Demographic Characteristics of Participants	199
4.	Means and Standard Deviations for Dependent Variables by Group	
	(pledge vs. active member)	200
5.	Pearson Product-Moment Correlation Coefficients Between AEQ-A	
	Subscales and MCSD	201
6.	Hypothesis Outcomes for Research Question 3	202
7.	Distribution Levels of MCSD Scores (pledge v. active)	203
8.	MCSD and AEQ-A Scores by Level and Academic Status	204

LIST OF APPENDICES

Appendix	Page
Appendix A Marlowe and Crowne Social Desirability Inventory	179
Appendix B Alcohol Expectancy Questionnaire-Adult	182
Appendix C Informed Consent Form	189
Appendix D Demographic Questionnaire	192
Appendix E Debriefing Statement	194
Appendix F Tables of Results	196

Chapter I

INTRODUCTION

Chapter One presents a brief overview of the issues and challenges associated with alcohol use by members of fraternities on college campuses in the United States. A background of the trend of alcohol use by fraternity members is provided along with the purpose and potential significance of this study. The definitions of terms are also included in Chapter One.

Chapter Two provides a comprehensive review of the research literature specific to alcohol use by fraternity members and the variables associated with this study. It presents the historical pretext to alcohol use by fraternity members with the history of alcohol policy and the evolution of the college fraternity. Chapter Two also explores research related to the culture of alcohol abuse that exists within fraternities as well as the research that discusses social desirability and expectations of alcohol.

Chapter Three describes the research methodology and provides a framework for the study. The design of the research, approach, instrumentation, and data analysis procedures are all presented in this chapter. Additionally, the sampling procedure and data collection process are discussed.

Background

College and university campuses continue to have significant alcohol problems (Weitzman, Nelson, Lee, & Wechsler, 2004; Wechsler, Davenport, Dowdall, Moeykens, & Castillo, 1994). Even though the majority of undergraduate students are under the age of 21, alcohol is the most popular drug and its consumption features widespread misuse (NIAA, 2005; Wechsler, Lee, Kuo, Seibring, Nelson, & Lee, 2001). Aggregate data from

several major studies paint a vivid picture of collegiate alcohol misuse (Johnston, O'Malley, & Bachman, 2007; Presley, Meilman, & Cashin, 1996, U.S. Department of Education, 2002; Wechsler et al., 2001). In response to this and continued alcohol related issues within the last 20 years, senior administrators continue to feel that alcohol is a significant issue (Gallagher, Harmon, & Lingenfelter, 1994; Weitzman et al., 2004).

Many have cited fraternities as a primary contributor to the issue of alcohol misuse as they provide access to alcohol for undergraduate students (Fabian, Toomey, Lenk, & Erickson, 2008). The depiction of fraternity- and sorority-affiliated students as heavy alcohol users is portrayed throughout the media and supported by empirical research (Caudill et al., 2006; Presley et al., 2002; Wechsler et al., 1996; Workman, 2001). News reports of incidents of alcohol-related deaths and other issues resulting from fraternity and sorority alcohol abuse provide face validity to these findings (Wall, 2006).

Additional attitudes of students, administrators, faculty and other external constituencies of a college or university in response to such data have facilitated the views that fraternities are no more than speakeasies or drinking clubs (Wechsler, Kuh, & Davenport, 1996). This has generated the *Animal House* stereotype that is commonly associated with fraternities (Maisel, 1990). This perception along with consistent stories of alcohol misuse has motivated college administrators and officials to take action; however these efforts have been with little effectiveness (Gurie, 2002).

University administrations have attempted a number of measures to curb the trend of binge drinking and its associated negative effects. These efforts have included everything from mandating dry housing (Crosse, Ginexi, and Caudill, 2006) to banning common source containers such as kegs specifically for Greek organizations (Kilmer,

Larimer, Parks, Dimeff, & Marlatt, 1999). However, these measures have been found to have little or no effect (Wall, 2008).

Regardless of policy, fraternities continue to consume heavy volumes of alcohol (Kilmer et al., 1999). If there are policies in place to restrict alcohol use, fraternities will increase their levels of binge drinking (Kilmer, et al., 1999). Additionally educational programs have limited effectiveness in addressing fraternity alcohol misuse (Wall, 2006). Therefore, most measures and attempts to control alcohol misuse such as binge drinking have not resulted in the decrease of alcohol consumption levels sought by institutions (Wall, Reis, & Bureau, 2006). This failure is indicative of the numerous social aspects of fraternity life that can create an environment conducive to excessive alcohol use (Baer, 1994).

Previous research indicates that many related problems associated with alcohol exist within the cultures of fraternities on American college campuses including violence, hazing, and sex (Pascarella, Edison, & Whitt, 1996; Wechsler et al., 1996). Furthermore on American college campuses, alcohol is central to the fraternal experience (Workman, 2001). This focus on alcohol exists because its use is ceded to social status as the heaviest-drinking chapters are perceived as holding greater prestige (Larimer, Irvine., Kilmer, and Marlatt, 1997). Within fraternity chapters, alcohol is utilized to help sustain their bonds of brotherhood (Wechsler, Kuh, & Davenport, 1996). Alcohol is used in the recruitment and socialization of new members into the chapter culture as this assists in the perpetuation of problems from one generation of members to the next (Arnold & Kuh, 1992). Thus, joining a fraternity or sorority has become a predictor for increasing alcohol consumption as alcohol use is culturally ingrained (Arnold & Kuh). This

culturally ingrained use of alcohol within fraternities has led to distorted in-group norms has specifically related to alcohol.

Danielson, Taylor, and Hartford (2001) concluded that the Greek subculture is significantly different from the general student population in that drinking attitude and behaviors are embedded in the physical, cognitive, emotional, and cultural aspects of fraternity members' lives resulting in abnormal in-group social norms. Fraternity and sorority members are more likely to: (1) hold more liberal beliefs regarding alcohol use, (2) hold more tolerant beliefs that support the use of alcohol, (3) perceive excessive drinking as positive, and (4) have more drinking problems (Goodwin, 1989). Members of the Greek system are more likely to engage in excessive drinking (Baer, 1994). Higher levels of alcohol use are seen among members of fraternities and sororities as opposed to nonmembers (Goodwin, 1989). Greek alcohol abuse also includes related negative effects of alcohol misuse.

Greek men and women reported more alcohol use than their non-Greek counterparts, and Greek men reported more use and more negative secondary effects of alcohol than Greek women (Eberhardt, Rice, & Smith, 2003). Comparatively, Greek students tend to experience more problems related to alcohol abuse then their non-Greek peers (Eberhart et al., 2003). Larimer, Irvine, Kilmer, and Marlatt (1997) concluded that becoming intoxicated and putting oneself at risk for academic or sexual consequences is an acceptable part of life in a fraternity or sorority.

Supporting this conclusion is Wechsler et al. (1996) who indicated that Greek students were significantly more likely to consume unsafe amounts of alcohol than their

non-Greek peers and also report tertiary alcohol-related problems which include but are not limited to missing class, injury to themselves, and engaging in risky sexual behavior more frequently than non-Greek students. Binge drinking and unsafe sexual practices are reported as frequent occurrences among sorority and fraternity members (Elias, Bell, Eade, & Underwood, 1996; Kellogg, 1999; McCabe & Bowers, 1996; Tampke, 1990; Wechsler et al., 1996).

When further compared to other student populations, Greek fraternity and sorority members still consume more than their peers. In a cultural comparison, Pace and McGrath (2002) reported that Greek students drank more than other students who were active in volunteer organizations. It has also been found that fraternity and sorority members drink equivalent to or less than student-athletes (Meilman, Leichliter, & Presley, 1999).

However, small reductions have been found as the trend of binge drinking and overall volume consumption of alcohol for fraternities and sororities is decreasing (Caron, Moskey, & Hovey, 2004). Even with this slight decrease and despite the best efforts of Greek organizations and their advisors, national or campus-based, the perception remains that alcohol use is a core component of the fraternal experience (Workman, 2001). Given these apparent problems, some administrators in higher education have called for tighter controls or even the removal of fraternal organizations from colleges (Maisel, 1990; Wall, 2006). Others have suggested that further in-depth studies of Greek problems are needed to determine the most effective methods of dealing with these social organizations (Neuberger & Hanson, 1997).

Statement of the Problem

Given the context of alcohol use by fraternities, additional research is needed as alcohol continues to serve as a significant role within fraternities which poses a significant health risk to its members. It is clear that drinking by college students can lead to problematic use (Wechsler, Lee, Kuo, Seibring, Nelson, & Lee, 2002). Further, poor decision-making can be the antecedent and consequence of high-risk behaviors such as excessive alcohol consumption (Williams & Smith, 1994). Students who regularly consume heavy amounts of alcohol are more likely to suffer tertiary effects (Wechsler, Kuo, Lee, & Dowdall, 2000). These may take the form of engaging in high-risk behaviors such as unprotected sex, illicit drug use, and violence (Wechsler et al., 2000). The health risks and tertiary effects associated with sustained alcohol use is only part of the challenge to addressing alcohol misuse by fraternities. The major issue is that alcohol is culturally ingrained into the structural hierarchy of fraternities as it begins with the socialization of new members into the chapter culture.

The socialization of new members through indoctrination is considered an essential function of fraternity membership. This is known as the new member or pledge period (Arnold & Kuh, 1992). New members are expected to sequence through a series of activities, ceremonies, and rituals that introduce expectations for membership (Pascarella et al., 1996; Pascarella, Flowers, & Whitt, 2001). Expectations are continually reinforced through alcohol as new members interface through the events and rites-of-passage associated with their pledge process (Arnold, 1995).

It has been found that these expectations are traditionally based on alcohol (Caudill et al., 2006; Thombs & Briddick, 2000). Furthermore, it has been demonstrated

that attitudes toward alcohol or expectancies of alcohol's effects influence drinking behavior (Corcoran, 2001; Goldman, Brown, & Christiansen, 1987; Reich, Goldman, & Noll, 2004). Alcohol expectancies are underlying beliefs that are involved in the commencement, maintenance, and possibly termination of alcohol use. Further research supports this notion as chapter consumption expectations are strongly predictive of consumption behavior, signifying strong social orientation of members (Trockel, Wall, Williams, & Reis, 2008). Additional research indicates that these expectations are distorted and are grossly exaggerated from those of non-members (Goodwin, 1989; Borsari & Carey, 2003). This socialization of fraternity members through the use of alcohol and the distorted expectations it establishes has drawn much attention and effort in order to prevent the health risks and tertiary effects associated with alcohol misuse.

Due to this phenomenon, fraternal organizations and campus practitioners have devoted a considerable amount of time and human capital educating new members regarding issues related to alcohol misuse (Wall, 2006). This sort of preventative intervention along with others such as other educational programs, alcohol misuse campaigns, alcohol-free alternative programming, policy frameworks, and community awareness efforts have all not been as successful as originally intended in addressing overall alcohol use and in reducing excessive drinking (Wechsler, Seibring, Lui, & Ahl, 2004).

In fulfilling a duty to care, with most efforts confounded, administrators and other stakeholders have continually reconsidered their efforts to address fraternity alcohol misuse due to the human capital costs and the lack of significant results (Powell & Wechsler, 2003). Many campuses have since concluded has that only continuing

education will reduce liability, but will not decrease overall alcohol misuse issues (Bickel & Lake, 1999). Since large-scale programs have such low impact and more individually oriented programs demonstrate the greatest efficacy but are taxing, funding for alcohol education has considerably shifted to a lower priority given recent budget challenges for higher education (Wall, 2006). Therefore institutions are often implementing only minimal education programs to simply reduce liability and meet their legal duty to care (Wechsler et al. 2004).

Given the scant resources for campuses to implement alcohol education programs, new variables need to be identified to address alcohol misuse by fraternity members. The identification of new variables could assist in the understanding of a fraternity culture that is heavily associated with alcohol use. The practical application of new variables may inform the design of new interventions which could address the social aspects of alcohol by fraternities. This socialization with alcohol has confounded the reductions in tertiary effects and overall use sought by administrators and other stakeholders associated with fraternities. Two potential variables are expectations of alcohol and social desirability.

Purpose of the Study

During social adjustment fraternity members may have high levels of social desirability since the social aspects of alcohol use by fraternity members is influenced by additional individual factors (Gurie, 2002). Social desirability is a set of behaviors associated with those who demonstrate a need for social approval (Marlowe & Crowne, 1960). A need for social approval is when individuals seek affirmation or endorsement

from peers and present a favorable image of themselves to others which is associated with conformity and compliance (Marlowe & Crowne, 1964).

This need for social approval has been found to be caused by several factors including peer acceptance and lack of self-concept (Chickering, 1969). Additionally, the desire for popularity (Arnold & Kuh, 1992); fear of rejection (Hughes & Winston, 1987); and lack of self-worth and confidence (Kraft, 1979), are all potential causal factors according to the research. Essentially, these causes are the desire to meet or exceed expectations, particularly of parents or special individuals (Chickering, 1969; LaBrie & Cail, 2011). All of these factors can positively or negatively impact behavior and attitudes depending upon circumstances (Borsari & Carey, 1999). Marlowe and Crowne's (1960) social desirability is one factor that has not been examined in the context of alcohol expectations.

Expectations of alcohol are related to one's belief that alcohol use will provide a particular outcome or reinforcer (Jones, Corbin, & Fromme, 2001). In regards to individual alcohol expectancy, the research indicates that perceived behavior of peers also is strongly linked to alcohol use (Borasi & Carey, 2003; Perkins 2002). Students' alcohol consumption reflects how much one thinks their peers typically drink (Perkins, 2002) Previous research also indicates that group affiliation such as with fraternities and its associated peer norms are among the strongest correlates of alcohol use (Neighbors, Lee, Lewis, Fossos, & Larimer, 2007; Perkins et al., 2005). Therefore, if expectations of alcohol are linked to alcohol use, then it could be that fraternity members are engaging in

socially desirable behaviors and conforming towards these expectations established by the Arnold and Kuh (1992) "liquid bonding" theory of fraternity culture.

These data may potentially indicate a relationship between social desirability and alcohol expectations. This increase in alcohol use through liquid bonding by fraternity chapters may be influenced by a need for social approval or social desirability in their attempts at social integration. This potential relationship has yet to be examined. Given the issues of alcohol use within fraternities as aforementioned, it is surprising such a knowledge gap exists within the research literature. No study has investigated the relationship between social desirability and alcohol expectancy by fraternity members. Therefore, examining these individual factors may better inform targeted interventions.

The purpose of this study was to examine the role of alcohol expectations and social desirability by fraternity members on American college campuses. The main goals of this study were: 1) to determine if a relationship exists between levels of alcohol expectation and levels of social desirability among students who are members of social fraternities at four-year institutions in the United States, 2) to determine if alcohol expectations by fraternity members moderate their social desirability levels, and 3) to determine if differences exist in levels of social desirability and alcohol expectations between pledges (new members) and initiated (active) members.

Research Questions

This study was guided by several research questions. These questions were:

Research Question 1:

Does social desirability as measured by the MCSD relate to alcohol expectancy as measured by the AEQ-A among fraternity members?

Hypothesis. It was hypothesized that a significant positive relation existed such that as social desirability increases alcohol expectancy also increased.

Research Question 2:

Do levels of social desirability as measured by responses on the MCSD and as measured by the AEQ-A total score and as measured by the AEQ-A subscales (e.g., Global Positive Changes, Sexual Enhancement, Physical and Social Pleasure, Social Assertion, Relaxation and Tension Reduction, and Arousal and Aggression) differ between pledges and active members?

Hypotheses. It was hypothesized that there was a significant main effect for group membership (pledge v. member) and the dependent measures (AEQ-A and MCSD). It was further hypothesized that there were significant differences between group membership (active v. pledge) and social desirability and the subscales of Sexual Enhancement, Social Assertion, and Physical and Social Pleasure on the AEQ-A. However, it was additionally hypothesized that there were no significant differences between membership (pledges vs. actives), and the subscales of Global Positive Changes, Relaxation and Tension Reduction, and Arousal and Aggression on the AEQ-A.

Research Question 3:

What is the relation between the AEQ-A subscale scores and social desirability as measured by the MCSD?

Hypotheses. It was hypothesized there was at least moderate positive correlation $(r= \ge 0.5)$ between social desirability and the various subscales of the AEQ-A. Additionally, was hypothesized that several of the subscales had at least moderate positive correlation $(r= \ge 0.5)$ between each another. Additionally, it was hypothesized that there was be no statistical significance among several of the AEQ-A subscales and social desirability (r = < 0.5). For more information see Table 2.

Significance

Regardless of institutional type, alcohol misuse at the collegiate level has been a prominent challenge confronting campuses and communities nationwide and has been for sometime (O'Malley & Johnston, 2002; Turrisi, Mallett, Mastroleo & Larimer, 2006). Turrisi et al. also found that the early research within the last decade points toward a polarized trend regarding the alcohol misuse. There are students who drink casually and consume alcohol on an irregular basis and those who engage in ritualistic, heavy episodic drinking also known as binge drinking (Turrisi et al.; Wechsler et al., 1994).

Binge drinking has increased in commonality and occurs when students consume large quantities of alcohol with an intentional ambition of becoming extremely intoxicated (O'Malley and Johnston, 2002). This poses a serious health risk and a threat to the user's environment as well as the community at large (Presley, 1992; Presley & Meilman, 1992). It was found that 40 percent of college students binge drink which is defined as five or more drinks for men and four or more drinks for women over a two hour period (O'Malley and Johnston, 2002). Additionally, college students bring pre-

college experiences with alcohol and have pre-established drinking patterns (Grekin & Sher, 2006).

Identifying social desirability as a potential factor influencing fraternity alcohol consumption may provide further insight into chapter culture which is necessary for targeted inventions to be truly programmatically effective (Wechsler et al., 1996).

Further, clarifying alcohol expectations by fraternity members may additionally help inform the design of interventions as well. Therefore, investigating the role of social desirability and alcohol expectations among fraternity members use may inform chapter-specific interventions which have been found to be effective.

A major limitation of the aforesaid interventions is the limited focus on individuals as opposed to examination of social or environmental factors contributing to a culture of alcohol use. Further, investigating this relationship can help target the use of effective interventions. Such outcomes would help in the validation of intervention programs and ensure their sustainability, while the existence of alcohol and other drug programs is prevalent on many campuses, the evidence of the efficacy of these efforts is limited (Licciardone, 2003; Werch, Pappas, & Castellon-Vogel, 1996).

Assumptions

The assumption was that there are multiple factors that differentiate between those who have distorted expectations about alcohol use and those who do not. In this study, the identified factor was Crown and Marlowe's (1964) social desirability. A second assumption was that there would be a higher degree of social desirability present in those who have higher expectations of alcohol. The third assumption was that the participants would self-report honestly. Additionally, it is assumed that men consume

greater quantities than women (Singleton, 1997) and that alcohol consumption is a rational behavior for most young adults (Kuther, 2002). In responding to questions within the various study instruments, it assumed that the majority of fraternity members have consumed alcohol and been affected by the tertiary health effects as found by Wechsler et al. (2000). Based on additional research, it is assumed that the majority of fraternity members are a part of a monosexual environment and are heterosexual (Case, Hesp, Eberly, 2005)

A critical assumption of the study is that student respondents are capable of reading, conceptualizing, and then responding to the questions included within the measurement instruments. Further, the instruments were be distributed live in real-time, therefore it is assumed that the researcher did not present demand characteristics that influenced responses provided by the student participants.

Regarding the sample, it is assumed that students volunteering or selected for participation in the study provide an accurate representation of fraternity members. However, utilizing nonrandomized sampling strategies lowered the generalizeability of the results of this research to the larger population of fraternity members within the United States (Mertens, 2005). It was assumed that most of the sample would be comprised of fraternity members enrolled at colleges and universities located in a unique geographical locale, the Mid-Atlantic region, in which the external validity of the study may be limited. Study results may not be generalized to the larger population of universities across the nation. In addition, despite methodological assumptions of the study, there remains potential for dishonesty on the part of survey respondents (Mertens, 2005; Neuman, 2000), limiting internal validity.

Conclusion

This chapter outlined in further detail the issue of alcohol use of fraternity members, enumerate the research questions, delineated assumptions by the researcher, and discussed the potential significance of this study. In the succeeding chapters a literature review which follows will further describe alcohol expectancy and some of the theories and models used to explain expectancy in alcohol research. It will then highlight fraternity alcohol and social desirability research. Finally, the study will propose a unique method to measure how expectancies of alcohol by fraternity members may influence their social desirability.

Definition of Terms

Active Member: An initiated member in good standing with participation in a sanctioned fraternity chapter.

Alcohol Expectation: an individual's beliefs about the expected effects of alcohol consumption (Jones, Corbin, & Fromme, 2001).

Active Participation: Fraternity members involved in the business affairs or social activities of the chapter.

Alcohol-free housing: A living environment where all forms of alcoholic beverages are prohibited from the premises, including private rooms, common living areas, lawn, and parking lot. A successful alcohol-free housing unit is a living environment where the normal behavior and culture is consistent with the stated alcohol free housing policy.

Binge drinking: The consumption of five or more drinks in one sitting for males or four or more drinks in one sitting for females (Inaba & Cohen, 2004).

Culture: A bond between a group or groups of people that is "created over time as people convene regularly, talk, and do things over and over again" (Kuh & Hall, 1993, p. 9). Kuh and Whitt (1988) note that culture serves several purposes in organizations, including "conveys a sense of identity" and "it is a sense-making device that guides and shapes behavior" (p. 10). Kuh (1990) also notes that institutional culture is manifested by a heterogeneous set of subcultures (p. 49). For the purpose of this study, the definition of culture includes the concept of shared values among group members.

Compensatory Masculinity: adjustments or exaggerations in behavior by men when their dominant sex role is threatened.

Expectancy: the subjective probability that a given behavior will lead to a particular outcome or reinforcer (Rotter, 1954).

Fraternity: A social association of the students or alumni at a college or university in the United States.

Greek: students affiliated with a Greek-lettered organization with the Inter-Fraternity Council (IFC).

Hegemonic Masculinity: In Western societies, the ideal dominance of men as assertive, athletic, independent, successful, and the subordination of women.

Housing: A general term to describe a residence hall, fraternity, or off-campus apartment unit built primarily as a domicile for college students.

Initiation: Bonds of brotherhood formed through friendship maintained through rites of passage ritual ceremonies that build the foundations of a fraternity (Callais, 2002).

Initiated: Fraternity member who has completed a through an indoctrination probationary, pledge, or new member education program marked by the completion of a series of rites of passage or ritual ceremonies.

New Member: Term is synonymous with pledge.

NIC: North-American Interfraternity Conference, which is the trade association and umbrella organization for men's collegiate fraternal organizations.

Substance abuse: Refers to use of alcohol and/or illicit substances with accompanying problems associated with use, as defined by the American Psychological Association

(APA) Diagnostic and Statistical Manual, Fourth Edition, Text Revision [DSM-IV-TR] (2000).

Pledge: An associate or probationary member of a fraternity seeking full membership.

Need for Social Approval: Term synonymous with social desirability.

Social Desirability: Tendency of individuals to project favorable images of themselves during social interaction.

Traditional Undergraduate: A student, aged 18-23, matriculating at a university who has not completed a bachelor's degree

Chapter II

LITERATURE REVIEW

Introduction

Chapter one provided the reader with a composite overview of the problem along with purpose of this study. This chapter will examine the historical background of alcohol use and policy pertaining to college students as well as the evolutionary history of the college fraternity. Additionally, the research literature regarding alcohol and fraternities, social desirability, and expectations of alcohol will discussed.

Historical Context

It is important to provide the historical pretext or the preceding events related to fraternities and alcohol use. Much of the culture of fraternities is rooted in tradition and mired in the events of the past. The history of alcohol use and policy is characterized by a cyclical and binary relationship. Conceptualizing the evolution of alcohol use by college students provides a pretext in understanding the alcohol issues surrounding fraternities.

History of Fraternities

American college fraternities are unique among the educational systems of the world. While similar groups exist in Germany, Italy, and England, their existence is purely founded on the perpetuation of specific socioeconomic cohorts of students (Bailey, 1949). The emphasis of such European fraternal organizations completely identify with elitist fervor as they typically hold very selective membership intake practices (Anson & Marchesani, 1991). American collegiate fraternities focus on egalitarianism and the social development of its members. Although European schools have clubs and societies, no

other arrangements are readily comparable to the American fraternity system (Anson & Marchesani).

The genesis of American college fraternities was forged from the desire of the general student body (Bailey, 1949). The evolution of the men's collegiate social fraternity began as a social outlet as part of the extracurriculum. During the 19th century, many colleges had forbidden the existence of fraternities (Bailey). Prior to 1880 and in a few cases afterwards, the fraternities evaded anti-fraternity rules and operated chapters sub-rosa (Bailey). While many institutions of higher education have chosen to eliminate fraternities and sororities or question their relevancy, Greek organizations had a major historical impact on the early development of the American system of higher education (Anson & Marchesani, 1991).

Educational curriculum during the 18th and 19th centuries was rigid, structured and dogmatic (Horowitz, 1987). Recitation of text and oral examination of the classics was commonplace (Horowitz). This system of drill and instruction was believed to be foundational in the preparation of gentlemen scholars and clergymen who predominately dominated the student demographic (Horowitz). Due to the high levels of academic rigor and restrictiveness of the collegiate environment at the time, students craved an extracurriculum; they yearned for outside social activity to complement their academic pursuits (Caple, 1998).

Thus, students founded early and loosely affiliated groups that meet privately in dorm rooms and debated the topics of the day (Bailey, 1949). Students sought to create organizations of like-minded individuals particularly formed in the matters of common interest such as for the discussion of banned texts (Bailey). These few clubs were

primarily formed as literary and debate societies and they offered the only outside-theclassroom experience to which students had access (Horowitz, 1987). These clubs began to flourish at this time (Bailey, 1949). With the influence of the classicist curriculum, many students sought inspiration from Greek texts that they had read and debated (Horowitz). These societies became the first early college fraternities as they adopted Greek letters and ideals which symbolized specific academic and intellectual ideals (Horowitz). The early fraternities were formed to fill a need in the lives of students by providing friendships and recreation as a basis to provide an outlet for free expression at a time when the college environment provided none (Caple, 1998).

The first true modern conception of a Greek-letter society grew out of an antecedent organization know as the Flat Hat Club, which had existed at the College of William and Mary since about 1750 (Bailey, 1949). The Flat Hat Club was a group of men devoted to the printing and distribution of an underground, literary newspaper called *The Flat Hat* (Bailey). Early writings of *The Flat Hat* were satirical compositions on student culture and essays concerning various literary opinions and expressions (Horowitz, 1987).

Phi Beta Kappa was founded by five students at the College of William and Mary in the Apollo Room of the Raleigh Tavern on the night of December 5, 1776 (Bailey, 1949). The Greek-letter society and its founders soon determined to extend its values to other institutions and within eleven years had established chapters at Yale, Harvard, and Dartmouth (Bailey). This growth was, however, short-lived. Due to military conscription actions during the Revolutionary

War, the parent or Alpha chapter of Phi Beta Kappa became dormant in 1781 (Bailey). The fraternity did not expand further for many years.

In 1831, influenced by a nation-wide faculty agitation against secret societies, the Harvard chapter voluntarily disclosed it secrets (Horowitz, 1987). Therefore, the entire organization became an honorary society in which membership was conferred solely for distinguished scholarship (Bailey, 1949). Its Greek lettered designation of Phi, Beta, and Kappa stood for "love of learning is the guide of life" (Anson & Marchesani, 1991). Following this change of policy, Phi Beta Kappa emphasized the honorary nature of its membership and no longer considered itself in competition with social fraternities (Bailey).

Phi Beta Kappa today is more widely distributed on college campus across the United States than any other Greek-letter society and remains purely honorary in character (Anson & Marchesani, 1991). Yet this fraternity of 1776-1831 was the progenitor of our whole class of college fraternities and its numerous decedents bear all of its essential features (Horowitz, 1987). The Phi Beta Kappa of the late 18th century had all the earmarks of our present-day social fraternities: the charm and mystique of the secrecy, an esoteric ritual, oath of fidelity, a grip, a motto, a badge for external display, high ideals of morality, as well as ideals of high scholastic achievement and fellowship (Horowitz). Their founding as the first Greek-letter society provided the foundation for the proliferation of the college fraternity (Bailey, 1949). This was true for women's fraternities as well (Caple, 1998).

As young women were gradually admitted to colleges across the United States after the Civil War ended, women craved the same type of outside-the-classroom

fraternal experience that men were creating through Greek-lettered organizations (Caple, 1998). Thus, the women established their own fraternities that were solely for the purpose of advancing women forward within institutions of higher education (Caple). The first women's fraternity was formed at Monmouth College in Illinois in 1867 and named styled I. C. Sorosis (later Pi Beta Phi) and was patterned after Phi Beta Kappa and other men's fraternities (Anson & Marchesani, 1991). The first Greek-lettered women's fraternity was Kappa Alpha Theta and it was founded at DePauw University in early 1870 (Anson & Marchesani). Also in 1870, Kappa Kappa Gamma was established at Monmouth (Anson & Marchesani). Without any prior knowledge of other women's fraternities, Alpha Phi was founded at Syracuse University in 1872 and Delta Gamma was founded at Lewis School in 1873 (Anson & Marchesani). All these women's groups were established and founded as "women's fraternities" (Anson & Marchesani; Bailey, 1949; Caple; Horowitz, 1987). Women's fraternities are known today as "sororities," however; the word sorority did not exist at this time (Caple). This term was created for Gamma Phi Beta which was established in 1874 and wished to distinguish them from Alpha Phi Fraternity which was also formed at Syracuse University two years earlier (Anson & Marchesani, 1972).

As fraternities and sororities formed, campus housing during the early era of campus life left a growing number of students living in boarding houses rather than in dormitories because of a shortage in the availability of on campus housing. By the middle of the 19th century, a change occurred on the American campus that caused fraternities to acquire a secondary characteristic: the fraternity house (Dartmouth College, 1936). More students had greater personal wealth than in earlier periods and could afford to board in

fraternity houses (Dartmouth College). The earliest example of a fraternity house was at the University of Michigan where Chi Psi built a 20- by 14- foot log cabin in 1846. While it was not used for living, it was used to hold its meetings where its membership spent a considerable amount of their outside time. This marks the first instance of the fraternity as a social living group and the end to the fraternity as a social outlet (Bailey, 1949).

Even though students could afford housing, due to economic factors, a number of colleges were financially ill-equipped to maintain housing for their students (Dartmouth College, 1936). Consequently, campuses were ringed with private boarding houses where students secured their own lodging and meals (Dartmouth College). For fraternities and sororities, owning and maintaining property required the cooperation of the alumni, many of whom in the past had simply graduated and disappeared (Hering, 1931). Eventually, alumni(ae) became involved with the management of the chapters because undergraduates were unable to maintain their living space properly (Dartmouth College). This indirectly benefited the colleges by keeping alumni interested and engaged in the affairs of their alma mater. Likewise, chapter ownership of these houses relieved many colleges and universities of the financial burden of building dormitories (Dartmouth College). For the college or university, fraternities had the practical benefit of housing people when an expanding college or university could not cope, and many institutions at this time relied on fraternities this way (Hering).

This willingness on the part of sororities and fraternities to assume responsibility for housing gradually led to arrangements on the part of the institutions, such as "leased land" agreements, whereby the institution owned the land and the fraternity constructed

the building (Hering, 1931). These complicated arrangements caused many social tensions between fraternities and their host institution (Dartmouth College, 1936).

This evolution of Greek chapter houses is exemplified by the author of an 1895

American University Magazine article on Dartmouth fraternities:

The idea of chapter houses as it came from other colleges was discussed by many of the chapters, and the prevalent belief was that a chapter house would tend to isolate its occupants from the rest of the college, or worse still, might create factions in college affairs. The Dartmouth man has always looked with abhorrence upon anything savoring of an aristocracy. Gradually there has come a change in the attitude of the students toward this question, not that they have weakened in principle, but it appears that the chapter house does not destroy the unity of the College. (Dartmouth College, 1936, p. 56)

This move mirrored a national change in meaning. Fraternities had previously been shifting to an outlook that valued socializing more than secrecy and the fellowship of literary debate. The new emphasis was on social opportunities and associations one could have in college. Faculty member Ashton Willard observed this change in 1897, noting that, "the students who belong to these organizations have close social relationships with each other, and find it agreeable to be quartered under the same roof' (Dartmouth College, 1936, p. 45).

Willard commented on the architectural component of this shift to chapter houses. The "house" concept is evident with non-housed chapters as well. Chapters substituted the word "house" for the word "chapter," as in, "What house do you belong to?" This expression is common today even where there are no housed chapters (Horowitz, 1987).

This paradigm shift of the Greek organization as a group that has a close fraternal bond through esoteric laws to a social living group that ate and lived together marks the beginning of the modern era of collegiate Greek life (Horowitz).

This historical evolution by fraternities has transitioned them into a form radically different than their ancestors. In the contemporary context fraternities are social fellowship groups assembled by values, rites of passage, and rituals that remain abstruse from the rest of campus. They provide social opportunities, leadership training, and philanthropic efforts for their members. While there may be significant elements of fraternities that remain esoteric, what has been visible to the remainder of society at large as well as other undergraduate students, are the results of alcohol-infused hazing incidents and consistent public displays of alcohol use (Wechsler, Kuh, & Davenport, 1996).

Members of the Greek system are more likely to engage in excessive drinking (Baer, 1994). Higher levels of alcohol use are seen among members of fraternities and sororities as opposed to nonmembers (Goodwin, 1989). Greek alcohol abuse also includes related negative affects of alcohol misuse. Previous research indicates that many related problems exist within the cultures of fraternities and sororities on American college campuses associated with alcohol (Pascarella, Edison, & Whitt, 1996; Wechsler, Kuh, & Davenport, 1996).

History of Alcohol Use

Alcohol and its tertiary effects have influenced institutional policies in postsecondary education around the globe for more than eight-hundred years (Cowley, 1934; Stewart, 1962). In the United States, alcohol use by undergraduate university

students has been present on college campuses since the era of the colonial college. Early colonial institutions such as Harvard, Yale, as well as William and Mary copied their English progenitors and served alcoholic libations to faculty and students between meals in the eating clubs and the dining halls (Warner, 1970). During this period, students as well as faculty and administrators were free to consume alcohol with little restriction as saloons and bars peppered the outskirts of the colonial campus. However, this dramatically changed during the twentieth century (Warner).

The temperance movement coupled with prohibitionist sentiment of the second decade of the twentieth century dried up the taps. Student groups supported this as they protested against "demon rum." Students self-regulated and formed militias against violation of the Eighteenth Amendment which banned the sale and distributed of alcohol, thereby legally banning alcohol in the United States. This was famously done at Cornell, Harvard, Michigan, and the University of California-Berkley. With this student-support and militant fervor against alcohol, alcohol became rare at college campuses and access was limited. Albeit surreptitious trafficking of beer and liquor was just as commonplace by entrepreneurial college students as it was in larger society, drinking after football games and at fraternity parties did not cease. However, this period would conclude with the repeal of the Eighteenth amendment to the U.S. Constitution (Warner, 1970).

In 1933, the prohibition era ended as was the precursor era of the evening pint with dinner. It is also important to consider the *in loco parentis* philosophy of student oversight by administrators and faculty during this time. Students began to consume alcohol in large quantities, specifically at sporting and fraternity houses in the 1930s and into the 1940s (Warner, 1970). However, students understanding the stiff penalties and

consequences for alcohol misuse continued their pension for alcohol (Warner, 1970). The *in loco parentis* role of colleges, the university acting in place of a parent, was prevalent at the beginning of the twentieth century and began to diminish after World War II (Wechsler, Seibring, Liu & Ahl, 2004).

Students responded to this increased freedoms with increases in alcohol consumption. One of the earliest studies on college student alcohol use revealed that surveyed traditional undergraduate students in the late 1940s and early 1950s provides validity to this phenomenon and its impact on alcohol (Straus and Bacon, 1953). It was discovered that 74 % of students admitted to having consumed alcohol at some point in their lives. This conclusion was drawn from a sample of 15, 747 students at 27 participating institutions (Straus and Bacon).

This role of the university acting in place of a parent all but disappeared at most colleges by the late 1960s. The decline and eventual evaporation of *in loco parentis* occurred simultaneously with the lowering of the minimum drinking age to eighteen.

Beginning in the 1970s the pendulum swung in favor of increasing the minimum drinking age. As the more experimental attitudes of the 1960s faded, the states were concerned with the role of alcohol in motor vehicle fatalities (Wechsler et al., 2004).

Later studies by Weschler and McFadden (1979), Gonzales (1986), and Johnson, O'Malley, and Bachman (1986) demonstrated the increasing trend of alcohol use by college students during the 1970s and 1980s. This increase in alcohol consumption was also coupled with an increase in motor vehicle accidents reportedly related to alcohol misuse (Wechsler et al., 2004). The response to this included new legislation and mandates by the federal government. It has only been in the last twenty years that

colleges and universities have been forced to cope with the issue of alcohol misuse on college and university campuses across the country.

The federal government enacted the Federal Uniform Drinking Age Act of 1984 (23 U.S.C. § 158), mandating a change in the minimum drinking age from 18 to 21 (Chaloupka & Wechsler, 1996). With the passage of this act, each state or commonwealth was required to increase its minimum legal drinking age for the sale, distribution, or consumption of all alcoholic beverages (Chaloupka & Wechsler, 1996). The penalty for noncompliance was a decrease in allocations for federal highway funding (Chaloupka & Wechsler). However, colleges and universities were not required to engage in compulsory enforcement or to develop policies until five years later. In 1989, amendments to the federal Drug-Free Schools and Campuses Act (20 U.S.C. § 1011i) mandated that colleges develop policies to prevent the illegal use of drugs and alcohol on campus as well as the minimum drinking age which has previously been increased to 21 (Wechsler et al., 2004).

Beginning in mid-1990s, binge drinking became a subject of national attention, following a number of highly publicized student deaths and subsequent litigations (Wechsler et al., 2004). To address this challenge, most colleges and universities reassessed their approaches to student alcohol use (Reisberg, 1998). Institutions developed more explicit guidelines and policies to address these persistent problems (Wechsler et al.).

Moreover, this historical relationship of alcohol and the university reflects a pendulum. It begins on the left in serving students libations and immediately moves to the right with prohibition. The pendulum now rests in the middle, where regulation and

expectations of programmatic enforcement and education are preset. This binary relationship of love and hate with alcohol as a "demon rum" has generated much interest in the form of research solely dedicated to the study of alcohol by undergraduate college students. The changes in legislation have facilitated the study of the college student alcohol use and research has produced large data sets to track, monitor, and examine. Within this approach and these changes in alcohol consumption laws, many have cited college fraternities as the root cause or as a prime example of alcohol misuse by traditional undergraduate students on American college campuses (Kuh, Pacarella, & Wechsler, 1996).

National Data and Trends

The National Institute on Alcohol Abuse and Alcoholism (NIAAA) released its first study on college alcohol use in 1976 (NIAAA). There has since been an increasing body of literature on national drinking trends for students in college drawn from national data studies (NIAAA). Data sets from national benchmark college alcohol surveys provide a snapshot of data regarding traditional undergraduate student alcohol consumption patterns. The research literature reveals that alcohol consumption is a continued problem of concern. "Misuse of-alcohol is a major social and health issue for colleges in the United States a as stated by Weitzman, Nelson, Lee, and Wechsler (2004), "Significant attention has been paid to college student drinking over the past decade but little has changed since the 1990s" (p. 187). Further, the research has indicated that collegiate undergraduate students have significant issues with heavy episodic drinking also known as binge drinking and its related consequences (Wechsler et al., 2004).

Binge drinking is the most serious problem affecting social life, health, and education on college campuses today (Wechsler, Nelson & Weitzman, 2000). Many studies defined binge drinking as having five or more drinks in a single drinking session for males and four or more for females (Wechsler, Davenport, Dowdall, Moeykens, & Castillo, 1994). Binge drinking among college students has been considered an informal rite of passage on many college campuses (Wechsler et al., 2000). Much has been published and researched about alcohol consumption habits among college students and the findings show how pervasive and destructive alcohol use is affecting students in many negative ways as indicated by national data.

A majority of the research addresses alcohol consumption for four-year institutions, especially concerning levels of student alcohol consumption (Blowers, 2009). This focus often overshadows the challenges of community colleges dealing with the same issues (Blowers). Very few studies have examined alcohol consumption patterns among community college students, however; the data suggests that they exhibit the same tendencies and patterns (Sheffield, Darkes, Del Boca, & Goldman, 2005).

Regardless of institutional type, alcohol misuse at the collegiate level is a prominent challenge confronting campuses and communities nationwide and has been for sometime (O'Malley & Johnston, 2002; Turrisi, Mallett, Mastroleo & Larimer, 2006). According to the U.S. Department of Education (2002) death from alcohol poisoning and from alcohol-related incidents has occurred across all institutional types. These same data reveals that each year 1,400 college students die from unintentional alcohol-related injuries and that alcohol is involved in 500,000 injuries, 600,000 assaults, and 70,000 cases of sexual assault and acquaintance rape among college students. These aggregate

data also indicated the tertiary effects of alcohol misuse in relation to its impact on academics and health (U.S. Department of Education)

In addition to the physical and emotional trauma, alcohol creates academic problems among 25 percent of college students which includes earning lower grades, performing poorly on exams or papers, or missing class (U.S. Department of Education, 2002). Additionally, 400,000 students had unprotected sex while under the influence of alcohol and more than 100,000 were too intoxicated to know whether they consented to sexual intercourse. More than 150,000 students developed a health problem related to alcohol. Furthermore, 11 percent of students damaged property and 2.1 million students drove while under the influence of alcohol (U.S Department of Education).

Further, according to the U.S. Department of Education (2002):

The highest prevalence of alcohol dependence in the U.S. population is among 18 to 20 year olds who typically began drinking years earlier. This finding underscores the need to consider problem drinking within a developmental framework. Furthermore, early and especially, early heavy drinking are associated with increased risk for adverse lifetime alcohol related consequences (p.2).

The U.S. Department of Health and Human Services (2007) indicates that underage drinking remains a serious problem despite laws against it in all 50 states. Since the change in the minimum drinking age in the 1980s from 18 to 21, there have been several federal, state, local, and even tribal programs aimed at preventing and reducing underage drinking coupled with efforts by many private entities such as alcohol distributors and manufacturers (NIAAA, 2005). Underage drinking is part of the American culture and it

is often viewed as a rite of passage and as a trend has proved stubborn and resistant to change (U.S. Department of Health and Human Services).

This sort of alcohol consumption as indicated by these aggregate data, at an early age, may result in an alcohol use disorder (NIAAA, 2005; Wechsler et al., 1994). This factor is considered diagnostic criteria for either alcohol abuse or dependence (NIAAA, 2005; Wechsler et al.). Furthermore, the highest prevalence of alcohol dependence is among people ages 18-20 (NIAAA, 2005; Wechsler et al.). This drinking behavior meets the criteria for defining alcohol dependence set forth in the most recent edition of the *Diagnostic and Statistical Manual of Mental Disorders*, DSM-IV and DSM-IV-TR (American Psychiatric Association [*DSM-IV-TR*], 2000). The largest groupings of young adults that exist in the United States are on American college campuses, both at the two-year and four-year level (U.S. Department of Health and Human Services, 2007). The number of citations within the research literature concerning alcohol misuse among collegiate undergraduate students attests to the increasing professional awareness of college students' alcohol problems in both research and the population.

The Harvard University School of Public Health College Alcohol Surveys (1993-2001) by Wechsler et al. (2001) provides a depth and breadth of data in regards to the tertiary effects of alcohol misuse as well as collegiate alcohol consumption patterns, specifically in regards to heavy episodic drinking or binge drinking. The Harvard University School of Public Health College Alcohol Survey (CAS) polled students about their drinking habits in 1993, 1997, 1999, and 2001 (Wechsler, Lee, Kuo, Seibring, Nelson, & Lee, 2001). The CAS studies revealed a polarization of alcohol consumption (Wechsler et al., 2000a). The studies indicated that the number of abstainers and binge

drinkers had increased over the years in which the studies were conducted (Wechsler, Lee, Kuo, & Lee, 2000b). The studies defined binge drinking as having five or more drinks in a single drinking session for males and four or more for females (Wechsler, Kuh, & Davenport, 1994).

Further, the CAS studies further found that approximately 44 % have engaged in high-risk drinking and about 23 % do so frequently (Wechsler, Nelson, & Weitzman, 2000). Twenty percent of students binge drank at least once in a two week period. These same students experienced a higher rate of various educational, social and health problems than those who did not binge drink (Wechsler et al.).

The 1999 Harvard study included 14,138 full time college students randomly selected from 128 four-year colleges and universities (Wechsler et al., 2000). This study supported the findings of the 1993 study of college student drinking which suggested that 44 % of students at four-year colleges engaged in binge drinking. More than half of the students from one-third of the colleges surveyed admitted to binge drinking during the two weeks prior to the survey. Additionally according to the 1993 study, being highly social, living in a coeducational residence hall, having many friends, and living with a roommate, all raised probabilities that a student would binge drink (Wechsler et al.).

Students who reported spending more time socializing and participating in physical activities as opposed to studying or doing volunteer work, were also more likely to be binge drinkers (Wechsler et al., 2000). The 1993 study also indicated a positive relationship between binge drinking and driving under the influence of alcohol (Wechsler et al., 1994). Among binge drinkers 62 % of the men and 49 % of the woman participants said that they had driven a car after drinking (Wechsler et. al., 2000).

The same 1997 results investigated binge drinking even further. The data found that on campuses where more than half of the students were binge drinkers, 87 % of non-binge drinkers reported experiencing one or more secondhand effects of other student's alcohol misuse (Wechsler et al., 2000). Additionally, among non-binge drinking women, 26 % had experienced unwanted sexual advances by students who had been drinking, and 2 % had been sexually assaulted or date raped by inebriated students (Wechsler et al., 2000). Wechsler et al. (1994) suggested this study was the first to use a representative national sample and the first large scale study to measure binge drinking under a gender-specific definition.

The data obtained from the CAS studies were consistent with other major national surveys. The Monitoring the Future Project, found that 40% of college students were binge drinkers (Presley, Meilman, & Cashin, 1999). Additionally, the Core Alcohol and Drug Survey, has annually discovered that 40 % of college students were binge drinkers (Presley et al.). Both studies defined of binge drinking as consuming five or more drinks on a single occasion at least once over a two-week period (Johnston, O'Malley, Bachman, & Schulenberg, 2007; Presley et al.). The CAS studies adjusted the number of drinks to four for female students since they examined gender as a variable (Wechsler et al., 1994). Further, the Core Alcohol and Drug Survey is a benchmark instrument that annually measures a college or university against its peer institutions (Presley et al.). The Core Alcohol and Drug Survey reports the responses of students' awareness of their own drinking behavior and of other students (Presley et al.). These data were again similar to the data provided by the CAS studies (Presley et al.; Wechsler et al., 2000b).

The results from the Core survey indicated that more than 45 % of students engage in binge drinking and 21 percent of the students engaged in frequent binge drinking (Presley et al., 1996). These results are similar to the national averages found by the Michigan survey and the CAS studies (Johnston et al., 2007; Presley et al., 1996; Wechsler et al., 1994; Wechsler et al., 2000b; Wechsler, Nelson, & Weitzman, 2000). More than 75 % of students living in four-year college dormitories reported knowing someone who engages in binge drinking on campus as compared to 22 % of the students attending a commuter college (Presley et al.). Fifty percent of the students agreed that drinking contributed to sexual assault and 68 % agreed that drinking affected judgments while driving (Presley et al.). Fifty percent indicated that drinking contributed to injury and death (Presley et al.). Approximately 80 % of students reported knowing someone under the age of 21 who could obtain alcohol easily (Presley et al.). Additionally, students were questioned about their awareness of campus policies and programs (Presley et al.).

Even though 90 % of students agreed that educational alcohol programs available on campus and in the community would be beneficial, 70 % of students were unaware of their campus' alcohol policy (Presley et al., 1996). Furthermore, 60 % were unaware of their campus alcohol prevention programs, community programs, and related support programs. With regard to recognition of such student support programs, 80 % of the students reported that counseling could help with problem drinking (Presley et al.). However, only 2.2 % of the entire population has sought counseling for a drinking problem (Presley et al.). These national benchmark studies provide descriptive data that suggests alcohol consumption among college students is a population-level area of

concern, which potentially categories this as a social issue. Students are clearly aware of the issue; however; the trend continues. Binge drinking and the polarization within the college student population continue the existence of alcohol consumption as a social issue.

Binge Drinking and the College Environment

The early research within the last decade points toward a polarized trend regarding the alcohol misuse with which four-year institutions cope (Turrisi et al., 2006). Two groups or patterns exist regarding the consumption of alcohol by college students (Turrisi et al.). There are students that obstain or consume alcohol on an irregular basis and those that engage in ritualistic, heavy episodic drinking also known as binge drinking (Wechsler et al., 1994). More recent data as found by Outside the Classroom (2010) and Johnston, O'Malley, Bachman, & Schulenberg (2009) only further emphasizes this trend of polarization. Those who engage in such a pattern of alcohol consumption enter with pre-college experiences with alcohol and have pre-established drinking patterns (Grekin & Sher, 2006).

Binge drinking has increased in commonality and occurs when students consume large quantities of alcohol with an intentional ambition of becoming extremely intoxicated (O'Malley and Johnston, 2002). This poses a serious health risk and a threat to the user's environment as well as the community at large (Presley, 1994). It is estimated that 40 % of college students binge drink which is defined as five or more drinks for men and four or more drinks for women over a two hour period (O'Malley and Johnston; White, Kraus, McCracken, & Swartzwelder, 2003). Further, approximately one half of male college students have binged at least once within a two week period (Baer,

2001). Even at schools with low binging rates, at least 35 % or less of students were binge drinkers (Weschler et al., 1994).

Binge drinking has is often associated with a diverse array of direct negative consequences. These include accidents, even fatalities, destructive behavior through damage of property or arguments, and engaging in unprotected sexual activity either consensual or forced. Binge drinking is associated with a myriad of tertiary affects mot limited to missing classes, violence, student attrition, high risk sexual behavior, and physical injury (NIH, 2002; Wechsler, Dowdall, Maenner, Gledhill-Hoyt, & Lee, 1998; Wechsler et al., 1994). Binge drinking has also been associated with high levels of truancy (Weitzman & Nelson, 2004). College students are more likely to miss class and fall behind in course-related assignments (Weitzman & Nelson).

Alcohol consumption patterns among America's undergraduate students during the past quarter century, most specifically among fraternity members, has enabled researchers to recognize recurring themes (Sherwood, 1987). These themes include binge drinking, socialization with alcohol, tertiary health effects, heavy frequency of use, and high volume of use, and negative academic consequences (Sherwood, 1987). This has prompted great concern among college and university administrators (Borsari & Carey, 1999).

The excessive drinking that occurs at colleges and universities across the country has long been a source of concern since the 1980s. The prevalence of this episodic, heavy drinking behavior has once again brought the issue of undergraduate alcohol abuse to the forefront. The consistency of the alcohol abuse among undergraduates has established the

issue as the most important health hazard among students (White, Kraus, McCracken, & Swartzwelder, 2003).

Tertiary Effects

LaBrie, Tawalbeh, & Earleywine (2006) examined the differences between male students who had adjudicated alcohol violations and those who were not. The salient themes that emerged from the findings were that those students who had cases adjudicated were heavier drinkers and that adjudicated first-year students were more likely to be frequent binge drinkers.

Collins, Parks, and Marlatt (1985) examined the social determinants of alcohol consumption. They studied the effects of both social interactions on alcohol and perceived environmental stimuli as determinants of alcohol consumption within fraternities. The authors found that overall alcohol consumption was dependent upon social interaction and perceived environment. There was an increase in alcohol consumption when individuals were placed in light-drinking-unsociable, heavy-drinking-unsociable, or light-drinking-sociable models. The social models were defined by the amount of alcohol and individual present in a specific environment. Those in heavy-drinking-sociable conditions consumed one-and-a-half times more alcohol than those in light-drinking-sociable situations. It was hypothesized that rapport and camaraderic were indictors of the reason for such consistent heavy drinking regardless of the situational context.

Not only does heavy alcohol consumption affect the ones who engage in it, but it also affects their peers who may or may not do the same (Weitzman & Nelson, 2004). This has been seen at college and universities where drinking levels are high. In these environments, students are up to four times more likely to suffer one problem as a result of a peer's heavy alcohol use (Weitzman). These effects range from having their studies interrupted to sexual assault (Weitzman). This has created a climate of alcohol use and abuse, as all students are affected by the excessive consumption of alcohol.

Further, according to Weschler et al. (1994), there are a number of "secondary binge effects" for those residing near or in direct proximately of binge drinkers. In his study, 21% of non-bingeing students had been insulted or humiliated, 13% had been in conflict with the person engaging in the binge drinking, 7% were involved in some form of assault, 6% experienced damage to their property, and 5% of those not engaging in binge drinking experienced unwelcome sexual advances (Wechsler et al., 1994). The greatest impact was that 31 % of those surveyed self-reported that they had to take care of a student who had binged and 42% were interrupted from academic activities including studying.

There is a definite collective conscious among students about the direct and indirect negative effects of excessive drinking; there is still a culture of silence because they are afraid of negative peer evaluation (Weitzman & Nelson, 2004). While students feel that expressing concern about alcohol consumption would lead to negative evaluations from peers, individual students report that they would suffer negative consequences from frequent episodes of excessive drinking (Del Boca, Darkes,

Greenbaum, & Goldman, 2004). This culture of secrecy is most prevalent amongst fraternity members as they are defined as the largest drinking cohort of traditional undergraduate students (Baer, 2001).

Fraternities & Alcohol Use

Studies have found that fraternity and sorority members are more likely to be professionally successful, more likely to hold civic positions, and more likely to have better paying jobs than nonmembers (Bryan, 1987). They are also the most likely to give monetary donations to their collegiate alma mater (Bryan). Fraternities and sororities are also the largest collegiate non-profit private housing network, valued at three billion dollars housing and over a quarter million individuals (Wechsler et al., 1996). They also give more than three million dollars annually to charities and scholarships (Wechsler et al.).

Membership in fraternities is attractive because it aids in identity formation and provides students with group identity and community within the college environment (Hughes & Winston, 1987). However, negative perceptions associated with sorority and fraternity membership such as binge drinking and hazing within fraternities and sororities persist regardless of their value to society and their individual members (Wechsler et al., 1996).

This has generated the *Animal House* stereotype that is commonly held by nonmembers and college administrators (Grubb, 2006). It is this stereotype that has motivated college administrators and officials to take action, however it has been met with little effectiveness (Wechsler et al., 1996). The 1978 movie increased the historical view of fraternity and even sorority chapters and their perception of administrators as

agents of persecution (Mathiasen, 2005). The notion that all college administrators are like Dean Warmer from *Animal House* and want to place fraternities or sororities on "double secret probation" is false.

Many administrators view fraternities and other social Greek organizations as a necessary evil because on many campuses they are part of the social fabric (Wechsler et al., 1996). Any attempts to control them may create rogue Greek organizations such as "Delta Tau Chi" from *Animal House*. These issues have lead to the transformation of the perception of fraternities and sororities as co-curricular social outlets to institutional liabilities viewed as "speakeasies" or "drinking clubs" who engage in homoerotic hazing rituals (Wechsler et al.).

This transformation has caused a huge shift in the attention, or rather scrutiny of fraternities and sororities in an effort to reduce institutional liability (Wall, 2008). Given behaviors of hazing and excessive alcohol consumption creating high stakes institutional liability, many colleges have come to question fraternity and sorority relevancy (Kaplin & Lee, 2006). These liability concerns have caused Greek organizations to come under more scrutiny than ever before, by both higher education and within the media (Rhoads, 1995; Whipple & Sullivan, 1998). In the mainstream press there has been significant negative publicity about Greek organizations on a more than consistent basis (Whipple & Sullivan). Reports of incidents involving hazing, alcohol and substance abuse, sexual assault, discrimination, ethnic/cultural insensitivity, and poor scholarship fill headlines about news in higher education (Mathiasen, 2005). This negative press and image often overshadows the positive contributions fraternities and sororities make in campus

involvement, community service, charitable fund-raising, and philanthropy (Earley, 1998; Nuwer, 1999).

Regardless of their overshadowed positive philanthropic and involvement efforts, the relevancy of fraternities of sororities on the college campus is being questioned more frequently. The liabilities related to past and recent events across the country concerning fraternities and sororities put their relevancy on the modern college campus into question (Wechsler et al., 1996). The risk management liabilities associated with Greek-lettered organizations ranges from underage drinking to hazing to sexual assault (Kaplin & Lee, 2006; Wechsler et al.). Many college administrators feel that Greek organizations are inconsistent with their individual institutional mission or that they are not fostering desired learning outcomes. This same sentiment has lead to the dissolving of Greek systems at such colleges as Alfred University, Colby College, Williams College, and Bowdoin College (Kaplin & Lee). With all this animosity and negativity against fraternities and sororities, their existence still persists as some institutions and administrators see their value. However, extreme patterns of alcohol use are comorbid with their existence. Early, foundational survey studies provide empirical validity to these concerns by administrators.

Early Studies

Early studies by Goodwin (1989, 1990) in a survey of 2,000 fraternity and sorority members, revealed participation in heavy episodic drinking or binge drinking and consistency of drinking. Alcohol is the primary drug of choice for fraternity and sorority members as 98% of members consume alcohol each week (Goodwin, 1989, 1990).

Fraternity and sorority members felt it was okay to drink each week and to drink to

excess (Goodwin 1989, 1990). Fraternity and sorority members are more likely to:(1) hold more liberal beliefs regarding alcohol use; (2) hold more tolerant beliefs that support the use of alcohol; (3) perceive excessive drinking as positive; and (4) have more drinking problems (Goodwin, 1989).

An additional early study by Faulkner, Alcorn, and Garvin (1988) of 108 pledges (new members) participated in a self-report questionnaire from five fraternities. Alcohol consumption was tracked utilizing a self-report drinking calendar. It was found that heavy alcohol consumption was viewed positively along with socialization value and its associated tertiary effects (Faulkner et al., 1988). Alcohol was found to be a strong component of the pledge process in the socialization of new members (Faulkner et al., 1988). The pledges that consumed the most had a higher tolerance for tertiary effects and heavy alcohol consumption (Faulkner et al., 1988). It was also found that previous problems associated with alcohol use are a strong predictor of heavy alcohol consumption at the beginning of pledging (Faulkner et al., 1988). Similarly, Tampke (1990) also found that fraternity and sorority members consume more than any other cohort and that they engage in heavy episodic drinking. They also have a low concept about the risks involving drinking and the tertiary effects of alcohol are viewed has normal or acceptable. Later studies have results that indicate the same binge drinking, distorted social norms, and alcohol use in the socialization of membership.

Borsari and Carey (1999) facilitated a large literature review in which they distilled the empirical literature concerning fraternity drinking published between 1980 and 1999. The review is revealed five themes from the literature: (1) the continuity between high school and college drinking, (2) the self-selection of heavy drinkers into

environments that support heavy drinking, (3) the central role of alcohol in fraternity socialization, (4) the misperception of drinking norms, and (5) the enabling environment of the fraternity house. These same themes are prevalent in the research literature. These themes are also prevalent along with hazing and sexual assault.

Alcohol and Hazing

One of the biggest challenges to Greek life is hazing as headlines of hazing typically dominate media headlines concerning fraternity and sororities (Ellsworth, 2006; Nuwer, 1999). Hazing traditionally is consistent with high levels of alcohol use by chapter (Nuwer). A large national study of hazing (n= 11,482) found that more than half of students who hold membership in student organizations claimed to have been involved in a hazing incident (Allan and Madden, 2008). Furthermore, 53 % of hazing by fraternities and sororities involved the use of alcohol (Allan & Madden).

Within the research literature, hazing is typically defined as any forced task or activity that requires physical, mental, or emotional outcomes that endanger the physical safety of another person, produces mental or physical discomfort, causes embarrassment, fright, humiliation, or ridicule, or degrades an individual (Ellsworth, 2006; Nuwer, 1999; Sweet, 1999). Hazing is a phenomenon that is traditionally and uniquely American in the modern era (Nuwer, 1999). According to Nuwer (1999) hazing is a behavioral practice evolved from forms of military discipline imposed during boot camp or basic training. While American forms of hazing have parallels in Medieval Europe and the British prep schools of the 1700's, these practices disappeared well before the American version developed (Nuwer).

Drout & Corsoro (2003) analyzed how fraternity and sorority and non-member students would respond to a given hazing incidents. The situational response involved a student being force-fed alcohol, and another voluntarily consumed alcohol. Drout and Corsoro observed "the differential response to victimization that was voluntary and that which was forced is not at all surprising...both sets of students attributed similar levels of responsibility to the president and brother as perpetrators of the hazing incident" (2003, p. 541). Further, there is no gender difference between how fraternity and sorority members react similarly when faced with hazing scenarios (Cokley et al., 2001; Drout & Corsoro, 2003). Thus, hazing and pledging activities are viewed similarly by fraternity/sorority members, except when asked to determine responsibility (Cokley et al.)

Hazing persists today because fraternity and sorority members hold it as a tradition (Nuwer, 1999; Sweet, 1999). For American undergraduates in fraternities and sororities, hazing is a "rite of passage" which establishes it as a tradition (Sweet, 1999). This rite of passage entitles the "survivor" presumed special recognition (Nuwer, 1999). There is little early research regarding hazing practices because Greek organizations are rooted in sworn secrecy amongst their membership (Lemon, 1972). Thus, a piecemeal approach has been developed whereas fraternity and sorority hazing is studied through a more theoretical lens and case studies are analyzed through those incidents that come to light through the mainstream press (Sweet, 1999).

What is known about fraternities and sororities is that they culturally vary by organization (Ellsworth, 2006). Thus each chapter has an individual, unique culture and hazing practices vary from chapter to chapter (Ellsworth, 2006). Also, groupthink plays a

significant role in these incidents (Sweet, 2004). It is also known that fraternities and sororities that have higher levels of alcohol use also have higher levels of hazing (Nuwer, 1999). It has also been established that alcohol use is a much more frequent issue than hazing within fraternities (Nuwer, 1999; Sweet, 1999). Danielson, Taylor, and Hartford (2001) concluded that the Greek subculture is significantly different from the general student population in that drinking attitude and behaviors are embedded in the physical, cognitive, emotional, and cultural aspects of Greek students' lives resulting in abnormal in-group social norms. These distorted in-group norms additionally facilitates an environment that is conducive to supporting sexual assault.

Alcohol and Sexual Assault

A large percentage of reported sexual assault incidents among undergraduates involve alcohol. Most specifically, several studies also link fraternities to sexual assault. In a study of fraternity men, Foubert, Garner, and Thaxter (2006) examined the link between fraternities and alcohol related sexual encounters at a mid-sized public university in the Southeast. Thirty-seven traditional-aged undergraduate fraternity men, representing 14 fraternities, were segmented into three separate focus groups. Participants described ambiguity in defining consent in alcohol-related sexual encounters. Most fraternity men in this study admitted to never specifically asking for consent because they either viewed it as too awkward to approach or a potential "moment killer" (Foubert et al., 2006). Additionally, a portion of the participants expressed the belief that if both parties had consumed alcohol, consent was unnecessary and no fault was placed on either individual for initiating sexual activity.

Locke and Mahalik (2005) examined masculinity norms among college males relating to sexual assault. They found men who used alcohol problematically and conformed to masculine norms were more likely to be perpetrators of sexual assault. These masculine norms included belief in being a "player," ridiculing homosexual male activity, subservience of women to men, and dominance. These same characteristics were also reported by Foubert et al. (2006) and Nelson (1993) who found fraternity men exhibited more traditional beliefs toward women and embrace rape-supportive attitudes.

Rape prevention program efforts often target fraternity men (Choate 2003; Larimer, Lydum, Anderson & Turner; 1999). The focus on this population is warranted since fraternity men are more likely than male college students to be sexually coercive (Garrett-Gooding & Senter, 1987). Furthermore, they are more likely to use alcohol in an attempt to have sex with women (Boeringer, 1999; Boeringer, Shehan, & Akers, 1991). The availability of alcohol coupled with a hyper-masculine environment better facilitates a rape-supportive environment Foubert (2000). This provided by data which indicates that fraternities commit over half of all gang rapes on college campuses (O'Sullivan, 1991).

Alcohol Use Patterns

College and university administrations have used a number of measures to attempt to curb the trend of binge drinking and its associated negative effects. These efforts have included everything from mandating dry housing to banning common source containers (Kilmer, Larimer, Parks, Dimeff, & Marlatt, 1999). However, these measures have been found to have little or no effect. Regardless of policy, Greek organizations still continue to consume heavy amounts of alcohol (Kilmer et al.). Where policies are in

place, increased levels of binge drinking have been found (Larimer, Turner, Mallett, & Geisner, 2004).

Most measures and attempts to control binge drinking have not resulted in the decrease of alcohol levels sought by institutions. This failure is indicative of the numerous social aspects of fraternity and sorority life that can create an environment that is conducive to excessive alcohol use (Baer, 1994). Tampke (1990) discovered that Greeks reported drinking approximately twice as much alcohol per month as their non-Greek peers. Colleges and universities continue to struggle with student binge drinking and many times it is linked to fraternities and sororities.

While college students consume more than any other population in America, fraternity and sorority members are one of the heaviest drinking subcultures (Baer, 1994).

Within fraternity membership, problems of binge drinking are coexistent as they utilize alcohol to help sustain their bonds of brotherhood and sisterhood (Wechsler et al., 1996). Maintaining these bonds and beneficial social aspects often involves alcohol. The use of alcohol in the formation and maintenance of the interpersonal bonds is the deeper root of the issue of excessive alcohol consumption (Arnold & Kuh, 1992). Excessive drinking levels are involved in the socialization of new members and this is what perpetuates problems from one generation to the next (Arnold & Kuh). Thus, joining a fraternity or sorority has become a predictor for increasing alcohol consumption as alcohol use is culturally ingrained (Arnold & Kuh).

Caudill, Crosse, Campbell, Howard, Luckey, and Blane (2006) surveyed one national college fraternity. The sample was comprised of 3406 members of one national college fraternity, distributed across 98 chapters in 32 state with an 85% response rate.

This provides an extensive profile of drinking behaviors and predictors of drinking among multiple indexes of alcohol consumption measured frequency, quantity, estimated blood alcohol concentration levels (BACs), and related problems. All six preselected demographic attributes of members and two chapter characteristics were significantly related to the drinking behaviors and levels of risk, identifying possible targets for interventions. Among all members, 97 % were drinkers, 86 % binge drinkers, and 64 % frequent binge drinkers. In the four weeks proceeding the time of survey, members self-reported they drank average of 10.5 days and consumed an average of 81 drinks. Drinkers had an average BAC of 0.10, reaching at least 0.08 on an average of six days.

The relationship between Greek affiliation and alcohol consumption in college was examined using a retrospective survey by Lo and Globetti (1995) at the University of Alabama. Eight hundred and eight first-year students participated in the study. The results demonstrated that members of Greek associations were more likely to drink, and to drink greater excess in larger quantities, than other students (non-Greeks). Greek affiliation was also associated with higher rates of alcohol-related problems such as tertiary effects. Students with a background of high-quantity drinking in high school were more likely to join Greek associations than other students. In addition, Greek affiliation was associated with a significantly greater increase in drinking level between high school and college. The authors concluded that membership in a Greek association was shown to be both a facilitating and enhancing factor in alcohol use.

Caron, Moskey, and Hovey (2004) compared data from 508 Greek members at a large, northeastern land grant university in 1994 and 2000, examining both alcohol use

and its tertiary effects. This study supports past research findings showing a high incidence of alcohol consumption among fraternity and sorority members. When comparing the 1994 sample to the 2000 sample, significant differences were found. These results suggest that there was a reduction in overall alcohol use by fraternity and sorority members. While, these results are encouraging additional research still indicates that alcohol is a major concern for fraternities. Further research indicates that members self-select into fraternities because of precollege drinking characteristics (Juth, Smyth, Thompson, & Nodes, 2010).

Alcohol & Membership Selection

O'Connor, Cooper, and Thiel (1996) examined the relationship between precollege alcohol use in freshmen and their fraternity affiliation decisions. Participants were 121 freshmen from a small, private, Midwestern university who reported that they had drank in the past or that they were currently drinking alcoholic beverages. The study found a significant correlation between precollege levels of alcohol use and the probability that a freshman would pledge a fraternity. This countered the widely accepted view that fraternities are the primary cause of heavy drinking and further supporting the alternative notion that fraternities attract heavy drinkers.

In a meta-analysis of the Harvard College Alcohol Study results from 1993 to 2001, DeSimone (2009) found that fraternities were responsible for considerable portion of campus events with alcohol. Data were analyzed from 54,740 students representing 140 universities to determine whether fraternity membership was causally related to risky alcohol consumption. He also found a strong correlation between Greek membership and

binge drinking. Self-selection of members into fraternities accounted for a significant portion of this correlation.

Park, Sher, Wood, and Krull (2009) profiled the motivations underlying the membership selection process. Park et al. studied personality factors, precollege drinking, as well as the alcohol-conducive environmental as potential factors. A total of 3,099 participants from the University of Missouri at Columbia were administered surveys. Park et al. followed participants through their first six semesters to determine the changes in drinking behavior and involvement in fraternities and sororities. Park et al. determined that personality traits of impulsivity, extraversion, and neuroticism were commonly seen in heavy drinking fraternity and sorority members. They also established these traits were consistent with increased alcohol misuse. It was concluded that these predisposing personality traits and preconceived positive perceptions of alcohol use contributed significantly to an increase tendency of alcohol misuse by members of fraternities and sororities.

Alcohol Consumption Population Comparisons

Alva (1998) investigated self-reported alcohol use among college fraternity and sorority members. Participants included 385 fraternity and sorority members and 1,518 non-Greek-affiliated students at four college campuses of a large public university system in California. On average, fraternity and sorority members reported consuming 3.91 drinks per week, compared to 1.75 drinks for non-Greeks. Sorority members reported lower levels of alcohol consumption than fraternity members but significantly higher levels of consumption when compared to non-Greek females.

Barry (2007) found that fraternity members drank in greater quantities than their non-fraternity/sorority counterparts. It was found further, that fraternity men consumed the most followed by sorority members, non-fraternity men, and non-sorority women. Furthermore, one-third of fraternity and sorority members admitted to being intoxicated at least once a week. Additionally, members of fraternities and sororities reported their attitudes and beliefs about alcohol. Members were far more likely to assume their peers drank excessively and they conceived far less risk in consuming alcohol consistently. They acknowledged excessive drinking behaviors of others as opposed to their own and 40 % did not perceive their alcohol consumption as problematic.

Sher, Bartholow, and Nanda (2001) facilitated a longitudinal study that examined drinking behaviors between fraternities and non-Greeks during four years of college and for three years postcollege. It was found that throughout the four years of college, there was a distinct difference between fraternity and Non-Greek alcohol consumption.

Fraternities were found to have a higher level of alcohol consumption. However, nonsignificant differences were found between fraternity membership and Non-Greeks as there were even postcollege alcohol consumption between the two groups. Fraternity membership in years one and two of college were predictors of heavy drinking in years three and four. Greek status in years three and four were also consistent in predicting heavy alcohol use in the same year or for the next. It was also found that Non-Greeks in years one and two who displayed heavy drinking were more likely to gain fraternity membership. Furthermore, those who displayed heavy drinking, were overall more likely to join a fraternity. When compared to other student cohorts, fraternities still remain the largest consumer of alcohol.

Greek men and women reported more alcohol use than their non-Greek counterparts, and Greek men reported more use and more negative secondary effects of alcohol than Greek women (Eberhardt, Rice, & Smith, 2003). Comparatively, Greek students tend to experience more problems related to alcohol abuse then their non-Greek peers (Eberhard et al., 2003). Larimer, Irvine, Kilmer, and Marlatt (1997) concluded that becoming intoxicated and putting oneself at risk for academic or sexual consequences is an acceptable part of life in a fraternity or sorority.

Supporting this conclusion are Wechsler et al. (1996) who indicated that Greek students were significantly more likely to consume unsafe amounts of alcohol than their non-Greek peers and also report alcohol-related problems which include but are not limited to missing class, injury to themselves, and engaging in risky sexual behavior more frequently than non-Greek students. Binge drinking, unsafe sexual practices, are reported as frequent occurrences within sororities and fraternities (Elias, Bell, Eade, & Underwood, 1996; Kellogg, 1999; McCabe & Bowers, 1996; Tampke, 1990; Wechsler, Kuh, & Davenport, 1996).

In another comparison, Pace and McGrath (2002) reported that Greek students drank more than other students who were active in volunteer organizations. It has also been found that fraternity and sorority members drink just as much or more than student-athletes (Meilman, Leichliter, & Presley, 1999). This same sentiment concerning alcohol use is realized by other students as well.

A University of Massachusetts-Amherst study by Malaney (1990) examined attitudes held by 310 college students toward fraternities and sororities. About five percent of the 18,000 undergraduates at this research-oriented university belonged to

what the researcher termed Greek letter organizations (GLOs). The sample was representative of the student body with responding percentages equaling 91.1 percent of students whom had never belonged to GLOs, five and a half percent current members, and 3.4% former GLO members responding to the survey. Findings revealed that both members and nonmembers believed that there was value in belonging to fraternities and sororities. Further, a majority of students believed that Greeks performed community service, were involved in campus activities outside of the Greek system, and did not perform poorer academically than other students; they still recognized negative aspects of Greek life that focused on partying and was perceived as irresponsible consumption of alcohol. Other students may recognize that fraternities consume mass quantities of alcohol, small reductions have been found recently as the trend of binge drinking and overall volume consumption of alcohol for fraternities and sororities is potentially decreasing (Caron, Moskey, & Hovey, 2004).

Alcohol & Cultural Studies

Arnold (1995) found that alcohol was systemic within the entirety of fraternity chapters utilizing data from nearly three years of investigation drawn from interviews, observation, and document analysis. A strong emphasis was placed on the pledgeship process. Arnold termed them "addictive organizations" and established framework to explain the group dynamic, specifically with respect to alcohol and hazing. Arnold findings suggest that alcohol is systemic throughout the entirety of a fraternity chapter. Other studies provide validity to these findings.

Kuh and Arnold (1993) examined the impact of pledge/new member experiences on the alcohol use behaviors of members of college fraternities was examined in this

study using qualitative methodology. Information was collected from four fraternities on two different types of campuses using interviews, observations, and document analysis. General observations about the role of alcohol in fraternities are made, and then the role of alcohol during the pledgeship period is illustrated by a case study of one fraternity. The regulation of alcohol use during the pledgeship period is a key component of a multifaceted system that socializes pledges to the fraternity norms and values. Kuh and Arnold suggested that alcohol use is culturally ingrained within fraternity chapters. Building on this theory, several other studies have found that chapter leaders encourage and perpetuate alcohol use and that alcohol use in used in the socialization of new members.

Cashin, Presley, and Meilman (1998) facilitated a study which alcohol consumption, binge drinking, consequences of use, and beliefs about drinking were compared according to students' level of involvement in fraternities or sororities.

Analyses indicated that students in the Greek system averaged significantly more drinks per week, engaged in heavy drinking more often, and suffered more negative consequences than non-Greeks. Greek leaders scored at least as high and as often higher than other members, indicating that the leadership of these organizations is setting heavy-drinking norms. These findings are also similar to Gurie (2002). However, more recent findings counter the alcohol use differences in chapter leaders and their peers.

A similar study to Cashin et al. (1998) by Fairlie, DeJong, Stevenson, Lavigne, & Wood (2010) found no significant differences between fraternity and sorority chapter leaders and their subordinates, however; the authors did note in their limitations that it was a single-institution study and that differences may exist between chapter leaders and

their subordinates across institutions. A much larger study of educational gains in fraternities and sororities by Long and Snowden (2011) supports the limited sample findings of While the Farlie et al. (2010). Long and Snowden found that prevalence of binge drinking to be lower than the national average of 60% for fraternity members as found by Wechsler, Lee, Kuo, & Lee (2000).

Larimer, Turner, Mallett, and Geisner (2004) obtained a large sample of individuals in Greek system and studied the incoming pledge class. They reported the acceptability of heavy drinking and that new members expected to drink heavily and felt they should. It was demonstrated that individual new members' alcohol consumption increased in year two. There was also a differential perception between acceptable use from established members and actual use. New members were actually exceeding the perceived norm. Furthermore, established members were consistently overestimating their perception of another peer's consumption as they felt that they did not consume as much. If provided with specific consequences, the established members' acceptance was lower. New members' acceptance was also the same. Yet, the difference was that actual drinking levels based upon consequences were different. Most of the individuals demonstrated symptoms of alcohol dependence. Overall perceived alcohol use was inconsistent with actual alcohol consumption.

between their own consumption and what the actual frequency is. While alcohol is used in the socialization of new members facilitated and perpetuated by chapter leaders, this self-selection into fraternities by heavy alcohol consumers is further enabled by the environment of the fraternity house or place of residence.

Alcohol in Other Contexts

Larimer, Anderson, Baer, and Marlatt (2000) examined residential students and their alcohol use. Fraternity, sorority, and residence hall students were compared to drinking rates and patterns, drinking-related problems, family history of alcohol problems, alcohol outcome expectancies, and high school drinking patterns. Results indicated residence in a fraternity was related to more frequent alcohol consumption and greater negative consequences even after accounting for family history, expectancies, and high school drinking rates. Family history of alcohol problems was only related to negative consequences for men. Only high school drinking rates were related to amount of alcohol consumed per occasion, for both men and women. Fraternity residence was found to be related to more negative consequences even after accounting for current drinking habits. However, sorority residence was found to moderate the relationship between current drinking and negative consequences. Both high and low drinkers in sororities indicated similar rates of alcohol-related negative consequences, whereas high frequency female drinkers in the residence hall sample reported significantly more problems. Similar results were found by Baer (1994) and Page and O'Hegarty (2006).

Baer (1994) studied individual perceptions of approval concerning alcohol consumption of first year students who reside in Greek, residential, and off-campus housing and also examined the frequency of drinking within Greek housing. Residential students reported that others would not care about their drinking every weekend. Greeks generally indicated that individuals would show mild approval about drinking every weekend, but showed moderate disapproval in drinking every day. Off campus residents showed strong disapproval for drinking every day. This survey further studied the

frequency of college student binge drinking in social groups and also examined the social norms surrounding the culture of alcohol use within the social groups with residential students and fraternity houses. Overall, Greek members were found to drink at least once or twice a week. Fraternity members were found to drinking almost three or four times a week in Greek housing. Their frequency of alcohol consumption was significantly higher than residential students who drank at least once or twice a week.

Page and O'Hegarty (2006) conducted a survey in all 34 sections of a general education core English class at a northwestern public university to investigate the relationship between residence and alcohol use patterns. Students living in fraternities, compared with males living in apartment complexes and residence halls, consumed more alcohol, engaged more frequently in heavy episodic drinking, and drank more when "partying." A similar pattern was true for females living in sororities relative to females students living in apartment complexes and residence halls. In most cases, social normative estimations were higher than reported use among those living in fraternities, sororities, residence halls, and apartment complexes. As hypothesized, social normative estimates of alcohol use were highest among students living in fraternities and sororities. Thus, it appears that social normative estimations of frequent and heavy drinking may contribute to alcohol use patterns, particularly among members of fraternities and sororities. These results demonstrate that students' choice of residence is a prevailing influence when it comes to drinking behavior. Beyond the confines of the fraternity house or residence hall, fraternity members have been examined in several other contexts and environments.

Glassman, Dodd, Sheu, Rienzo, Wagenaar (2010) conducted a study on the basis that alcohol use and the related consequences associated with college football games are a serious public health issue for university communities. This study defined alcohol consumption for the purposes of this study as consuming 10 or more drinks on game day for a male, and eight or more drinks for women. In the fall of 2006, college students ages 18 to 24 were randomly selected to complete the Game Day Survey.

Researchers utilized a cross sectional research design to collect data. Sixteen percent of the respondents engaged in extreme ritualistic alcohol consumption on game day, whereas 36 % drank five or more drinks (four or more for females). It was found that males, Caucasian, and Greeks (members of a social fraternity or sorority), and students of legal drinking age consumed alcohol at disproportionately high rates.

Zakletskaia, Wilson, and Fleming (2010) examined drinking behaviors and associated factors in students being seen in student health services for primary care visits from October 30, 2004, to February 15, 2007. Among one of the risk factors for at-risk drinking included living in or drinking at a fraternity/sorority house. Additional factors included young age, white males, and use of tobacco. Analyses were based on a Health Screening Survey completed by 10,234 college students seeking general medical treatment through student health services. Alcohol use was similar to other studies with 57% meeting the minimum National Institute on Alcohol Abuse and Alcoholism (NIAA) criteria for at-risk drinking.

Violence at fraternity house related to alcohol misuse at parties was examined by Menning (2009). This study investigated attendees' perceptions of possible danger cues in

party environments, how such perceptions may be linked to concern for personal safety, or variations in perceptions of personal safety at party environments according to gender or party type (i.e., fraternity vs. nonfraternity). The study utilized analyses of survey data to explore these issues. The findings suggest that (1) fraternity parties exhibit traits that may indicate greater danger, (2) some of these traits are linked to attendees' perceptions of personal safety, (3) men and women draw on different cues in making assessments of personal safety, but women feel no more threatened than men, and (4) the amount of alcohol consumed by other party attendees is not associated with perceptions of personal safety.

Fabian, Toomey, Lenk, and Erickson (2008), in a qualitative study, focused on the sources of alcohol obtainment and access. The researchers conducted focus groups with 19 underage college students. These groups discussed access to alcohol and related issues. They reported that alcohol is easy to obtain from a variety of sources, with friends/acquaintances who are of legal age or those with a false ID being the most common. Fraternity and sorority parties were also common sources, but "shoulder tapping" which involves asking a stranger to purchase alcohol) was not common. Further, it was inconclusive whether underage fraternity/sorority members have greater access to alcohol than non-Greeks.

In a study of 442 women and 341 men were surveyed at Panama City Beach,
Florida, to assess the effects of gender, age, fraternity or sorority membership, and travel
motivation on alcohol consumption and binge drinking during spring break by Smeaton,
Josiam, and Dietrich (1998). Fraternity or sorority membership was not associated with
higher levels of consumption. However, men reported that levels of alcohol consumption,

binge drinking, and intoxication to the point of sickness were significantly higher than the women. The mean number of drinks consumed the previous day was 18 for men and 10 for women; 91.7 % of the men and 78.1 % of the women had participated in a binge-drinking episode during the previous day. Respondents less than 21 years old consumed less alcohol and reported significantly lower frequencies of intoxication than those over 21.

Utilizing the free-pour experiment, White, Kraus, McCracken, and Swartzwelder (2003) asked students to pour an assigned amount into a cup. This study utilized three different types of drinks and asked different subsets of undergraduates to complete the experiment. On average students pour in about one-and-a-half times the normative amount as to what quantified a regular serving. Those in who defined Greek membership consistently overestimated what a "shot" was, what a "cup" of beer was, and also what a "mixed drink" was. Respondents usually doubled the normative serving size. Fraternity members comprised over half the sample. The high levels of overestimation show that fraternity members have poor associations with actual servings which indicate they may not actually know how much they drink.

Durkin, Wolfe, and Phillips (1996) found that nearly one-half of the respondents to a survey on fraudulent identification use indicated that they had engaged in this behavior. Students who belong to a fraternity or sorority were much more likely than other students to report that they had used a fake I.D. to obtain alcohol. Black students were much less likely than other students to indicate that they had engaged in this behavior.

Dinger and Parsons (1999) examined the prevalence of high-risk sexual behaviors among college students at a Midwestern university. Questionnaires using 12 sexuality items and several demographic questions from the National College Health Risk Behavior Survey were completed by 735 students aged 18 years or older who lived in residence halls or fraternity/sorority housing, most of this behavior involving alcohol. Results revealed that 86.3 percent of the students had experienced sexual intercourse, with students living in fraternity or sorority housing having more lifetime sexual intercourse partners and engaging in more sexual activity during the 30 days preceding the survey than students living in residence halls. Thus, residing in Greek housing is a strong correlate with increased sexual activity involving alcohol.

What is known from the research literature is that fraternities and sororities are a unique cohort within the spectrum of undergraduate student culture as they have established their own social norms that appear abnormal from the out-group perspective. There exists a culture of hazing from senior members to new members involving alcohol (Nuwer, 1999; Ellsworth, 2006; Sweet, 1999). They also consume heavy amounts of alcohol so much so that it is abused (Arnold & Kuh, 1992; Baer, 1994; Danielson et al., 2001; Kilmer et al., 1999; Kuh et al., 1996; Larimer et al., 2004; Tampke, 1990). This alcohol misuse is attributed to their liberal attitudes towards alcohol consumption and its associated negative effects such as promiscuity and impairing of academic achievement (Eberhardt et al., 2003; Elias et al., 1996; Goodwin, 1989; Kellogg, 1999; Larimer et al., 1997; McCabe & Bowers, 1996; Pace & McGrath, 2002; Tampke, 1990; Wechsler et al., 1996). They also impair academic performance during the period of probationary/associate membership and impair cognitive gains throughout the

undergraduate experience (Baier & Whipple, 1990; Carney, 1980a, 1980b; Grubb, 2006; Kuh et al.; McCabe & Bowers; Pascarella et al., 1996). Conversely, Greek organizations are also seen within the research literature for their ability to develop student leaders, establish community, provide increased psychosocial gains, and act as a basis for student retention (Abowitz & Knox, 2003; Adams & Kleim, 2000; Astin 1984, 1993, 1996; Beil & Shope, 1990; Fourbert & Grainger, 2006; Mathiasen, 2003, 2005; Moore et al., 1998; Nelson et al., 2006; Owen, 1998; Pike & Askew, 1990; Santovec, 2004; Slivinske, 1984; Terenzini et al., 1996). Therein lays the dichotomy of fraternities as they offer both positive and negative aspects to membership. The rich body of research literature provides campus-based professionals with little evidence of whether to support Greek letter organizations or not as it is many times a decision based upon institutional culture and best fit. However, if one wanted to support their existence the research literature indicates that change is difficult in fraternities because of their lack of response to interventions, programming, or participation in student services on campus.

Interventions and Programs

Thombs and Briddick (2000) examined the perceived lack of readiness among sorority and fraternity members to reduce their drinking. In a survey of 106 Greek students, only 25% report moving into stages that involve thinking about change or action to reduce their alcohol consumption. The authors proposed that research should assess the extent to which high-risk Greeks would use harm-reduction services.

Carter and Kahnweiler (2000) answered this call for further research and examined the efficacy of social norming on fraternity members. Social norming campaigns have been correlated with a decrease in reported consumption in the general

college population. Their study found that social norming has little or no impact among Greek students. The authors investigated and subsequently found three possible flaws in the application of the social norms strategy that may account for the failure to decrease binge drinking among fraternity men: (1) there is no predominant, healthy drinking norm in this population; (2) students are influenced more by people within their network than by others; and (3) binge drinking is the norm in this group and may serve to perpetuate the problem. The results by Carter and Kahnweiler are consistent with those of Cascarano (2007), Glider, Midyett, Mills-Novoa, Johannessen, and Collins (2001), and Far (1998) as no significant differences in alcohol consumption was demonstrated through use of any social norming approach with fraternity members.

Kilmer, Larimer, Parks, Dimeff, and Marlatt (1999) studied alcohol consumption at two specific intervals. This was done to ascertain what the drinking and perceptions were concerning Greeks before and after a restrictive alcohol policy was put into place. Before the policy fraternity members consumed approximately five drinks per occasion and sorority members consumed approximately three. This increased by one drink after the policy was put into effect. Fraternity members reported drinking less frequently after the policy was put into place but reported drinking more when they did engage in episodic drinking. This demonstrates that fraternities may decrease the frequency of their drinking according to campus policy; however they will increase the amount of alcohol they do consume when they do drink.

Wechsler, Kuh and Davenport (1996) compared binge drinking in members of Greek letter organizations and nonmembers. A national sample of 179 colleges was used to select 14,756 participants, who responded to a 20-page questionnaire to identify

whether students belonged to a Greek letter society, the extent to which they had experienced problems as a result of drinking, and whether they experienced any problems as a result of other students' drinking. Results from the study indicated that fraternity and sorority house environments seem to tolerate the dangerous use of alcohol and other irresponsible behaviors, that efforts to reduce dangerous drinking on college campuses appear to have little effect on members of fraternities and sororities, that fraternity and sorority members engage in binge drinking to a much greater extent than other students, and that there is little evidence to show that campus officials hold fraternity and sorority members responsible for their behavior.

In response to this, Hart (1999) found that fraternity/sorority advisors as well as campus professionals actively partnered with other offices, primarily the counseling office, to address alcohol misuse by Greek organizations. However, Hart also concluded that many times the choices that fraternity/sorority advisors as well as other campus professionals made regarding alcohol, resulted in a lack of consideration of environmental variables. It was advocated by Hart that national organizations must be more accomplished in addressing alcohol use by their undergraduate members. Findings by Hennessy (2000) provide face validity to the adminission of Hart.

Hennessy (2000) found that undergraduates were also lax in their enforcement of risk management policies. While application of policies varied between chapters, it was common that undergraduate students viewed the policies as unrealistic or impossible to enforce. This was especially true for in regards to underage members and that their restriction was an infringement on chapter activity. It was able believed that risk management policies were replaceable with common sense. The majority of practices

utilized by chapters included monitoring behaviors resulting from alcohol use instead of prevention of access to alcohol. It was concluded that risk management tended to be circumvented. The emphasis was on reducing risk through not getting caught, rather than stressing on the "letter" of risk management policies and following them as instructed.

With additional respect to risk-management as an intervention for high-risk dribking several national fraternities and universities have enforced a dry-housing mandate for their houses or living-learning communities. Crosse et al. (2006) and Hart (1999) found that dry housing efforts were ineffective. Hart (2000) specifically found that at one institution that instituted dry housing, fraternity and sorority members partied in the greater community instead of that their chapter house. This resulted in significant community issues and a public health burden on local law enforcement (Hart). Additional findings by Robinson (2007) reveals that it is possible to maintain dry housing, but not without significant challenges. An additional effort to facilitate alcohol awareness interventions within chapter houses has also shown low levels of efficacy (Savoy, 2007).

Larimer, Kilmer, & Lee (2005) pointed to a series of promising strategies for college alcohol abuse prevention in their review of individually-oriented prevention programs where they specifically noted: (1) cognitive-behavioral skills training that includes norms clarification and motivational elements; (2) brief motivational enhancement interventions; and (3) social norming programs that challenge alcohol expectancies are effective as interventions. Each of these program options has been evaluated in programmatic form and found to be useful among college students (Larimer et al., 2005). Moreover, brief motivational enhancement and cognitive-behavioral skills training have been found to be the most effective among fraternity members (Larimer,

Turner, Anderson, Fader, Kilmer, Palmer et al., 2001). When further examining these individually oriented programs they are cited to be highly effective (Larimer et al., 2001). These are programs with the greatest efficacy in creating sustainable behavioral and attitude change (Wall, 2006).

These are one-to-one or small group interactions that have limited economy of scale (Hunter & Mazurek, 2004; LaBrie, Pedersen, Lamb, & Quinlan, 2007; McNally & Palfai, 2003). Other formats such as individual brief screening and feedback have strong evidence of efficacy for heavy college drinkers, but are limited in their scale by resource intensity which is taxing due to the cost of staff needed to provide services (LaBrie et al., 2006; Lewis & Neighbors, 2006). These individually-focused intervention programs have been found to be resource intensive albeit effective, however; programs with high economy of scale have not.

Interventions or programs that have a greater economy of scale, such as social marketing and alcohol alternative events, have more mixed findings as to their impact as evaluation findings have not shown consistent evidence of alcohol-related behavior change (Perkins & Craig, 2006; Thombs, Dotterer, Olds, Sharp, & Raub, 2004; Wechsler et al., 2003). Efforts to shift policy or realize multi-faceted prevention programs across a college campus are difficult to implement and evaluate (Larimer et al., 2005). Multi-faceted programs that utilize a blend of techniques to include cognitive-behavioral approaches and social norming demonstrate varied empirical evidence of support (Larimer et al., 2005; Weitzman, Tobin, Lee, & Wechsler, 2004). Further, a campus imperative to proactively address fraternity and sorority member alcohol use is challenged by the lack of clear program and policy efforts that are broadly and effectively

implemented (Licciardone, 2003; Mitchell, Toomey, & Erikson, 2005; Werch, Pappas, & Castellon-Vogel, 1996).

What truly makes the majority of interventions, policies, approaches, or programs ineffective is that the competitive culture of the fraternal system, which is based on social reputation, has a strong relationship to alcohol. Larimer, Irvine., Kilmer, and Marlatt (1997) examined the relationship between chapter prestige and alcohol in a study of members of fraternity and sorority houses with reputations for high, average, and low rates of drinking. Participants were compared on measures of perceived house reputation, acceptability of high-risk drinking, and alcohol norms. Members of high-drinking houses viewed their social reputations more positively and heavy drinking as more acceptable than did members in houses with reputations for less drinking. Additionally, Alva (1998) found that alcohol was an important part of social activities that help to facilitate bonding and enhances social activity. This indicates that chapter prestige based on social reputation is connected to alcohol use.

This liquid culture of fraternities is demonstrated consistently within the research literature and the lack of readiness to change and deficient positive response to campus policies, programs, or interventions causes an imperative in that further research is needed to understand alcohol consumption by fraternities (Wall, Troxell, & Hazen, 2008). Further description of fraternity and sorority affiliated students as heavy alcohol users is portrayed throughout the media and supported by empirical inquiry. Alcohol is central to the fraternal experience as Workman (2001) concluded from a content analysis of fraternity drinking narratives reveals that alcohol is a core component of the fraternal experience for members as it is intractably involved in the socialization of new

members in hazing and by chapter leaders. Alcohol is so valued by fraternity members, that they cede social status to alcohol use (Larimer et al., 1997).

Although the American college fraternity was founded as a literary or academic society, it has evolved into a different organization. This addictive organization can simply be viewed as an automatic invitation to party (Arnold & Kuh. 1992; Borsari & Carey, 1999). While alcohol abuse is a problem for the entire college and university community, the percentage of use and abuse and binge drinking is greater in fraternity membership, both among members and pledges (Arnold, 1995; Kuh and Arnold, 1993). Thus, new variables need to be identified to aid in the development of targeted interventions that can seek to eliminate the social status of alcohol within fraternity chapters (Wall, Troxell, & Hazen, 2008).

Two such variables that have yet to be extensively explored are social desirability and alcohol expectancy. This use of alcohol for recruitment, socialization of new members, and sustaining of interpersonal bonds by fraternity members in the quest for prestige may facilitate an environment that creates distorted expectations and socially desirable behaviors.

Social Desirability

The impact of social desirability has long been recognized as a major factor influencing the outcome and threatening the validity of psychological measures (Marlowe & Crowne, 1961). Social desirability has been conceptualized as the subject's motivation to influence the responses based upon perceived situational demands or generally to present oneself in a favorable light. It has been defined as, "a need for social approval and

acceptance and the belief that this can be attained by means of culturally acceptable and appropriate behaviors" (p. 109). This may include the denial of symptoms or behaviors that are seen as undesirable and has been equated with the phenomenon of conformity. A low need for social approval is reflective of personal independence from the constraints of social norms (Crowne & Marlowe, 1960).

The Minnesota Multiphasic Personality Inventory (MMPI) utilizes items that statistically were shown to differentiate between normal persons producing abnormal profiles and those with genuine pathology. Drawn from the MMPI, the Marlowe-Crowne scale was developed to be a short measure of social desirability independent of overt pathology items. The items were constructed to reflect socially acceptable but improbable behaviors. Fifty potential items were rated by ten independent judges familiar with the social desirability construct. Items with a high rate of agreement between raters were retained. The items were further refined by administration to a sample of college students. Items with significant discrimination were retained, resulting in the final 33 items of the scale. Respondents are instructed to respond to statements indicating whether it is true or false as applied to them. Sample items include: "I have never intensely disliked anyone (T)" and "I like to gossip at times (F)" (p. 351). For each item the respondent answers in a manner reflective of socially desirable responding, they receive one point. The results yield a cumulative score, with higher numbers indicative of higher social desirability. The scale also revealed a significant correlation with previously developed social desirability measures and MMPI validity scales.

Since its development, the Marlowe-Crowne scale has been the primary measure of social desirability in psychological research (Reynolds, 1982). Based upon a principal

factor analysis, Reynolds (1982) recommended a 13 item short form (Form C) of the Marlowe-Crowne scale as a means to reduce participant burden without a dramatic decrease in reliability. Robinette (1991) further supported the use of this shortened version through significant correlations with MMPI validity scales. These correlations closely mirror the original findings for the full scale.

Items on the Marlowe-Crowne Social Desirability Scale were constructed to include self-presentation strategies which would tend to promote a positive impression (Ferrari, 2005). Social desirability responses tend to be strongest among participants with higher levels of education (Ferrari). This is due to their greater awareness of what constitutes an appropriate response (Ferrari). Therefore, the detection of social desirability has long been used as an indicator of validity of research findings (Crowne & Marlowe, 1960). However, it has been featured sparingly as a variable within research (Ferrari).

The importance of measuring social desirability lies in the notion that the participants in a study may seek to enhance their ego by reporting higher positive attributes on the questionnaires rather than answering completely truthfully (Paulhus, 1991). Paulhus (1991) further defines social desirability as the means by which a person attempts to look more favorably to others, by denying or not admitting to some flaws they may have. As such, assessing social desirability will permit assessment of whether the respondents are trying to portray themselves in an overly positive tone rather than a truthful manner.

Nederhof (1985) claimed that social desirability is one of the most common sources of bias affecting the validity of experimental and survey research findings. Social desirability is not inherently negative. While Crowne and Marlowe (1960) defined social desirability as the need to obtain approval by responding in a culturally appropriate and acceptable manner" (p. 352), Johnson, Fendrich, and Hubbell (2002) defined social desirability as, "the tendency for individuals to project favorable images of themselves while interacting socially" (p.1661). While most individuals strive to present themselves in a favorable manner when interacting with others it is when an individual's responses are strongly influenced by the need to obtain others' approval that social desirability can cause problems.

Social desirability is of particular concern when social norms identify a specific attitude as desirable and numerous individual actually hold a different attitude (Delamater, 1982). Responses to a measure are more likely to be falsified if the measure has high face validity, if the measured trait or behavior pattern is well understood by the general public, and if the trait has almost exclusively negative associations (Furnham, 1986).

Overall social desirability levels have decreased steadily among college students. In a meta-analysis of 241 studies comprised of a total sample of 40, 745 college students it was determined that social desirability has decreased since 1958 when the concept was first created by Marlowe and Crowne (Twenge, 2006). The average student in 2001 scored 62% lower on the inventory than an individual in 1958, which means that they have a 38% lower need for social approval (Twenge). It was concluded that this is representative to a larger societal trend of self-recognition and individualism amongst

members of the Millennial Generation (Twenge). When social desirability is measured in the context of alcohol use, the results reveal consistent findings.

Cox, Swinson, Direnfeld, and Bourdeau (1994) examined social desirability and the prevalence alcohol abuse in a sample of 84 clinical patients diagnosed with one of two anxiety disorders, social phobia or panic disorder. It was found that there was a negative correlation between social desirability and self-reports of alcohol abuse in male panic disorder patients. In male social phobia patients there was no such inverse relationship and the prevalence of alcohol abuse was much higher (47%). In female anxiety disorder patients these same patterns were not evident. These results suggest that when there is a strong relationship between self-reports of alcoholism and social desirability; the alcohol use may be minimized in regards to self-disclosure.

In two studies (N=391 and N=177), Davis, Thake, and Vilhena (2010) surveyed undergraduate students who reported that they had consumed alcohol in the past year through completed online confidential surveys. The findings indicate that there is a strong relationship between social desirability and self-reported consumption. Those with such that high self-impression report 20 to 33% less consumption and are about 50% less likely to report risky drinking. Further, those with indicated that high social desirability report 30-50% fewer acute harms following a drinking episode.

Within male undergraduates, social desirability can be applied to the theory of hegemonic masculinity. Theorists also purport that it is not the most common form of male expression, but it is the most socially endorsed (Peralta, 2007). While, not an empirically validated phenomenon, the theory states that men in specific competitive

subcultures, project and hold a favorable, culturally-based, idealized version of themselves or others and subscribe to a dominant construction of masculinity (Connell, 1995).

These cultural norms, within the practice of hegemonic masculinity, include assertiveness, subordination of women, aggressiveness, and self-reliance (Connell, 1987; Connell & Messerschmidt, 2005). These cultural norms, within men in contemporary Western societies, have been characterized as young, heterosexually active, economically successful, athletically inclined, and self-assured (Connell). These norms facilitate a demand characteristic that encourages conformity and institutionalizes these in-group norms with rites of passage (Kimmel, 2008). One specific group that has been specifically cited and indentified to engage in hegemonic masculinity is the college fraternity (Peralta, 2007).

It has been documented that fraternities engage in hegemonic masculinity through their use of recruitment advertisements as they have been found to celebrate idealized manhood and minimize women (Lapp, 2000). Furthermore, within fraternities, it has been theorized that by Peralta (2007) and Wechsler et al. (2000) that men belonging to male-dominated or male-centered social institutions increase the likelihood engaging in heavy episodic drinking. This is supported by the findings by McDonald (1994) in which marginalized men use alcohol to exert superiority over others who are prohibited from the same alcohol consumption, a practice of hegemonic masculinity. This phenomenon is demonstrated in the findings of the addictive organization framework by Arnold and Kuh (1992) in which pledges are restricted by alcohol consumption. Additionally supporting this are the sociological findings of Rogers (2006).

Rogers (2006) found that fraternity members create the image of hegemonic masculinity through identifying "Mr. Right" through recruitment, created attitudes and beliefs, and maintained the image of manhood. Attitudes and beliefs are established as they enter under a social contract in which old stereotypes are rejected and new ones are established through hazing and alcohol. Additionally, hegemony is maintained through competition between members and fraternities. Women engage in a dialectical relationship with fraternities and are utilized as tools to aid in the competition between fraternities. Negative reprisal occurs if the image is not maintained as this is perceived as a challenge to the masculine identity. Heterosexual rituals and paternalistic chivalry are also utilized to exacerbate the formation and reinforcement masculine identity of subordinate members (Rogers).

Additional findings are demonstrated specifically when men conform and engage in social desirable behaviors according to the standards of hegemonic masculinity. This is especially in certain in contexts involving alcohol as a form of gender expression (West, 2001). It has been found that men, especially those from a "blue-collar" socioeconomic background, consume beer as a compensatory masculinity (Hemmingsson et al. 1998; Janes and Ames 1989; Kaminer and Dixon 1995). This means that males respond to sexrole threat by exaggerating their masculinity.

This is additionally exemplified in male alcohol consumption narratives or "drinking stories." Evidence suggests that these personal narratives are a component of male identity formation and engagement in compensatory masculinity (Giles, 1999; Gough and Edwards, 1998; Moore 1990). These stories indicate that alcohol is an accepted component of male identity formation as Landrine et al. (1988) have suggested

that, "drunkenness may be an aspect of the concept of masculinity" (p. 705). Further depiction of excessive drinking in advertisements exclusively as men's activity provides face validity to this research (Ratliff & Burkhart, 1984). Quantitative studies additionally link alcohol misuse to masculinity (Boswell & Spade 1996; Capraro 2000; Cohen & Lederman 1995; Schacht, 1996). While these findings posit men, especially fraternity members, as engaging in socially desirable behavior according to a schematic framework of masculinity, there has been little research that has assessed levels of social desirability within fraternity members.

Accounting for social desirability would seem particularly important given that college students are typically well aware that drinking underage is illegal and that heavy drinking at any age is socially unaccepted (Maguire, 2010). While students feel that expressing concern about alcohol consumption would lead to negative evaluations from peers, individual students report that they would suffer negative consequences from frequent episodes of excessive drinking (Del Boca, Darkes, Greenbaum, & Goldman, 2004). There is a definite collective conscious among students about the negative effects of excessive drinking; however, there is still a culture of silence because they are afraid of negative peer evaluation (Weitzman, 2004). These social norms are nonexistent and not extremely prevalent within male social organizations or fraternities. Therefore social desirability is a potential covariate in explaining alcohol-related intentions or expectations (Maguire).

Alcohol Expectations

Alcohol expectancies have proven one of the strongest predictors of drinking behavior, holding other variables constant such as race, gender and socioeconomic status (Goldman, 1994; Goldman & Rather, 1993). The alcohol expectancy model suggests that knowledge about the relationship between alcohol consumption and specific outcomes is essential. An individual consumes alcohol because this behavior to result in the attainment of a desired outcome (Goldman, Brown, & Christiansen, 1987). Further, alcohol expectancy in childhood is predictive of drinking patterns in later years (Aas, Klepp, Laberg, & Aaro, 1995)

Much of the research has focused on the content of alcohol expectations based as either positive or negative. Brown, Goldman, Inn, & Anderson (1980) found the general belief was that alcohol is able to enhance a wide range of physical and social experiences. Four other dimensions or themes of expectancy emerged from their research which are more specific: an improvement of sexual behavior, increase of power and aggression, increase of social assertiveness, and reduction of tension (Brown et al., 1980).

Furthermore, the research has focused on the predictive utility of alcohol expectations. Predictors of alcohol expectancies have come from cognitive and social learning models of alcohol use (Palfai & Wood, 2001). Characteristics of alcohol expectations have best predicted drinker type, such as heavy and light drinker status (Goldman et al., 1999). Positive alcohol expectancies were those that reflected the more emotionally positive, arousing and reinforcing properties of alcohol consumption, such as feeling happy, social or sexually aroused. Alternatively, negative alcohol expectancies

typically included more emotionally negative and sedating effects of alcohol, such as feeling sick, sad or sleepy. Heavier drinkers have been shown to endorse more positive, arousing effects of alcohol consumption, while lighter drinkers endorsed more negative and sedating effects of drinking (Goldman et al., 1999).

Expectancies and drinking behavior were thought to maintain a reciprocal relationship, with one influencing the other, thus strengthening the relationship between alcohol expectancies and subsequent alcohol use (Aas, Leigh, Anderssen, & Jakobsen, 1998; Smith, Goldman, Greenbaum, & Christiansen, 1995). Heavy drinkers possessed strong associations between positive and arousing outcomes for drinking, while light drinkers displayed a looser association between drinking and positive outcomes (Rather & Goldman, 1994).

The measurement of alcohol expectancies has been primarily explicit and cognitive in nature (paper-and-pencil questionnaires) and has not accounted for the more automatic, emotional motivations rewards driving drinking behavior. The cognitive components to alcohol expectancy theory have long since been validated as individuals self-reported alcohol expectancies which have predicted drinking behavior. When positive expectancies were activated, drinking behavior was produced and free-associations to alcohol were correlated with drinking behavior (Goldman & Darkes, 2004; Reich & Goldman, 2005).

Alcohol expectancies are generally defined as a person's beliefs about the effects of consuming alcohol (Neighbors, Walker, & Larimer, 2003). The general construct of expectancy is used by several theories as a cognitive mediator of behavior (Darkes & Goldman, 1998; Leigh & Stacy, 1993). While expectancies can be positive (alcohol

makes me attractive) or negative (alcohol will make me sick), research has demonstrated that utilizing both positive and negative expectancies are important for predicting drinking behavior (Lee, Greely, & Oei, 1999; Leigh & Stacy, 1993; Stacy, Widaman, & Marlatt, 1990). Research has demonstrated that utilizing both positive and negative expectancies are important for predicting drinking behavior (Lee et al., 1999; Leigh & Stacy, 1993; Stacy et al., 1990). While the basic relationship between alcohol expectancies and drinking behaviors is well established, some studies have begun to examine the interaction of alcohol expectancies with other concepts.

Neighbors, Walker and Larimer (2003) found that the effect of alcohol expectancies may be more pronounced in individuals with lower levels of self-determination. An additional line of research has begun examining the differential impact of positive and negative expectancies on drinking behavior. When alcohol expectancy is applied to university students, high expectations of alcohol are revealed.

Reese and Friend (1994) examined the differences in expectations of alcohol use among black and white undergraduate male students. The findings suggested that white students held more positive expectancies than black students for physical/social pleasure, social assertiveness, and tension-reduction. Further, the role of expectancies as moderators of the relationship between ethnic status and alcohol consumption was partially supported.

LaBrie, Kenney, Migliuri, and Lac (2011) examined the relationship between sexual experience and various drinking measures in 550 incoming first-year college females. Sexually experienced participants reported stronger alcohol expectancies and

endorsed higher drinking motives. They also consumed alcohol more frequently and in greater quantities than sexually inexperienced participants.

LaBrie, Tawalbeh, and Earleywine, (2006) found that alcohol expectancies for social and physical pleasure and social enhancement were predictive adjudication in a sample of first-year university students. Furthermore, adjudicated students were found to hold more positive alcohol expectancies for social enhancement and social and physical pleasure than nonadjudicated peers. It was concluded that those students who believe that alcohol will affect their behavior and define outcomes in a positive way, drink alcohol more often and are thereby more likely to be adjudicated.

In a sample of first-time adjudicated college students, O'Hare, Sherrer (1997) found that expectancies of alcohol reinforced excessive drinking. Students with a greater belief that even moderate alcohol consumption can increase confidence in social situations or relieve tension, are more likely to report more serious social or emotional problems including depression, anxiety, family and other relationship problems, and negative feelings towards oneself. Those with higher expectancies of alcohol use regarding social assertiveness and tension reduction, are more likely to report more negative health effects of drinking including nausea and vomiting, spend too much money on alcohol or other drugs, operate a motor vehicle while under the influence, and are more to engage in problems with the law. Those with higher expectations of alcohol use also had a high expectancy of enhanced sexual pleasure from alcohol.

When the college population is disaggregated by gender, the results follow traditional gender roles and differences exist in regard to alcohol expectancy. These differences in expected outcomes from alcohol use may influence gender differences in

reactions to excessive drinking (Rauch & Bryant). Thus, females expect fewer positive outcomes and more negative consequences; they react in more restrictive ways toward excessive drinkers than males (Rauch & Bryant). Males, hold greater positive expectancies for drinking than females, would be more motivated to accept and encourage the drinking of others than females (Rauch & Bryant). This phenomenon is also supported by Thombs (1993).

Thombs (1993) differentiated problem drinkers from nonproblem drinkers in both males and females based on their AEQ-Adult subscale results. Problem drinkers were defined as those who frequently engage in excessive or heavy drinking. Women problem drinkers differentiated from other women nonproblem drinkers on three expectancy subscales: Global Positive Change, Relaxation and Tension Reduction, and Physical and Social Pleasure. Men problem drinkers differentiated from male nonproblem drinkers in regards to Relaxation and Tension Reduction, and Physical and Social pleasure. Further expectancy of alcohol use by male and female may be influenced partially by context (Carruthers, 1993). Young adult men have higher expectations of alcohol use in a socially facilitated context whereas young adult women have a higher expectation of increased alcohol use in the context of emotional pain (Thombs, Beck, and Mahoney, 1993).

Palfia and Wood (2001) examined the impact of expectancy strength and expectancy accessibility on drinking behavior and found strong associations between the two in college students. Expectancy strength refers to the intensity of a like or a dislike for alcohol, using a Likert scale (0=not at all to 4=a lot). Expectancy accessibility refers to the behavioral responses to alcohol which depends on the degree of association between alcohol use and expectancies about alcohol (Palfai & Wood, 2001). This study

was designed to examine some of the memory processes involved in expectancies effect on behavior. The researchers found that expectancy rating and expectancy associations significantly increased prediction of heavy drinking and alcohol-related problems As such the relationship between expectancy strength and alcohol frequency was stronger for individuals who associated positive outcomes with drinking behavior. Further, the strength of alcohol expectancies as a predictor of alcohol use depends on the accessibility of the expectancies. Students with more accessible positive expectancies would be more likely to drink when evaluating their drinking options (Palfai & Wood, 2001).

Social Desirability and Alcohol Expectancy in Fraternities

Strano, Cuomo, and Venable (2004) also studied student perceptions of alcohol consumption. Those who perceived no disapproval from close peers and were in a fraternity, were significantly more likely to engaged in binge drinking. Further, these same students were just as likely to binge drink more frequently than those who perceived their peers' disapproval or were not members of fraternities or sororities.

Therefore, positive expectations of alcohol predicted the degree to which students viewed drinking as a risk which additionally predicted their drinking behavior. This indicates further that behaviors might be related to membership in fraternal organizations.

According to Wall (2006) additional efforts to facilitate campus imperatives, taskforces, or social norms approaches have proved ineffective with fraternity members. Further, these approaches with high economies of scale have low efficacy in addressing the behavioral change sought by administrators when considering the issues of alcohol use by fraternity members (Wall). Those approaches which address alcohol use directly

on a targeted, individual chapter basis have shown the greatest promise in facilitating behavioral change as marked by a decrease in alcohol consumption.

The impact of an incentive intervention on college students' intoxication levels from alcohol consumption at fraternity parties was explored using a group-randomized trial. Intoxication was measured through the standard blood alcohol content scale (Glindemann, Ehrhart, Drake, & Gelle, 2007). Participants included 702 college students (447 men, 225 women) attending fraternity parties in Blacksburg, VA at Virginia Polytechnic and State University. Six fraternities were randomly assigned one of two groups, control or experimental. Each of these fraternities hosted two parties. The three fraternities in the experimental group hosted a baseline party first and then hosted an intervention party at which those having a blood alcohol concentration (BAC) level below 0.05 were entered in a \$100 cash lottery. The three fraternities in the control group hosted two control (non-intervention) parties. For the experimental fraternities, mean BAC levels were significantly lower at the intervention parties than the baseline parties and the percentage of partygoers with a BAC below 0.08 was significantly higher at intervention parties than at baseline parties.

Wall (2006) facilitated an evaluation utilizing a randomly assigned post-test design with 3,552 individuals in 340 chapters to examine differences between individuals who have and who have not received the educational curriculum AlcoholEDU.

AlcoholEDU is an alcohol education curriculum delivered via a web-based interfaced designed for traditional freshman students or judicially referred students. The outcome of the study supports that there is a modest population level-impact in knowledge about alcohol and a small reduction in overall consumption when the curriculum is delivered.

Further, the study supports the efficacy of the online curriculum for Greeks and its high economy of scale.

Larimer, Turner, Anderson, Fader, Kilmer, and Palmer (2001) conducted a program evaluation of a targeted intervention demonstrates the program efficacy in addressing the short-term harm associated with heavy college student alcohol use in fraternities. It was found this intervention was effective in reducing short-term harm (tertiary effects) associated with heavy episodic drinking. Larimer et al. (2001), along with Wall (2006) and Glindemann (2007), demonstrated that new programs or approaches can be effective in addressing alcohol misuse by fraternities.

Researchers need to determine further which educational programs significantly impact both student's expectations towards alcohol use and decreases in their alcohol consumption (Cummings, 1997). Developing the right educational program may increase the likelihood that these programs are employed at colleges and universities (Cummings, 1997). However, the identification of additional variables is needed to further inform and inspire the creation of additional intervention programs (Cummings, 1997).

Current Study

Alcohol has a storied historical relationship with the university. This love and hate relationship has been inexplicably exemplified within fraternities. As can be concluded from the research literature, the fraternity experience, whether as a member or as a leader, and the consumption of alcohol are very closely connected. While the fraternity was founded as more than a social club, it has evolved into an addictive organization that has become a predictor for increased alcohol use. While they are part of a larger national trend of collegiate student alcohol misuse, it remains that fraternities

also consume more than any other subculture of traditional undergraduate students.

As new members assimilate into the chapter that are exposed to a chapter culture that is ingrained in distorted expectations of alcohol use by current members. These new members meet or exceed these expectations and continue the cycle of alcohol abuse set forth by current members. Additionally, a lack of clarity of purpose causes ambiguity amongst interventions and a lack of response by fraternity members to programs further confounds interventions. This is possibly confounded by utilizing alcohol as a means for demand characteristics, hazing, and socialization.

The Marlowe-Crowne Social Desirability Scale is often used to identify participants who do not answer truthfully, or provide answers they thought were expected of them (Ferrari, 2005). This is a measure of need for social approval which indicates a level of conformity or accommodating behaviors. Researchers also understand that student's expectations and perceptions concerning their alcohol use strongly impact their alcohol consumption (Neimark & Conway, 1994). Alcohol expectations measured by the Alcohol Expectancy Questionnaire-Adult (AEQ-A) and was developed by Brown et al. (1987). It could be that social desirability, a need for social approval, influences expectations about alcohol.

These two potential variables may influence, together or individually, the abuse of alcohol in fraternity members. Researchers have stated that there is an urgent need to find effective programs which reduce alcohol consumption among college students (Moore, Soderquist, & Werch, 2005). New insights into the efficacy of educational programs by identifying potential new variables can lead to new, chapter-focused treatment approaches and interventions for alcohol abuse by fraternities (Neimark & Conway,

1994). This study explored social desirability and alcohol expectations in fraternity members utilizing the aforementioned measure and guide by several research questions.

These were:

Research Question 1:

Does social desirability as measured by the MCSD relate to alcohol expectancy as measured by the AEQ-A among fraternity members?

Hypothesis. It was hypothesized that a significant positive relation existed such that as social desirability increases alcohol expectancy also increased.

Research Question 2:

Do levels of social desirability as measured by responses on the MCSD and as measured by the AEQ-A total score and as measured by the AEQ-A subscales (e.g., Global Positive Changes, Sexual Enhancement, Physical and Social Pleasure, Social Assertion, Relaxation and Tension Reduction, and Arousal and Aggression) differ between pledges and active members?

Hypotheses. It was hypothesized that there was be a significant main effect for group membership (pledge v. member) and the dependent measures (AEQ-A and MCSD). It was further hypothesized that there was a significant differences between group membership (active v. pledge) and social desirability and the subscales of Sexual Enhancement, Social Assertion, and Physical and Social Pleasure on the AEQ-A. However, it was additionally hypothesized that there was no significant differences between membership (pledges vs. actives), and the subscales of Global Positive Changes, Relaxation and Tension Reduction, and Arousal and Aggression on the AEQ-A.

Research Question 3:

What is the relation between the AEQ-A subscale scores and social desirability as measured by the MCSD?

Hypotheses. It was hypothesized there was at least moderate positive correlation $(r= \ge 0.5)$ between social desirability and the various subscales of the AEQ-A. Additionally, was hypothesized that several of the subscales had at least moderate positive correlation $(r= \ge 0.5)$ between each another. Additionally, it was hypothesized that there was no statistical significance among several of the AEQ-A subscales and social desirability (r = < 0.5). For more information see Table 2.

Chapter III

METHODOLOGY

Introduction

The primary purpose of this chapter is to define and present the procedures and methodology employed in the study. Included in these procedures are sampling, instrumentation, data collection procedures, and data analysis. Employing these procedures assisted the researcher in examining the connection between alcohol expectations and social desirability among fraternity members.

Sample

Participants

The sample was comprised of male undergraduate students enrolled in colleges and universities who are current, actively participating members of male social fraternities. Actively participating members were defined as those who are probationary (pledges) or initiated members in good standing as denoted by active participation in chapter affairs. The sample was limited to those fraternity members whose chapters participate in a traditional "pledge" i.e. a new member education process consisting of rites of passage as defined by Arnold and Kuh (1992) and are members of fraternal organizations within the umbrella group of the North-American Interfraternity Conference. Therefore, the sample for this study excluded a number of other fraternal organizations and modern traditions.

Exclusionary Criteria

This sample was regulated to specific, narrow subpopulation and therefore, prohibited the inclusion of a number other fraternal groups to ensure a more homogenous,

representative sample. First, the sample was not be comprised of actively participating members who engaged in a nontraditional new member education or orientation process such as a four-year development program, mentor program, or training process in lieu of a traditional pledge process. Additionally, this sample did not include singular ethnic fraternities such as those within the umbrella national organizations within National Pan-Hellenic Council which is historically African-American, the National Multicultural Greek Conference which is traditionally Asian-American, the National Association of Latino Fraternal Organizations which is historically Hispanic, or the National APIA Panhellenic Association which is comprised of members from southeast Asian or the Indian subcontinent.

Further, the sample did not include those organizations that draw their membership from the female gender, i.e. sororities, which include local organizations and organizations belonging to the National Panhellenic Conference. The sample also excluded co-educational fraternal organizations, honor societies, service fraternities and sororities, and progressive fraternities whose membership is drawn from lesbian, gay, bisexual, transgendered, queer, or inquiring undergraduate students.

Instrumentation

This study utilized two standard measures to address the research questions. The first was be the Marlowe and Crowne (1964) Social Desirability scale (See Appendix A). The second was be the Alcohol Expectancy Questionnaire - Adult Version (AEQ-A) as devised by Brown, Goldman, Inn, and Anderson (1987; See Appendix B). Additionally, a researcher-designed, demographic questionnaire was also distributed (See Appendix E).

The Marlowe and Crowne Social Desirability Scale (MCSD; Marlowe & Crowne, 1964) is utilized to measure need for social approval. As originally developed, this measure conceptualizes social desirability as "need for social approval." This need for social approval, as conceptualized by the MCSD, is the tendency to report information that is colored by social desirability concerns which is as a personality trait which can be measured via the MCSD scale.

The MCSD defines a category of personality test items with two principal attributes: (1) a 'good-bad' (social desirability) dimension, and (2) relatively likely to be true of most people or untrue of most people. This measure contains 33 true-false items that describe both acceptable but improbable behaviors. For each statement, the participant marks a "true" or "false" answer to indicate whether or not they agree or disagree in relation to their own personality style. The personal endorsement of "good" items means claiming some very improbable features about oneself, and rejection of "bad" items entails denial of common human imperfections. A final score is determined by calculating the participant's answers with an answer key. Scores range from a minimum of 0 and a maximum of 33.

Based on the findings of previous studies, participants with higher MCSD scores were expected to have a higher need for social approval. The MCSD has been used widely across various contexts and has established a linear relationship between need for social approval and various experimental contexts. Studies have supported the MCSD's effectiveness and validity (Carstensen and Cone, 1983; Kozma and Stones (1987). Social validity of the MCSD has been established through research correlating the MCSD to

symptoms of poor mental health as well as substance abuse (Bradburn and Sudman, 1979; Gove et al., 1976; Klassen et al., 1975; Welte and Russell, 1993).

The Alcohol Expectancy Questionnaire-Adult (AEQ-A) was developed by Brown et al. (1987) to measure the reinforcing effects of alcohol consumption. The AEQ-A is a 120-item, forced choice (1=Agree or 2 = Disagree), self- report questionnaire assessing whether alcohol, when consumed in moderate quantities, produces specific positive expectancies. The AEQ-A provides a means of quantifying such expectancies. Scores range from a minimum of 0 to a maximum of 120 with higher scores on the AEQ-A indicating participants perceive alcohol as having increased positive effects. The AEQ-A has six subscales that emerge as factors: Global Positive Changes, Sexual Enhancement, Physical and Social Pleasure, Social Assertion, Relaxation and Tension Reduction, and Arousal and Aggression.

The Global Positive Changes of the AEQ-A subscale measures positive associations with alcohol use gained from expectations. The Sexual Enhancement subscale measures the expected gains of sexual pleasure gained from alcohol consumption. The Physical and Social Pleasure measures the expected positive associations from social interactions with others. The Social Assertion subscale measures the expectancy level of gregarious behavior from oneself associated with alcohol use. The Relaxation and Tension Reduction subscale measures the expectancy of a reduction in perceived or self-identified stressors associated with alcohol use. The Arousal an Aggression subscale measures the expectations of alcohol use associated with aggressive behaviors or stimulation. The six subscales show both internal consistency and test-retest

reliability. Concurrent validity and construct validity were also reported (Christiansen & Goldman, 1983; Brown, 1980).

The AEQ-A plays an integral part in the clarification of personally perceived outcomes from alcohol use, as related to the initiation and maintenance of alcohol use in college-age adults. Furthermore, this test assists in identifying factors involved in the process of transition to or persistence of problem drinking. It has validity as it has been used in both clinical and non-clinical settings (Cohen & Vinson, 1995).

The AEQ-A has been validated by Christiansen et al. (1989) and by Brown et al (1987). It has been found to guide prevention efforts for addiction risk in adolescents; and may be used to assign clinical resources based on expectancies endorsed (Christiansen et al., 1989). Further, the instrument has been validated for use with traditional undergraduate college students in both African American and White ethnicities (McCarthy, Miller, Smith, & Smith, 2001).

The researcher-designed demographic questionnaire sought to gain information about participant fraternity membership. The questionnaire simply ascertained their membership status, academic level, major, and leadership positions held. Questions pertained to membership status (e.g., pledge vs. active), number of semesters as a traditional full-time student (e.g., I year or two or less semesters, 2 years or 3 to 4 semesters, etc.), declared major (e.g., Health, Science, Art, Humanities, etc.), and level of leadership (e.g., President, Vice President, etc.). See Appendix E for additional information.

Sampling Procedures and Data Collection

Sampling Procedure

Due to the esoteric and seclusionary nature of fraternities as noted by Nuwer (1999) and Arnold and Kuh (1992), a special sampling procedure is necessary to gain access. A convenience sample was constructed utilizing a chain-referral sampling procedure drawn from an accessible population of fraternity members currently enrolled as undergraduates. Chain-referral sampling, also known as snowball sampling, is an intentional and purposive sampling strategy commonly used in qualitative research, particularly within ethnography (Creswell, 2007). It is utilized in quantitative research when a population is not readily accessible through traditional random sampling procedures or even stratified sampling where it is necessary to construct a representative, homogenous sample such as with fraternities (Patton, 2002). Utilizing an intentional sampling strategy such as chain-referral may result in a homogenous, representative sample.

The sampling plan for the study included the following steps:

- A complete frame of available social fraternities available for participating in the study was established. Fraternities was contacted and solicited for participation.
 Individual referrals for additional participants were also collected.
- Referral contacts were solicited and asked to participate and additional referrals were be collected.
- 3. Each of the fraternity members participating were classified into one of two groups, active member or pledge (new member). This provided the researcher

with two subsets of fraternity members for the purposes of this study's comparisons.

Data Collection

Data for this study was collected using descriptive survey techniques. The AEQ-A and MCSD were offered in both a traditional paper and pencil form and an online version to participants. Specific steps in data collection included the following:

- 1. Fraternity chapters and individual members were solicited to participate in the study and was contacted via e-mail or in writing. Participants were provided a link to complete an online version of the AEQ-A and MCSD. A pencil and paper form was offered as well to individual or groups of fraternity members who choose to participate. Each participant was provided with a brief description of the purpose of the study and asked to cooperate with the collection of the data for the study.
- 2. If participants take a paper and pencil form for data collection, the researcher met with the fraternity members and provide them with a brief explanation of the study, and explained the procedures for completion of the survey. Part of this procedural explanation included a guarantee of anonymity for both the active members as individuals and for the fraternity as an organization, the participant as an individual member, and of the university campus.
- 3. Additionally, a national staff member, chapter advisor, or senior member was present to encourage positive participation, so that participants did not falsely present information and addressed the phenomenon of hegemonic masculinity (Kimmel, 2008). This additionally addressed the presence of a "chapter"

contrarian" that may present adverse opinion about the value of participation.

The online version contained the same script to standardize administration and reduce demand characteristics. Other instructions given to the respondents which included information on anonymity as there were no individual identification numbers on the instrument.

- 4. Participants were informed that if they feel uncomfortable responding to any specific question(s) they have the option of leaving that question blank.
- Participants were informed that they have the option of declining to
 participate further in the study by informing the researcher at any point during
 data collection.
- 6. Participants completed an Informed Consent Form (See Appendix C). Once the informed consent form has been signed, the AEQ-A, the MCSD, and the demographic questionnaire was concurrently distributed to all of participants present if taking the paper and pencil form version or the online version.
 Participants agreeing to complete the online version completed the same assessment and asked to denote the same information in the demographic questionnaire. The concurrently distributed and completed instruments were collected and then stored in a private, secure envelope if completed via the paper and pencil form version. If the instruments were completed online, the data was downloaded and securely stored on a password protected sever to ensure its security and integrity.

7. Participants were debricfed utilizing a standard debriefing protocol (See Appendix D). This protocol was handed to all participants to reduce demand characteristics and standardize administration.

Research Design and Data Analysis

The research design for this project is a between-groups descriptive study evaluating the factors related to alcohol misuse and social desirability in members of fraternities. The measures used in this study lend themselves to parametric statistics including Multivariate Analysis of Variance (MANOVA) and bivariate correlation to answer the following research questions.

Research Question 1:

Does social desirability as measured by the MCSD relate to alcohol expectancy as measured by the AEQ-A among fraternity members?

Analysis and Hypothesis. A bivariate correlation analysis was performed to estimate the strength and direction of a potential linear relationship between alcohol expectancy based on participant responses totaled from the AEQ-A and social desirability derived from participant scores from the MCSD. It is hypothesized that a significant positive relation existed such that as social desirability increases alcohol expectancy also increased.

Research Question 2:

Do levels of social desirability as measured by responses on the MCSD and as measured by the AEQ-A total score and as measured by the AEQ-A subscales (e.g., Global Positive Changes, Sexual Enhancement, Physical and Social Pleasure, Social Assertion,

Relaxation and Tension Reduction, and Arousal and Aggression) differ between pledges and active members?

Analysis and Hypotheses. An analysis of variance (ANOVA) was be used to determine if there are any significant differences between the groups on the demographic variables of membership status (pledge v. active). If significant difference existed between the groups the variable was used a covariate for subsequent analyses. MANOVA was used to determine if there is a main effect for group measurement and scores on the MCSD, AEQ-A total score, and the six subscales of the AEQ-A. Levene's test for equality of variances was used to ensure that the parameters for MANOVA are not violated. It is hypothesized that there was a significant main effect for group membership (pledge v. member) and the dependent measures (AEQ-A and MCSD).

It is further hypothesized that there was significant differences between group membership (active v. pledge) and social desirability and the subscales of Sexual Enhancement, Social Assertion, and Physical and Social Pleasure on the AEQ-A. However, it is additionally hypothesized that there was be no significant differences between membership (pledges vs. actives), and the subscales of Global Positive Changes, Relaxation and Tension Reduction, and Arousal and Aggression on the AEQ-A.

Research Question 3:

What is the relation between the AEQ-A subscale scores and social desirability as measured by the MCSD?

Analysis and Hypotheses. Bivariate correlations were calculated to determine the strength and direction of a potential linear relationship between social desirability among the six subscales of alcohol expectations. As aforementioned, the six subscales of the AEQ-A are

Global Positive Changes, Sexual Enhancement, Physical and Social Pleasure, Social Assertion, Relaxation and Tension Reduction, and Arousal and Aggression. It is hypothesized there was at least moderate positive correlation ($r=\geq 0.5$) between social desirability and the various subscales of the AEQ-A. Additionally, it is hypothesized that several of the subscales had at least moderate positive correlation ($r=\geq 0.5$) between each another. Additionally, it is hypothesized that there was no statistical significance among several of the AEQ-A subscales and social desirability (r=<0.5). For more information see Table 2.

Conclusion

This chapter presented the methodology for this study. This is a between-subjects descriptive study utilizing the AEQ-A and the MCSD to address three research questions. Data analysis utilized a mix of analysis of variance, multivariate analysis of variance, and bivariate correlation to address each of the research questions.

Chapter IV

RESULTS

Introduction

The purpose of this study was to examine the role of alcohol expectations and social desirability by fraternity members on American college campuses. The main goals of this study were: 1) to determine if a relationship exists between levels of alcohol expectation and levels of social desirability among students who are members of social fraternities at four-year institutions in the United States, 2) to determine if alcohol expectations by fraternity members moderate their social desirability levels, and 3) to determine if differences exist in levels of social desirability and alcohol expectations between pledges (new members) and initiated (active) members. In addition, the results provide further knowledge about the possible existence between concurrent socially desirable behaviors and high expectations of alcohol use in fraternity members at four-year institutions in the United States. This chapter provides a summary of the study participants and the results of the of the analyses conducted for each of the research question and its associated hypothesis(es), testing the following:

Research Question 1:

Does social desirability as measured by the MCSD relate to alcohol expectancy as measured by the AEQ-A among fraternity members?

Hypothesis. It is hypothesized that a significant positive relation will exist such that as social desirability increases alcohol expectancy will also increase.

Research Question 2:

Do levels of social desirability as measured by responses on the MCSD and as measured by the AEQ-A total score and as measured by the AEQ-A subscales (e.g., Global Positive Changes, Sexual Enhancement, Physical and Social Pleasure, Social Assertion, Relaxation and Tension Reduction, and Arousal and Aggression) differ between pledges and active members in regards to academic level?

Hypotheses. It is hypothesized that there will be a significant main effect for group membership (pledge v. member) and the dependent measures (AEQ-A and MCSD).

It is further hypothesized that there will be significant differences between group membership (active v. pledge) and social desirability and the subscales of Sexual Enhancement, Social Assertion, and Physical and Social Pleasure on the AEQ-A. However, it is additionally hypothesized that there will be no significant differences between membership (pledges vs. actives), and the subscales of Global Positive Changes, Relaxation and Tension Reduction, and Arousal and Aggression on the AEQ-A.

Research Question 3:

What is the relation between the AEQ-A subscale scores and social desirability as measured by the MCSD?

Hypotheses. It is hypothesized there will be at least moderate positive correlation $(r \ge 0.5)$ between social desirability and the various subscales of the AEQ-A. Additionally, it is hypothesized that several of the subscales will have least moderate positive correlation $(r \ge 0.5)$ between each another. Additionally, it is hypothesized that there will be no statistical significance among several of the AEQ-A subscales and social desirability $(r \le 0.5)$. For more information see Table 2.

Sample

This study utilized several standard measures for data collection purposes. These measures were: the Marlowe and Crowne (1964) Social Desirability scale (MCSD), the Brown, Goldman, Inn, and Anderson (1987) Alcohol Expectancy Questionnaire - Adult Version (AEQ-A), and a researcher-designed, demographic questionnaire. These measures were all concurrently distributed to participants.

Utilizing the exclusionary criteria established in Chapter 3, a convenience sample was constructed through a chain-referral sampling procedure. A complete frame of available social fraternities available for participation in the study was established through contacting "gatekeepers." These gatekeepers provided access directly to the fraternity chapters. Members of the Association of Fraternity/Sorority Advisors were randomly contacted and an electronic mail advertisement was forwarded to the Fraternity Executives Association. Responses were communicated via telephone and electronic mail. An initial frame of 32 fraternities was established and solicited for participation. Through chain-referral methodology, the sample consisted of 13 chapters from 12 postsecondary institutions.

The sample is comprised of both private and public institutions in the Northeast, Midwest, and Southern United States. The sample is represented by Science-Technology-Engineering-Math (STEM), Liberal Arts, Art, Comprehensive, and Land-Grant institutions in rural, suburban, and urban environments. Student populations ranged between 1,000 and 35,000.

Participants

The sample consists of 99 pledges and 225 active members (n=324). Twenty-three surveys were disregarded and appropriately destroyed due to inaccurate response patterns or lack of completion. Table 3 shows a summary of the characteristics of the participants who completed the survey. Information includes membership status, academic level, undergraduate major, and highest level of leadership or responsibility. A report of means also appears in Table 4 with regard to differences and normative score ranges for both the AEQ-A and the MCSD.

Research Questions

Research Question 1

The first research question addresses the extent to which social desirability is related to alcohol expectancy among fraternity members. It was hypothesized that a significant positive relationship will exist such that as social desirability increases alcohol expectancy will also increase. In calculating the Pearson Product-Moment Correlation Coefficient, a weak correlation was found between social desirability as measured by the MCSD and alcohol expectancy as measured by the AEQ-A, r(322) = .255, p < 0.01. This indicates that socially desirable behaviors may influence expectations of alcohol use in fraternity members.

Research Question 2

The second research question asked if levels of social desirability, overall expectations of alcohol use, global positive changes, sexual enhancement, physical/social pleasure, social assertion, relaxation and tension reduction, and arousal/aggression differ between pledges and active members.

It was hypothesized that there would be a significant main effect for group membership (pledge v. member) and the dependent measures (AEQ-A and MCSD). A one-way multivariate analysis of variance (MANOVA) was conducted to determine if there were significant differences between the total AEQ-A score, MCSD, and the 6 subscales of the AEQ-A. Results from the one-way MANOVA reveal a significant main effect for member status, Wilks' Λ = .911, F(8, 315) = 3.868, p < 0.05. Levene's Test of Equality of Error Variances indicated significant violation of homogeneity of variance for the variables of AEQ- Global Change, AEQ – Physical and Social pleasure, AEQ – Social Pleasure, and AEQ - Total. Follow-up analyses for between group differences were calculated using the Mann Whitney U test for the variables that violated Levene's test.

It was further hypothesized that there will be significant differences between group membership (active v. pledge) and social desirability and the subscales of Sexual Enhancement, Social Assertion, and Physical and Social Pleasure on the AEQ-A. Moreover, it was additionally hypothesized that there were no significant differences between membership (pledges vs. actives), and the subscales of Global Positive Changes, Relaxation and Tension Reduction, and Arousal and Aggression on the AEQ-A.

Due to the significant main effect, univariate ANOVAs and the Mann Whitney U test were calculated as appropriate to determine which group difference(s) contributed to the main effect. A significant ANOVA for membership status was obtained for the AEQ-A subscale of Sexual Enhancement F(1, 322) = 5.023, p = 0.026, partial $\eta^2 = .015$. No significant differences were found for the AEQ-A subscales of, Relaxation and Tension Reduction, F(1, 322) = 2.463, p = 0.118, partial $\eta^2 = .008$, Arousal and Aggression, F(1,

322) = 2.380, p = .124, partial $\eta^2 = .007$ or for the MCSD total score F(1, 322) = .544, p = .461, partial $\eta^2 = .002$.

A Mann-Whitney U Test was calculated to determine if there were significant differences in the distributions between the pledges and active members for the AEQ-A total score and AEQ subscales of Global Positive Change, Physical and Social Pleasure, and Social Assertion. Significant differences were found for AEQ-A Global Positive Change, p < 0.001 and AEQ-A Total, p = 0.016. No significant differences were found for AEQ-A Social Assertion, p = .734, Physical and Social Pleasure, p = 0.449, as well as for the MCSD total score, p = 0.539.

The results of the Mann-Whitney U Test indicate that the two final null hypotheses must be rejected. Hypothesis 2 predicted significant differences between pledges and actives in levels of social desirability, Social Assertion, and Physical and Social Pleasure on the AEQ-A. Results were not significant. Therefore, the null hypothesis could not be rejected. However, the significant results of the follow-up ANOVA to the main effect of the MANOVA allowed the null hypothesis to be rejected for the variable of Sexual Enhancement.

Hypothesis 3 predicted that there were no significant differences between membership (pledges vs. actives) and the subscales of Global Positive Changes, Relaxation and Tension Reduction, and Arousal and Aggression on the AEQ-A. This hypothesis was confirmed for the variables of Relaxation and Tension Reduction as well as Arousal and Aggression. However, results of the Mann Whitney U test indicated a significant difference between the groups for the variable of Global Positive Changes in expectations of alcohol. Therefore, the null hypothesis was rejected. Additionally, the

Mann Whitney U indicated significant difference between the groups for the AEQ-A total scores.

Research Question 3

The third research question inquired into the relationship between the AEQ-A subscale scores and social desirability. It was hypothesized there will be at least moderate positive correlation ($r \ge 0.5$) between social desirability and Sexual Enhancement, Physical & Social Pleasure, Social Assertion, and Arousal and Aggression. It is further hypothesized that there will be no statistical significance among several of the AEQ-A subscales and social desirability ($r \le 0.5$) to include the MCSD and Global Positive Change as well as Relaxation & Tension Reduction.

It was also hypothesized that several of the subscales will have least moderate positive correlation (r≥ 0.5) between each another to include: (1) Global Positive Change with Sexual Enhancement, Physical & Social Pleasure, Relaxation and Tension Reduction; (2) Sexual Enhancement with Global Positive Change, Physical and Social Pleasure, Social Assertion, Relaxation and Tension Reduction, and Arousal and Aggression; and (3) Physical and Social Pleasure with Relaxation and Tension Reduction (See Table 2). A summary table of correlations appears in Table 5.

Relation of Variables as Predicted. In calculating the multiple Pearson Product-Moment Correlation Coefficients, significant relationships were found between the MCSD and the AEQ-A subscales of Sexual Enhancement r = .305, p < 0.001 and Arousal and Aggression r = .185, p < 0.001. The hypothesis, with regard to the MCSD was correct in predicting at least moderate positive correlation between social desirability and Sexual Enhancement and Arousal and Aggression, and was correct in predicting no

statistical significance with regard to Relaxation & Tension Reduction. Additional correctly predicted correlations included several AEQ-A subscales to one another.

It was correctly predicted that the AEQ-A subscale of Global Positive Change correlated to Sexual Enhancement r=.586, p<0.001, Physical and Social Pleasure r=.477, p<0.001, as well as Relaxation and Tension Reduction r=.468, p<0.001. It was also correctly predicted that the the AEQ-A subscale of Sexual Enhancement correlated to Physical and Social Pleasure r=.339. p<0.001, Social Assertion r=.410, p<.001, Relaxation and Tension Reduction r=.299, p<0.001, Arousal and Aggression r=.358, p<0.001. The hypothesis also predicted a relationship between the AEQ-A subscale of Physical and Social Pleasure to Relaxation and Tension Reduction r=.409, p<0.001.

Relation of Variables Not-Predicted. The hypothesis was incorrect in its expectation of a relationship between social desirability (MCSD) and Physical & Social Pleasure and Social Assertion. It was also incorrect in predicting a relationship between Global Positive Changes r = .304, p < 0.001.

The hypothesis was incorrect in expecting nonsignifigant relationships between the AEQ-A subscale of Global Positive Change to Social Assertion r=.607, p<0.001 and Arousal and Aggression r=.531, p<0.001. It was also incorrect in predicting nonsignifigant relationships between Physical and Social Pleasure correlated to Social Assertion r=.574, p<0.001 and Arousal and Aggression r=.320, p<0.001. This was also the case for the AEQ-A subscale of Social Assertion correlated to Relaxation and Tension Reduction r=.544, p<0.001 and Arousal and Aggression r=.358, p<0.001 as well as the AEQ-A subscale of Relaxation and Tension Reduction correlated to Arousal

and Aggression r = .247, p < 0.001. A summary table of hypothesis results for research question 3 appears in Table 6.

Conclusion

This chapter presented the analyses of the data or the correlation and MANOVA findings. This sample is represented by 13 chapters from 12 postsecondary institutions characterized by land-grant, art, STEM, comprehensive, as well as liberal arts colleges and universities. The sample consisted of 99 pledges and 225 active members (*N*=324).

Research questions one and two examined the relations between social desirability as measured by the MCSD and expectations of alcohol as measured by subscales and total scores from the AEQ-A. Findings indicate that a statistically significant relation exists between social desirability and expectations of alcohol. This research suggests that at least moderate levels of conformity are related to increased expectations of alcohol in fraternity men. In particular, significant differences were found between pledges and active members in regards to expectations of alcohol use.

Differences in expectancies were based on overall affirmative gains (Global Positive Change) and aggrandizement of sexual ability (Sexual Enhancement). The hypothesis for research question one was correct. The hypotheses for research question two was correct in predicting a main effect on the dependent variable of AEQ-A scores, but was incorrect in determining differences in expectations of alcohol as measured by the AEQ-A subscales.

Research question three inquired into the relationship between social desirability and AEQ-A subscale scores. Weak positive correlations were found between social desirability and overall gains (Global Positive Changes), sex (Sexual Enhancement), and

belligerence (Arousal and Aggression). Overall gains from alcohol use (Global Positive Change) was at least moderately associated with all 5 other subscales of the AEQ-A including a strong positive association with socialization (social assertion).

Increases in sexual ability associated with alcohol (Sexual Enhancement) demonstrated weak positive relation with delectation (Physical and Social Pleasure), belligerence (Arousal and Aggression), and stress reduction (Relaxation and Tension Reduction), but a moderate positive relation with socialization (Social Assertion).

Delectation (Physical and Social Pleasure) demonstrated weak positive relation with belligerence (Arousal and Aggression), moderate positive relation with stress reduction (Relaxation and Tension Reduction), and a strong positive relation to socialization (Social Assertion).

Socialization (Social Assertion) as an alcohol expectancy was moderately correlated to stress reduction (Relaxation and Tension Reduction), and demonstrated a weak positive relation with belligerence (Arousal and Aggression). Stress reduction demonstrated a weak positive correlation to belligerence (Arousal and Aggression). The hypothesis failed to predict a majority of the positive associations.

This research suggests that conformity may influence alcohol expectations related to overall gains, confidence in sexual ability, and belligerence in fraternity members. This indicates that socially desirability behaviors may increase when alcohol expectations are established based on overall positive gains, sexual enhancement, and aggression. Further, this research also suggests expectations of socialization at least moderately influence other expectations regarding sexual enhancement and physical and social pleasure from alcohol use. Therefore, this indicates that alcohol expectancies related to socialization is a

key determinant in influencing how fraternity members believe alcohol will enhance their sexual interactions and what physical and social pleasure alcohol will provide for them.

However, it is essential to recognize that this study does not imply a cause-effect relationship between social desirability and expectations of alcohol use among pledges and actives in American college fraternities.

Chapter V

DISCUSSION AND CONCLUSION

Introduction

Chapter one provided an overview and background information for this study, including a statement of the problem, its significance and purpose, definition of terms, research questions and their associated hypotheses, limitations, and assumptions. Chapter two presented the history of fraternities, alcohol policy in the United States as they relate to colleges, and the literature related to fraternities and alcohol misuse. Chapter three outlined the design of the study, including its mythology, data collection procedure, and data analyses. Chapter four distilled the results of statistically significant outcomes from the data analyses. This final chapter provides a summary, interpretation of the study outcomes, and provides implications for practice as well as presents limitations of this study and suggestions for future research in the area of alcohol misuse by fraternity members.

Summary of the Study

This study explored the possible relationships between social desirability and expectations of alcohol in fraternity men. It also explored the differences in social desirability and expectations of alcohol between pledges and active members. This study was limited to fraternity chapters that employ a traditional pledge process and to those national fraternities that belong to the National Interfraternity Conference as this represents the majority of fraternity members. Exclusionary criteria included service, academic, ethnic, sectarian, and female collegiate fraternal organizations. It also excluded

those fraternities that do not utilize a traditional pledge process. Data was gathered through a chain-referral methodology to address access issues in sampling fraternity men.

The study sought to answer the following research questions:

Research Question 1:

Does social desirability as measured by the MCSD relate to alcohol expectancy as measured by the AEQ-A among fraternity members?

Hypothesis. It is hypothesized that a significant positive relation will exist such that as social desirability increases alcohol expectancy will also increase.

Research Question 2:

Do levels of social desirability as measured by responses on the MCSD and as measured by the AEQ-A total score and as measured by the AEQ-A subscales (e.g., Global Positive Changes, Sexual Enhancement, Physical and Social Pleasure, Social Assertion, Relaxation and Tension Reduction, and Arousal and Aggression) differ between pledges and active members in regards to academic level?

Hypotheses. It is hypothesized that there will be a significant main effect for group membership (pledge v. member) and the dependent measures (AEQ-A and MCSD).

It is further hypothesized that there will be significant differences between group membership (active v. pledge) and social desirability and the subscales of Sexual Enhancement, Social Assertion, and Physical and Social Pleasure on the AEQ-A. However, it is additionally hypothesized that there will be no significant differences between membership (pledges vs. actives), and the subscales of Global Positive Changes, Relaxation and Tension Reduction, and Arousal and Aggression on the AEQ-A.

Research Question 3:

What is the relation between the AEQ-A subscale scores and social desirability as measured by the MCSD?

Hypotheses. It is hypothesized there will be at least moderate positive correlation $(r\geq0.5)$ between social desirability and the various subscales of the AEQ-A. Additionally, it is hypothesized that several of the subscales will have least moderate positive correlation $(r\geq0.5)$ between each another. Additionally, it is hypothesized that there will be no statistical significance among several of the AEQ-A subscales and social desirability $(r\leq0.5)$. For more information see Table 2.

Pearson Product-Moment Correlation Coefficient was used to investigate to relationships in questions one and three. A MANOVA and a Mann U Whitney Test were utilized to compare group differences for the second question. Results were considered significant at the p < 0.05 level for the MANOVA and p < 0.01 level for the correlations.

Major Findings

The findings of study demonstrate the "liquid culture" of traditional fraternity chapters. This liquid culture is encompassed by distorted expectations of alcohol as found by this study. Pledges and active members demonstrated extremely high expectations of positive gains from alcohol use, which indicates that these expectations are abnormal and therefore distorted in-group norms relegated to fraternity men. Pledges had slightly higher expectations of alcohol than active members.

Expectations of alcohol use by fraternity members suggest that overall expectations are positively correlated to notions of sexual aggrandizement, belligerence,

socialization, stress reduction, and delectation from alcohol use. Moreover, expectations of alcohol based on socialization are at least moderately related to ideas of delectation, stress reduction, and increases in sexual ability. Therefore, this study has found that fraternity members believe that alcohol use will ensure they will perform better sexually, provide social stimulation, and reduce stress. This indicates that alcohol expectancies related to socialization is a key determinant in influencing how fraternity members believe alcohol will enhance their sexual interactions and what hedonistic pleasures, both physical and social, alcohol will provide for them.

These expectations for alcohol may encourage members to engage in socially desirable behaviors. This research suggests that at least moderate levels of conformity are potentially related to increased expectations of alcohol in fraternity men. Findings indicate further that a statistically significant relationship exists between social desirability and expectations of alcohol. Positive relations were found between social desirability and alcohol expectancies of overall gains, sexual aggrandizement, and belligerence. This suggests that members are conforming through engaging in socially desirable behaviors in their beliefs that alcohol use will increase their sexual ability and aggression levels as well as provide an overall positive experience. Potentially this indicates that members are engaging in behaviors that would demonstrate increased aggression towards others, self-present increased intoxication levels, and increased confidence in social interactions with identified sexual partners when around other fraternity members.

Particularly, this study found between-group differences in pledges and actives which indicated that pledges have higher levels of conformity than active members who

additionally have moderate levels of conformity as measured by the MCSD. This study found that pledges are engaging in socially desirable behaviors at a statistically significant higher level than active members.

Differences in expectations of alcohol were found between pledges and actives in regards to overall affirmative gains and aggrandizement of sexual ability. Pledges demonstrated higher levels of conformity through social desirable behaviors specifically within these areas. Thus, fraternity membership encourages conformity based on notions of increased sexual ability and overall positive experiences from on alcohol use.

Implications

Implications for Fraternity/Sorority Advisors

On a broader level, this study revealed that fraternity men, both active and pledge members, demonstrated abnormal in-group expectations of alcohol. Moreover, it further demonstrated that members also conformed towards these expectations. Specifically pledges demonstrated high levels of conformity among fraternity members. These findings are consistent with other similar research (Cashin et al., 1998; Danielson et al., 2001; Gurie, 2002).

Fraternity/Sorority Advisors as campus-professionals and those staff members that hold employment as inter/national office staff both support fraternities. As a campus-based or headquarters based professional, these roles must interface with the negative consequences of fraternity member alcohol use (Hart, 1999). More specifically, fraternity/Sorority advisors must consistently cope with the negative impact of alcohol

misuse related to hazing, crime, and other tertiary effects (Hart). Using the broader findings from this study, several applications can be applied.

As fraternity/sorority advisors cope with alcohol misuse by fraternity members and manage response to its tertiary impact, they should strongly consider infusing the findings from this study. Fraternity/sorority advisors should implement skills-based trainings utilizing the harm-reduction model which have been found to be effective in tempering expectations and reducing harm as aforementioned (Wall, 2006). Within the curricular framework trainings the culture of conformity towards expectations of alcohol by fraternities can be addressed.

As alcohol expectations are predictive of actual consumption, then fraternity/sorority advisors should additionally target pledges as their expectations of alcohol and conformity levels were significantly higher than those of active members. Fraternity/sorority advisors should have special developmental programming to address the needs of this within-group population of fraternity members. Therefore, a new member forum or a mandatory series of programs should be offered for pledge-level members of fraternities. Those advisors facilitating should choose be cognizant that health education programs and intervention programming has been unsuccessful in fraternity housing (Savoy, 2007).

Fraternity/sorority advisors should also consider utilizing parents as a partner within higher education. Given that this study found high levels of conformity influenced by distorted expectations of alcohol, parents can be a utilized an intervention to temper alcohol expectancies and stress interdependence (Chassin & Handley, 2006). Parental

notification regarding alcohol violations has been found to reduce recidivism among offenders of underage drinking (Lowery et al., 2002; Reisberg, 1998). However, parents can be an even more effective partner in addressing problematic alcohol use among college students (Chassin & Handley; Sessa, 2005). The level of communication between the student and parent is a key determinant regarding the effectiveness of parental intervention in addressing problematic alcohol use (Turrisi et al., 2001).

Therefore, fraternity/sorority advisors could send a letter home to parents of newly affiliated pledges welcoming their student to the fraternity/sorority community. The letter should include information about the community as well as websites and contact information for resources on campus their student can access if they need additional support as they transition into the fraternity/sorority community. Fraternity/sorority advisors should also partner with health education offices, counseling centers, and senior student affairs officers to produce a number of other necessary reforms for fraternities based on the findings from this study.

Implications for Health Education Professionals

Health education professionals assume a significant role and responsibility in combating alcohol misuse by fraternity members (Hart, 1999). Health education professionals continually must address alcohol misuse by fraternities as their members are the highest consumers of alcohol on college campuses (Weschler et al., 1994). Results from this study can also be utilized to facilitate supplemental interventions by health education professionals for fraternities.

In this study, not only did members demonstrate extremely high expectations, but they had overall positive expectations that alcohol will provide a positive, beneficial experience. Findings from this study further indicate and support the notion that alcohol will provide social and sexual benefits. Fraternity members in this study also exhibited conformity towards expectations of sexual aggrandizement or increased belief that alcohol will enhance their sexual ability.

These expectancies are especially potentially dangerous, given that fraternity members are the less likely to utilize student health services and receive treatment for sexually-transmitted diseases or other sexual health concerns as compared to other student populations (Zakletskaia et al., 2010). Therefore, it is suggested that sex education is extremely necessary for fraternity members given the findings from this in study where a positive attribution was made by fraternity members between alcohol and sex.

The findings from this study further underscore and reinforce the reality that fraternity men need continued and targeted efforts by health educators to address sex. Fraternity members hold that alcohol use will increase their sexual prowess, which they believe will ensure sexual interaction with an identified partner. Sexual assault prevention program efforts already often target fraternity men (Choate 2003; Larimer et al., 1999). However, it is with good reason as fraternity men are more likely than other male college students to be sexually coercive (Boeringer, 1999; Boeringer, Shehan,& Akers, 1991; Garrett-Gooding & Senter, 1987). They are additionally responsible for a large number of gang rapes on college campuses (O'Sullivan, 1991). These data from this study further demonstrate that such efforts are continually needed as fraternity members are unsure of

consent as fraternity members describe ambiguity in defining consent in alcohol-related sexual encounters (Foubert, Garner, & Thaxter, 2006). Targeted interventions that address the short-term harm associated with frequent heavy alcohol consumption and unsafe sex practices have been found to be effective (Hunter & Mazurek, 2004). Health educators must additionally address socialization as an alcohol-expectancy.

Socialization as an expectancy in alcohol by fraternity members is also a key finding by this study. This phenomenon of fraternity members consuming to increase social contact with fellow students as peers demonstrates the liquid bonding construct established by Kuh and Arnold (1992) and is consistent with the findings of previous research (Collins, Parks, & Marlatt, 1985). Furthermore, socialization is being utilized as a method for the orientation of pledges into the liquid culture of fraternities as found by this study given its statistical significance. Furthermore, pledges are exceeding expectations of active members. This cultural phenomenon has also confounded previous interventions. The distorted expectations of alcohol that cede social status to alcohol can further confound these interventions as well (Cashin, Presley, & Meilman, 1998; Kuh & Arnold, 1993; Plucker & Teed, 2004; Thombs & Briddick, 2000).

Fraternity members do not respond to social norming (Carter & Kahnweiler, 2000; Cascarano, 2007; Far, 1998; Glider et al., 2001), policies (Kilmer et al., 1998; Larimer et al., 2004), as well as alcohol-free alternative events, campus campaigns addressing alcohol misuse, or community efforts (Wechsler et al., 2004). Future programs should consider socialization as a key factor in fraternity alcohol use. It is possible that only individually orientated programs with fraternity chapters maybe effective in addressing socialization as an alcohol-expectancy. Such chapter-focused

programs have been found to be effective (Larimer et al., 2001). Moreover, some programs have demonstrated promise in addressing alcohol misuse, specifically in regards to short-term harm associated with heavy episodic or binge drinking (Wall et al., 2008).

Personal skills trainings are effective with fraternity members (Baer et al., 2001; N1H, 2002; Trockel et al., 2008; Wechsler et al., 1998; Wechsler et al., 1994).

Additionally, incentive programs have also been found to be effective (Glindemann, Ehrhart, Drake, & Gelle, 2007) as has self-pacing (Wall, Reis, & Burcau, 2006).

Additionally, discussing fraternity member alcohol consumption and its negative impact on their peers additionally has shown promise (Trockel et al., 2003). Several studies suggest that brief interventions focusing on chapter leadership can facilitate lasting behavioral changes in alcohol misuse among college students (LaBrie, Pedersen, Lamb, & Quinlan, 2007; Larimer, Turner, Anderson, Fader, Kilmer, Palmer et al., 2001; Larimer, Kilmer, & Lee, 2005; McNally & Palfai, 2003).

These chapter-specific or individually-focused brief interventions do not address the individual differences that exist between members because they assume homogeneity amongst fraternity members. However, the data from this study supports the existence of homogeneity among fraternity members as demonstrated by the high levels of conformity.

As aforementioned, only individually orientated programs with a low economy of scale such as brief interventions reviewing alcohol consumption or personal skills training have been found to be effective with fraternity members in reducing harm. These interventions address socialization as an alcohol-expectancy which is predictive of

pattern of alcohol consumption. Utilizing a social skills approach in consideration of the findings from this study will address expectations of alcohol connected to socialization and will provide a more relevant, situated-learning experience for fraternity members.

Implications for Counselors

Counselors work frequently with fraternity members individually as clients and frequently with fraternity/sorority advisors to address alcohol use (Hart, 1999).

Moreover, this study reveals several salient findings that can be incorporated into practice by counselors. These findings pertain to notions of gender and conformity.

Individual fraternity members self-select into chapters that exhibit similar alcohol consumption patterns (DeSimone, 2009; Juth et al.; 2010; O'Connor et al., 1996; Park et al., 2009). Park et al. determined that personality traits of impulsivity, extraversion, and neuroticism were commonly associated with this self-selection. Socially desirable behaviors are positively related to extraversion and neuroticism (Marlowe and Crowne, 1960). This study informs the research current research related to specific personality variables, given that this study found higher levels of conformity in pledges than in actives, but overall found high levels of conformity. This outcome from this study reveals, when informed by additional research, that socially desirable behavior may concurrently occur with behaviors of extraversion and neuroticism. Counselors should consider addressing this with their clients who may have fraternity affiliation.

This study also found that high levels of conformity were present in active members as were high expectations of alcohol which is consistent with the findings of Davis et al. (2010). This could potentially be a developmental issue for this population of

students. It could be that the fraternity acts an insulator or a cocoon. Individual members are insulated from their indoctrination until graduation. This membership is linear and is not developmental. Furthermore, it was found that almost half of men held no leadership position and almost all pledges had no leadership position (See Table 3).

There are no points in which members are allowed to transition to different developmental points as the fraternity culture encourages the same hegemonic ideal based on alcohol as a compensatory masculinity. Results from this study found that social desirability was higher for pledges, and remained the same for actives throughout their collegiate experience as there were no differences in levels by academic status (See Table 7). Fraternity members are engaging in socially desirable behaviors even through even their fifth year of college (See Table 8). Fraternity members are conforming to expectations through socially desirable behaviors, especially those based on alcohol, throughout their college experience. Capraro (2004) has hypothesized that this conformity towards expectations is socially constructed.

The social constructivist approach towards fraternity member development is consistent with the Male Sex Role Identity paradigm (Pleck, 1981). Male Sex Role Identity is based on the underlying assumption that masculinity and femininity are psychological states that are learned. Those males who not have a fully developed sex role identity or is incongruent, exhibit negativity toward women, display hypermasculinity to hide securities, develop initiation rites, have academic difficulty, and have challenges related to mental health (Pleck). This paradigm appears to accurately describe fraternity members based on the findings of this study with regards to expectations of alcohol and conformity. This "Peter Pan Syndrome" is perpetuated by fraternities and

causes developmentally stunted men who are ill prepared to transition into the workplace or into graduate school as they graduate from their undergraduate institution.

This study found that fraternity members conform towards expectations regarding belligerence as an expectation of alcohol use. This finding is consistent with previous research indicating that alcohol use can be considered a compensatory masculinity (Giles, 1999; Gough and Edwards, 1998; Moore 1990). Therefore, conformity towards aggression as an alcohol-expectancy is merely a method to express one's masculinity.

Based on the findings of this study, it is suggested that counselors and other mental health professionals should be conscious of the developmental levels of fraternity members and have a fundamental understanding that they possibly are stunted through their organizational affiliation to help avoid the "Peter Pan Syndrome." In working with fraternity men, counselors should understand that in public men may engage in superficial behaviors (social desirability) in order to appear as if they are meeting the expectations of masculinity. Moreover, they are performing "masculinity" (Kimmel, 2004). However, these same fraternity men will exhibit more authentic behaviors when alone with others, such as girlfriends or adult mentors (Edwards & Harris, 2009; Kimmel, 2008). Counselors may see this dichotomy when interacting with their fraternity member clients at on-campus events versus in the confines of their office.

Implications for Senior Student Affairs Officers

Senior student affairs officers, Deans of Students and Vice Presidents on American campuses, must weigh carefully the value of fraternities on institutional resource in association with their institutional liability. This study finds that alcohol expectancies by fraternity members are based on overall gains, sexual aggrandizement, and belligerence and that members are engaging in socially desirable behaviors.

Furthermore, this study found that pledges have higher expectations and are engaging in socially desirable behaviors at levels higher than active members, this indicates they are exceeding expectations of alcohol use, given that expectations of alcohol are predictive of actual consumption. This provides senior student affairs officers, as higher education decision-makers, very little evidence to support their continued existence. However, there is a possible remedy to allow fraternities to remain.

The crux of the challenge to fraternities is that, as found by this study, alcohol use is strongly tired to notions of socialization. This socialization through alcohol use is rooted in the pledge system as this study as also demonstrated by the statistically significant between-group differences in this study. This is consistent with the findings of Larimer et al. (2004) and Allan and Madden (2008) with regards to alcohol use by pledges as a rite-of-passage into membership or for hazing practices. This system of new member education has become a burden on the fraternity/sorority community and faces many challenges that include hazing and alcohol misuse (Campo, Poulos, & Sipple, 2005).

In all the studies on alcohol and fraternity membership cited by this study, not one of those studies contained a sample comprised of non-pledging chapters. Therefore, the research has demonstrated since the 1980s that fraternities and alcohol are strongly connected in fraternity chapters that operate on pledge model. This study had similar findings. Based on these findings, senior student affairs officers should strongly consider eliminating the pledge system at their institutions.

At the time of the authorship of this dissertation, after the death of a pledge from a fraternity hazing incident, Cornell University banned pledging at the institution under a decree from President David Skorton. Cornell will become the first institution to formally ban the pledge system for both fraternities and sororities. In its wake, several alternative constructs have emerged for fraternities that have done the same in eliminating the pledge system.

Alternative constructs exist for educating new members into fraternities. One such program is the Balanced Man Program as developed by Sigma Phi Epsilon. In this system, new members receive full equal rights and must engage in multi-step developmental experience over that collegiate tenure as an undergraduate to earn rights to serve as an officer and a full-member. This is a self-initiated, individually oriented process as members interface with rites-of-passage through each stage. They receive a mentor as well as leadership programming and learn the history and ethos of the fraternity through the duration of membership into their senior year.

While no formal program evaluation has yet to occur regarding the Balanced Man Program, outcomes that have been established include a minimum 3.0 composite grade point average for program participants, momentous reductions in hazing, significant decreases in risk management issues by chapters, and lower insurance costs for individual members (Eberly, 2009). Similar efforts to replicate these outcomes have been initiated by large fraternities such as Lambda Chi Alpha and Theta Chi as well as smaller fraternal organizations such as Tau Delta Phi. If there are alternative constructs to recruit and initiate new members into a collegiate fraternal organization, then senior student affairs

officers should consider these a method as Cornell University has to reduce conformity and distorted expectations of alcohol use which can lead to many institutional liabilities.

Limitations and Directions for Future Research

Several limitations exist in this study and are aforementioned in previous chapters. This foundational study does not have predictive utility and is merely relational in nature. The lack of casual association using linear regression models negatively impacts the predictive utility of this study. This study merely identified relationships and found between group differences. These between group differences among pledges and actives need to be further explored utilizing more sophisticated linear modeling multivariate statistical analyses.

Additionally, this is study is limited to traditional fraternities which is primarily comprised of white, suburban, middle-class undergraduate students. This study did not account for ethnic background or culture as variables. This study additionally operated on the assumption that all male participants were heterosexual as the sexual enhancement subscale on the AEQ-A clearly was biased towards those males who favor inter-gendered sexual relationships. Therefore, this study can be only applied to heterosexual male fraternity members in relation to the findings of sexual aggrandizement.

While data was gathered, this study did also not examine the relationship between the variables and academic level and leadership positions. These ordinal data may reveal additional factors that impact the fraternal membership experience and alcohol use. Furthermore, this study did not examine the developmental impact of conformity as measured by the MCSD and its potential influence over time as measured by academic

status. Tables 7 demonstrate an interesting distribution of MCSD clustered in the high level range and Table 8 reveals a similar phenomenon. Future research should investigate the relationships between expectations of alcohol use and social desirability with regards to academic level.

Due to the investigational nature of this study, the design hinders the external validity of this study as it is limited. This study gathered data during a spring term within an academic year and therefore, does not include true college freshman. The spring term was chosen as the data collection timeframe due to deferred recruitment policies of institutions. However, the lack of true freshman within the study limited the generalizability to chapters at institutions that operate on a deferred recruitment policy. This study was not longitudinal and therefore does not provide cross-sectional or timeseries data. This study merely provides a snapshot of data related to the variables examined.

This study only examined two variables, social desirability and expectations of alcohol use. Therefore, we know from this study that social desirability influences expectations of alcohol use and specifically related to sexual aggrandizement and exaggerated self-presentation from overall alcohol use. Moreover, from this study it remains unknown what other psychosocial variables could impact fraternity member experience and alcohol use. These could include pre-college characteristics, adjustment level, developmental level, and masculinity. Additionally, this may also include the severity of hazing as the research has demonstrated a strong association between hazing and alcohol use in chapters. Additional research should isolate these variables and examine their relationship to the fraternal membership experience.

More multi-institutional studies are needed for fraternities. This study as well as Caudill et al. (2006) are one of a few studies that are not single institution studies. The majority of alcohol research is based on single-institutional study and if alcohol consumption is truly based on associational or peer norms as suggested by Wall (2006), than previous studies are only valuable in measuring particular variables related to alcohol use on the specific campus in which it served as a laboratory for research. Future studies should ensure that they are multi-institutional.

Conclusion

This study was an examination of psychosocial variables related to alcohol misuse in fraternity members. This study was an attempt to further investigate why alcohol continues to scourge the college fraternity and why fraternities continue to serve as bastions for alcohol. In this study two variables were examined, which were expectations of alcohol as measured by the AEQ-A and conformity as measured by social desirability utilizing the MCSD.

The results from this study could help improve the fraternal experience as aforementioned. Implications include those for fraternity/sorority advisors, senior student affairs officers, health educators, and mental health counselors. The offices of student services impacted by alcohol misuse in fraternities was each addressed in this final chapter, which further provides face validity to negative impact that their consumption patterns have on higher education. The results of this study as related to conformity and expectations demonstrate that a cohort of students is negatively being impacted by this trend of pervasive alcohol misuse. The alcohol use by fraternities is indeed culturally

ingrained and higher education continues to let it remain unfettered because the focus remains on alcohol and not on education.

Undergraduate fraternity members and their levels of conformity and expectations spike as a pledge and then slightly decline, but remain high throughout the remainder of their tenure as an undergraduate. Instead, members remain conforming towards notions of overall positive gains from alcohol and attempting to "score" through ideas of sexual aggrandizement. This reveals that fraternity members are not being challenged to maturate into adult members of society who are civically engaged and ready to utilize the critical thinking skills their undergraduate institution is supposed to encourage them to develop. This impacts higher education professionals as they cope with alcohol misuse, instead of focusing on developmental programming that will address this Peter Pan syndrome that currently exists in fraternity members.

If fraternities are to become relevant within higher education, the focus needs to be removed from alcohol misuse to again become the development of its members. The early American fraternity was once relevant as John Robson (1966), author of *The College Fraternity and its Modern Role*, stated "Man is a noble creature, only a little lower than the angels. A chapter made up of his tribe is the kind that has given the American college fraternity a glorious history and promises it a glorious future" (p. 112).

Robson is correct is his assertion that fraternities, and even sororities, have a storied and contributing narrative in shaping higher education. The future of fraternities is one that is undeniable, as collegiate fraternal organizations are enduring and pervasive organizations that have yet to falter despite wide-spread criticism and this study provides

additional face validity to these criticisms. However, whether its existence is relevant depends on its capacity to change and end its enabling of a Peter Pan syndrome.

References

- Aas, H., Klepp, K., Laberg, J., & Aaro, L. (1995). Predicting adolescents intentions to drink alcohol: Outcome expectancies and self-efficacy. *Journal of Studies on Alcohol*, 156, 293-299.
- Aas, H.N., Leigh, B.C., Anderssen, N., & Jakobsen, R. (1998). Two-year longitudinal study of alcohol expectancies and drinking among Norwegian adolescents.

 Addiction, 93, 373-38
- Abowitz, D. A., & Knox, D. (2003). Life goals among Greek college students. *College Student Journal*, 37(1), 96-99.
- Adams, T. C., & Keim, M. C. (2000). Leadership practices and effectiveness among Greek student leaders. *College Student Journal*, 34(2), 259-70.
- Allan, E., & Madden, M. (2008). Hazing in view: College students at risk. Initial findings from the national study of student hazing. Retrieved from http://www.hazingstudy.org
- Alva, S. A. (1998). Self-reported alcohol use of college fraternity and sorority members. *Journal of College Student Development*, 39, 3-10.
- Arnold, J. C. (1995). Alcohol and the chosen few: Organizational reproduction in an addictive system. Doctoral dissertation, Indiana University-Bloomington. Boca Raton, FL: Dissertation.com (1998).
- Astin, A. W. (1984). Student involvement: A development theory for higher education. *Journal of College Student Personnel*, 25, 297–308.

- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text revision). Washington, DC: Author.
- Arnold, J. C., & Kuh, G. D. (1992). Brotherhood and the bottle: A cultural analysis of the role of alcohol in fraternities. Bloomington, IN: Center for the Study of the College Fraternity. 115 pp.
- Anson, J. L., & Marchesani, Jr., R. F. (1991). *Baird's manual of American college fraternities* (20th ed.). Indianapolis, IN: Baird's Manual Foundation.
- Baer, J. S. (1994). Effects of a college residence on perceived norms for alcohol consumption:
- An examination of the first year in college. *Psychology of Addictive Behaviors*, 8(2), 43-50.
- Baier, J. L., & Whipple, E. G. (1990). Greek values and attitudes: A comparison with independents. *NASPA Journal*, 28(1), 43-53.
- Baily, H. J. (1949). *Baird's manual of American college fraternities* (15th ed.). Menasha,WI: George Banta Publishing.
- Barry, A. (2007). Using theory-based constructs to explore the impact of Greek membership on alcohol-related beliefs and behaviors: A systematic literature review. *Journal of American College Health*, 56(3), 307-315.
- Beil, C., & Shope, J. H. (1990, May). *No exit: Predicting student persistence*. Paper presented at the Annual Forum of the Association for Institutional Research, Louisville, KY.

- Bernardi, R., & Guptill, S. (2008). Social Desirability Response Bias, Gender, and Factors Influencing Organizational Commitment: An International Study. *Journal of Business Ethics*, 81(4), 797-809.
- Bickel, R. & Lake, P. (1999). The Rights and Responsibilities of the Modern University:

 Who Assumes the Risk for College Life? Carolina Academic Press: Durham,

 North Carolina.
- Blowers, J. (2009) Common issues and collaborative solutions: A comparison of student alcohol use behaviors at the community college and four-year institutional levels.

 **Journal of Alcohol and Drug Education, 53(3), 65-82. Retrieved from http://www.cinahl.com/cgi-bin/jrlshowtitles?jade
- Boeringer, S. B. (1999). Associations of rape-supportive attitudes with fraternity and athletic participation. *Violence Against Women*, *5*(1), 81-90.
- Boeringer, S. B., Shehan, C.L., & Akers, R. L. (1991). Social contexts and social learning in sexual coercion and aggression: Assessing the contribution of fraternity membership. *Family Relations*, 40, 58-64.
- Borsari, B. E., & Carey, K. B. (1999). Understanding fraternity drinking: Five recurring themes in the literature, 1980–1998. *Journal of American College Health*, 48(1), 30–37.
- Borsari, B. E., & Carey, K. B. (2003). Descriptive and injunctive norms in college drinking: A meta-analytic integration. Journal of Studies on Alcohol, *64*(3), 331-341.

- Boswell, A. A., & Spade, J. Z. (1996). Fraternities and collegiate rape culture: Why are some fraternities more dangerous places for women? *Gender and Society*, 10, 133–147.
- Bradburn, N. M. & Sudman, S. (1979) *Improving Interview Method and Questionnaire*Design, San Francisco: Jossey-Bass.
- Brown, S.A., Goldman, M.S., Inn, A., & Andersen, L. (1980). Expectations of reinforcement from alcohol: Their domain and relation to drinking patterns. *Journal of Consulting and Clinical Psychology*, 48, 419-426.
- Brown, S.A., Christiansen, B.A. & Goldman, M.S. (1987). The Alcohol Expectancy

 Questionnaire: An instrument for the assessment of adolescent and adult alcohol
 expectancies. Journal of Studies on Alcohol, 48, 483-491.
- Bryan, W. A. (1987). Contemporary fraternity and sorority issues. In E. G. Whipple (Ed.), *New challenges for Greek letter organizations: Transforming fraternities and sororities into learning communities* (New Directions for Student Services No. 81, pp. 37-56). San Francisco: Jossey-Bass.
- Callais, M. A. (2005). Helping fraternity and sorority members understand ritual. *Oracle:*The Research Journal of the Association of Fraternity Advisors, 1(1), 32-37.
- Capraro, R. L. (2000). Why college men drink: Alcohol, adventure, and the paradox of masculinity. *Journal of American College Health*, 48, 307–315.
- Carney, M. (1980a). Persistence and graduation rates of Greek, independent, commuter and residence hall students: A nine semester study (Office of Student Affairs Research, 1979-1980 Report No. 45). Norman, OK: University of Oklahoma.

- Carney, M. (1980b). *Utilizing ACT data for predicting scholarship of fraternity and sorority pledge classes* (Office of Student Affairs Research, 1979-1980 Report No. 32). Norman, OK: University of Oklahoma.
- Caron, S. L., Moskey, E. G., Hovey, C. A. (2004). Alcohol use among fraternity and sorority members: Looking at change over time. *Journal of Alcohol and Drug Education*, 47(3), 51-66.
- Carstensen, L. L. and Cone, J. D. (1983). Social desirability and the measurement of psychological well-being in elderly persons. *Journal of Personality*, *38*, 713-715.
- Caudill, B. D., Crosse, S. B., Campbell, B., Howard, J., Luckey, B. & Blane, H. T. (2006). Highrisk drinking among college fraternity members: A national perspective. *Journal of American College Health*, *55*(3), 141-155.
- Caudill, B., Luckey, B., Crosse, S., Blane, H., Ginexi, E., & Campbell, B. (2007).

 Alcohol risk reduction skills training in a national fraternity: A randomized intervention trail with longitudinal intent-to-treat analysis. Journal of Studies on Alcohol and Drugs, 68(3), 399- 409.
- Carruthers, C. P. (1993). Leisure and alcohol expectancies. *Journal of Leisure Research*, 25, 229-244.
- Carter, C. A. & Kahnweiler, W. M. (2000). The efficacy of the social norms approach to substance abuse prevention applied to fraternity men. *Journal of American College Health*, 49, 66-71.
- Case, D. N., Hesp, G. A., & Eberly, C. G. (2005). An exploratory study of the experiences of gay, lesbian and bisexual fraternity and sorority members revisited.

- Oracle: The Research Journal of the Association of Fraternity Advisors, 1 (1), pp. 24-47.
- Cascarano, M. (2007). A social norms marketing approach to promote healthy behaviors and reduce misperceptions about alcohol use on campus (Doctoral dissertation, Teachers College, Columbia University, 2007). Dissertation Abstracts International, 68(06A), 2343.
- Cashin, J. R., Presley, C. A., & Meilman, P. W. (1998). Alcohol use in the Greek system: Follow the leader? *Journal of Studies on Alcohol.* 59, 63-70.
- Caple, R. B. (1998). To mark the beginning: A social history of college student affairs.

 Lanham, MD: University Press of America.
- Caron, S. L., Moskey, E. G., Hovey, C. A. (2004). Alcohol use among fraternity and sorority members: Looking at change over time. *Journal of Alcohol and Drug Education*, 47(3), 51-66.
- Chaloupka F. J., & Wechsler H. (1996). Binge drinking in college: The impact of price, availability, and alcohol control policies. *Contemporary Economic Policy*, 112-124.
- Chassin, L, & Handley, E. D. (2006). Parents and families as contexts for the development of substance use and substance use disorders. *Psychology of Addictive Behaviors*, 20(2), 135-137.
- Chickering, A.W. (1969). Education and identity. San Francisco: Jossey-Bass.

- Christiansen, B. A., Smith, G. T., Roehling, P. V. & Goldman, M. S. (1989). Using alcohol expectancies to predict adolescent drinking behavior after one year.

 **Journal of Consulting and Clinical Psychology, 57, 93-99.
- Choate, L. H. (2003). Sexual assault prevention programs for college men: an exploratory evaluation of the men against violence model. *Journal of College Counseling*, 6, 166-176.
- Cohen, B. B., and Vinson, D. C. (1995). Retrospective self-report of alcohol consumption: Test-retest reliability by telephone. *Clinical Alcoholism and Expectancy*, 19, 1156-1161.
- Cohen, D. J., & Lederman, L. C. (1995). Navigating the freedoms of college life:

 Students talk about alcohol, gender, and sex. In D. B. Heath (Ed.), *International handbook on alcohol and culture* (pp. 101–127). Westport, CT: Greenwood.
- Cokley, K., Miller, K., Cunningham, D., Motoike, J., King, A., & Awad, G. (2001).

 Developing an instrument to assess college students' attitudes toward pledging and hazing in Greek letter organizations. *College Student Journal*, 35(3), 451-456.
- Collins, R. L., Parks, G. A., & Marlatt, G. A. (1985). Social determinants of alcohol consumption: the effects of social interaction and model status on the self-administration of alcohol. *Journal of Consulting and Clinical Psychology*, 53, 189-200.
- Connell, R. W. (1987). *Gender and power*. Stanford, CA: Stanford University Press. Connell, R. W. (1995). *Masculinities*. Los Angeles: University of California Press.

- Connell, R. W., & Messerschmidt, J. W. (2005). Hegemonic masculinity: Rethinking the concept. *Gender and Society*, *19*(6), 829–859.
- Cox, B. J., Swinson, R. P., Direnfeld, D. M., & Bourdeau D. (1994). Social desirability and self-reports of alcohol abuse in anxiety disorder patients. *Behavior Research and Therapy*, 32(1), 175-178.
- Creswell, J. W. (2007). Qualitative inquiry and research design: Choosing among five traditions (2nd Ed). Thousand Oaks, CA: Sage.
- Crosse, S. B. Ginexi, E. M. & Caudill, B. D. (2006). Examining the effects of a national alcohol-free fraternity housing policy. *The Journal of Primary Prevention*, 27(5), 477-495.
- Crowne, D. P., and Marlowe, D. (1960), A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, 24, 349-354.
- Crowne, D. P., and Marlowe, D. (1964), *The Approval Motive*. New York: John Wiley & Sons.
- Dackes, J., & Goldman, M. S. (1998). Expectancy challenge and drinking reduction:

 Process and structure in the alcohol expectancy network. *Experiments in Clinical Psychopharmacology*, 6, 64-76,.
- Dartmouth College (1936). Survey of the social life in Dartmouth College: Fraternities.`

 Dartmouth, NH: Dartmouth College Publications.
- Danielson, C., Taylor, S., & Hartford, M. (2001). Examining the complex relationship between
 - Greek life and alcohol: A literature review. NASPA Journal, 38(3), 451-465.

- Davis, C. G., Thake, J., & Vilhena, N. (2010). Social desirability biases in self-reported alcohol consumption and harms. *Addictive Behaviors*, *35*(4), 302-311.
- Del Boca, K., Darkes, J., Greenbaum, P. E., & Goldman, M. S. (2004). Up close and personal: temporal variability in the drinking of individual college students during their first year. *Journal of Consulting and Clinical*, 72, 155–164.
- Delamater. J. (1982). Response-efl'ects of question content. In W. Dijkstra & J. van der Zouwen (Eds.), *Response behavior in tihe surv e -intervpiewv* (pp. 13-48). London: Academic Press.
- DeSimone, J. (2009). Fraternity membership and drinking behavior. *Economic Inquiry*, 47(2), 337-350.
- Dinger, M. K., & Parsons, N. (1999). Sexual activity among college students living in residence halls and fraternity or sorority housing. *Journal of Health Education*, 30(4), 242-246.
- Drout, C., & Corsoro, C. (2003). Attitudes toward fraternity hazing among fraternity members, sorority members, and non-Greek students. *Social Behavior & Personality: An International Journal*, 31(6), 535-543.
- Durkin, K. F., Wolfe, T. W., Phillips, D. W. (1996). College students' use of fraudulent identification to obtain alcohol: an exploratory analysis. *Journal of Alcohol and Drug Education*, 41(2), 92-104
- Earley, C. (1998). The Greek experience and critical-thinking skills. In E. G. Whipple (Ed.), New challenges for Greek letter organizations: Transforming fraternities and sororities into learning Communities (New Directions for Student Services No. 81, pp. 39-47). San: Jossey-Bass.

- Eberhardt, D., Rice, N. D., & Smith, L. D. (2003). Effects of Greek membership on academic integrity, alcohol abuse, and risky sexual behavior at a small college.

 NASPA Journal. 41(1), 135-146.
- Eberly, C. G. (2009, January 30). A pilot program evaluation of the EDGE program for new members of Sigma Phi Epsilon fraternity. Unpublished manuscript, Illinois Higher Education Center for Alcohol, Other Drugs, and Violence Prevention, Eastern Illinois University.
- Edwards, K. & Harris, F. (2009, May). Empirically based strategies and recommendations to foster college men's development. Paper presented at 2009 Conference on College Men, Philadelphia, PA
- Elias, J. W., Bell, R. W., Eade, R., & Underwood, T. (1996). "Alcohol myopia," expectations, social interests, and sorority pledge status. *Journal of Alcohol and Drug Education*, 42(1), 78-90.
- Ellsworth, C. W. (2006). Definitions of hazing: Differences among selected student organizations. *Oracle: The Research Journal of the Association of Fraternity Advisors*, 2(1), 46-60.
- Faulkner, K. M., Alcorn, J. D., & Garvin, R. B. (1988). Prediction of alcohol consumption among fraternity pledges. *Journal of Alcohol & Drug Education*, 34(2), 12-21.
- Fabian, L. E., Toomey, T. I, Lenk, K. M., & Erickson, D. J. (2008). Where do underage college students get alcohol? *Journal of Drug Education*, 38(1), 15-26.
- Fairlie, A. M., DeJong, W., Stevenson, J. F., Lavigne, A. M., & Wood, M. D. (2010). Fraternity and sorority leaders and members: A comparison of alcohol use,

- attitudes, and policy awareness. *The American Journal of Drug and Alcohol Abuse*, *36*, 187-193.
- Far, J. M. (1998). A test of the norms challenging model for alcohol abuse prevention in a university Greek system. (Doctoral dissertation, Washington State University, 1998). Dissertation Abstracts International, 60(08B), 4299.
- Ferrari, J. R. (2005). Looking good or being good? The role of social desirability tendencies in student perceptions of institutional mission and values. *College Student Journal*, 39, 7-13.
- Foubert, J. (2000). The longitudinal effects of a rape-prevention program on fraternity men's attitudes. *Journal of American College Health*, 48(4), 158-163.
- Foubert, J. D., Garner, D. N., & Thaxter, P. J. (2006). An exploration of fraternity culture: implications for programs to address alcohol-related sexual assault. *College Student Journal*, 40 (2), 361-373.
- Fourbert, J. D, & Grainger, L. U. (2006). Effects of involvement in clubs and organizations on the psychosocial development of first-year and senior college students. *NASPA Journal*. *43*(1), 166-182.
- Furnham, A. (1986). Response bias, social desirability and dissimulation. *Personalito* and *Individual Differences*. 7, 385-400.
- Gallagher, R. P., Harmon, W. W., & Lingenfelter, C. O. (1994). CSAO.s perceptions of the changing incidence of problematic student behavior. *NASPA Journal*, 32(1).
- Garrett-Gooding, J., & Senter, R. (1987). Attitudes and acts of sexual aggression on a university campus. *Sociological Inquiry*, *59*, 348-371.

- Giles, D. (1999). Retrospective accounts of drunken behaviour: Implications for theories of self, memory, and the discursive construction of identity. *Discourse Studies*, *1*, 387–403.
- Glassman, T. J., Dodd, V. J., Sheu, J., Rienzo, B. A., & Wagenaar, A. C. (2010). Extreme ritualistic alcohol consumption among college students on game day. *Journal of American College Health*, 58(5), 413-423.
- Glider, P., Midyett, S. J., Mills-Novoa, B., Johannessen, K. & Collins, C. (2001).

 Challenging the collegiate rite of passage: A campus-wide social marketing media campaign to reduce binge drinking. Journal of Drug Edducation, 31(2), 207-220.
- Glindemann, K. E., Ehrhart, I. J., Drake, E. A., & Gelle, E. S. (2007). Reducing excessive alcohol consumption at university fraternity parties: A cost-effective incentive/reward intervention. *Addictive Behaviors*, 32(1), 39-48.
- Goldman, M.S. (1994). The alcohol expectancy concept: Applications to assessment, prevention, and treatment of alcohol abuse. *Applied and Preventive Psychology*, 3, 131-144
- Goldman, M.S., Brown, S.A., & Christiansen, B.A. (1987). Expectancy theory: Thinking about drinking. In H.T. Blane & K.E. Leonard (Eds.), *Psychological theories of drinking and alcoholism* (pp. 181-226). New York: Gryphon Press.
- Goldman, M.S., Del Boca, F.K., & Darkes, J. (1999). Alcohol expectancy theory: the application of cognitive neuroscience. In K.E. Leonard & H.T. Blane (Eds.), *Psychological theories of drinking and alcoholism.* New York; Guilford Publications.
- Goldman, M.S. & Darkes, J. (2004). Alcohol expectancy multi-axial assessment

- (A.E.Max): A memory network-based approach. *Psychological Assessment*, *16*, 4-15.
- Goldman, M.S. & Rather, B.C. (1993). Substance use disorders: Cognitive models and architectures. In P. Kendall & K.S. Dobson (eds.), Psychopathology and cognition (pp.245-291). Orlando, FL: Academic Press.
- Goldman, M.S., Darkes, J. & Del Boca, F.K. (1999). Expectancy mediation of
 biopsychosocial risk for alcohol use and alcoholism. In E.I. Kirsch. (Ed.), *How Expectancies Shape Experience*. (pp. 233-262). Washington, DC: American Psychological Association.
- Goodwin, L. (1989). Explaining alcohol consumption and related experiences among fraternity and sorority members. *Journal of College Student Development*, 30(2), 448-458.
- Goodwin, L. (1990). Social psychological bases for college alcohol consumption. *Journal* of Alcohol and Drug Education, 36(1), 83-95.
- Gonzales, G. (1986). Trends in alcohol knowledge and drinking patterns among college students: 1981-1985. *Journal of College Student Personnel*, 27, 496-499.
- Gough, B., & Edwards, G. (1998). The beer talking: Four lads, a carry out, and the reproduction of masculinities. *Sociological Review*, 46, 409–435.
- Grekin, E. & Sher, K. (2006). Alcohol Dependence Symptoms Among College Freshmen: Prevalence, Stability, and Person-Environment Interactions. *Experimental and Clinical Psychopharmacology*, 14(3),329-338.
- Grubb, F. (2006). Does going Greek impair undergraduate academic performance? A case study. *American Journal of Economics and Sociology*, 65(5), 1085-1110.

- Guiffrida, D. (2006). Toward a cultural advancement of Tinto's theory. *Review of Higher Education*, 29(4), 451-472.
- Gurie, J. R. (2002). The relationship between perceived leader behavior and alcohol consumption among university students who are members of social fraternities (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3042909).
- Hart, L. A. (1999). A study of campus Greek advisors regarding alcohol use on American college campuses (Doctoral dissertation, Georgia State University, 1999).Dissertation Abstracts International, 60(04A), 1039.
- Hemmingsson, T., Lundberg, I., Diderichsen, F., & Allebeck, P. (1998). Explanations of social class differences in alcoholism in young men. *Social Science and Medicine*, 47(10), 1399–1405.
- Hennessy, N. J. (2000). Constructions of the risk management of alcohol use in college fraternities (Doctoral dissertation, Bowling Green State University, 2000).

 Dissertation Abstracts International, 61(12A), 4693.
- Hering, O. (1931). *Designing and building the chapter house*. Menasha, WI: George Banta Publishing.
- Horowitz, H. L. (1987). Campus life: Undergraduate cultures from the end of the eighteenth century to the present. Chicago: The University of Chicago Press.
- Hunter, F. J., & Mazurek, M. B. (2004). The effectiveness of intervention studies to decrease alcohol use in college undergraduate students: An integrative analysis. Worldviews on Evidence-based Nursing, 1(2), 102–119.

- Inaba, D. S., & Cohen, W. E. (2004). Uppers, downers, and all arounders: Physical and mental effects of psychoactive drugs (5th ed.). Ashland, OR: CNS.
- Janes, C. R., & Ames, G. (1989). Men, blue collar work, and drinking: Alcohol use in an industrial subculture. *Culture, Medicine and Psychiatry*, 13, 245–274.
- Johnston, L. D., O'Malley, P. M., Bachman, J. G. (1986). Drug use among high school students, college students, and other young adults: National trends through 1985.

 Rockville, MD: National Institute on Drug Abuse.
- Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, I. E. (2007).

 Monitoring the Future national survey results on drug use: 1975-2006. Volume

 11: College students and adults ages 19-45 (NIH Publication No. 07-6206).

 Bethesda, MD: National Institute on Drug Abuse, 307 pp. Retrieved from http://www.core.siuc.edu/
- Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schlenberg, J. E. (2009).

 Monitoring the future: National survey results of drug use, 1975-2008 (Vols. 1 & II). Retrieved from http://www.monitoringthefuture.org/pubs.html.
- Johnson, T. P., Fendrich, M., & Hubbell, A. (2002, May). A validation of the Crowne-Marlowe. Social Desirability Scale. Paper presented at the 57th Annual Meeting of the American Association for Public Opinion Research Abstract retrieved April 16, 2012, from http://www.srl.uic.edu/publist/confpres.htm
- Jones, B.T., Corbin, W., & Fromme. K. (2001). A review of expectancy theory and alcohol consumption. *Addiction*, *96*, 57–72.
- Kaminer, D., & Dixon, J. (1995). The reproduction of masculinity: A discourse analysis of men's drinking talk. *South African Journal of Psychology*, *25*, 168–174.

- Kaplin, W. A., & Lee. B. A. (2006). *The law of higher education* (4th ed.). San Francisco: Jossey-Bass.
- Kellogg, K. (1999). *Binge drinking on college campuses*. Washington, DC: George Washington University, Graduate School of Education. (ERIC Document Reproduction Service No. ED436110)
- Kilmer R. J., Larimer, M. E., Parks, G. A., Dimeff, L. A., & Marlatt, G. A. (1999).

 Liability or risk management? evaluation of a greek system alcohol policy.

 Psychology of Addictive Behaviors, 4, 269-278.
- Kimmel, M. (2004). Afterward, developing effective programs and services for college men. In G.E. Kellom (Ed.), *Developing effective programs and services for college men. New directions for student services* (pp. 97-100). San Francisco, CA: Jossey-Bass.
- Kimmel M. (2008). *Guyland: The perilous world where boys become men.* New York, NY: Harper Collins.
- Kozma, A. & Stones, M. J. (1987). Social desirability in measures of subjective well-being: Age comparisons. *Social Indicators Research*, 20, 1-14.
- Kuh, G. D. (1990). Assessing student culture. In W.G. Tierney (Ed.), Assessing academic climates and cultures, New Directions for Institutional Research, No. 68. San Francisco: Jossey-Bass

- Kuh, G. D., & Arnold, J. C. (1993). Liquid bonding: A cultural analysis of the role of alcohol in fraternity pledgeship. *Journal of College Student Development*, 34, 327–334.
- Kuh, G. D., & Hall, J. (1993). Using cultural perspectives in student affairs. In G.D.Kuh (Ed.). Using cultural perspectives in student affairs work. Washington,D.C.: American College Personnel Association.
- Kuh, G. & Whitt, E. (1988). The Invisible tapestry: Culture In American Colleges and
 Universities. ASHE-Eric Higher Education Reports, 17 (1): Washington, DC: The
 George Washington University, Graduate School of Education and Human
 Development.
- Kuther, T. L. (2002). Rational decision perspectives on alcohol consumption by youth:

 Revising the theory of planned behavior. Addictive Behaviors, 27, 35-47.
- Kraft, D. P. (1979). Public drinking practices of college youths: Implications for prevention programs. In T. C. Harford & L.S. Gaines (Eds.), Social drinking contexts (Research Monograph No. 7, pp. 54-84). Rockville, MD: National Institute on Alcohol Abuse and Alcoholism.
- LaBrie, J. W., Pedersen, E. R., Lamb, T. F., & Quinlan, T. (2007). A campus-based motivational enhancement group intervention reduces problematic drinking in freshman male college students. *Addictive Behaviors*, 32(5), 889-901.
- LaBrie, J., Kenney, S., Migliuri, S., & Lac, A. (2011). Sexual Experience and Risky Alcohol Consumption among Incoming First-Year College Females. *Journal of Child & Adolescent Substance Abuse*, 20(1), 15-33.

- LaBrie, J., Tawalbeh, S., & Earleywine, M. (2006). Differentiating Adjudicated from Nonadjudicated Freshmen Men: The Role of Alcohol Expectancies, Tension, and Concern about Health. *Journal of College Student Development*, 47(5), 521-33.
- Landrine, H., Bardwell, S., & Dean, T. (1988). Gender expectations for alcohol use: A study of the significance of the masculine role. *Sex Roles*, 19, 703–712.
- Lapp, I. (2000). Advertising power: Hegemonic masculinity in fraternity rush advertisements (Doctoral dissertation, Syracuse University, 2000). Dissertation Abstracts International, 62(03A), 1216.
- Larimer, M. E., Anderson, B. K., Baer, J. S., & Marlatt, G. A. (2000). An individual in context: Predictors of alcohol use and drinking problems among Greek and residence hall students. *Journal of Substance Abuse*, 11(1), 53–68.
- Larimer, M., Irvine, D., Kilmer, J., & Marlatt, G. (1997). College drinking and the Greek system: Examining the role of perceived norms for high-risk behavior. *Journal of College Student Development*, 38(3), 587-598.
- Larimer, M. M, Lydum, A. R., Anderson, B. K., & Turner, A. P. (1999). Male and female recipients of unwanted sexual contact in a colleges tudent sample:

 Prevalence rates, alcohol use, and depression symptoms. Sex Roles, 40 (3/4), 295-308.
- Larimer, M. E., Kilmer, J. R., & Lee, C. M. (2005). College student drug prevention: A review of individually-oriented prevention strategies. *Journal of Drug Issues*, 35(2), 431-437.

- Larimer, M. E., Turner, A. P., Anderson, B. K., Fader, J. S., Kilmer, J. R., Palmer, R. S., et al. (2001). Evaluating a brief alcohol intervention with fraternities. *Journal of Studies on Alcohol*, 62, 370-380.
- Larimer, M. E., Turner, A. P., Mallett, K. A., & Geisner, I. M. (2004). Predicting drinking behavior and alcohol-related problems among fraternity and sorority members: examining the role of descriptive and injunctive norms. *Psychology of Addictive Behaviors*, 18, 203–212.
- Lee, N. K., Geeely, J., & Oei, T. P. S. (1999). The relationship of positive and negative alcohol expectancies to patterns of consumption of alcohol in social drinkers. Journal of Addictive Behaviors, 24, 359-369
- Leigh, B.C., & Stacey, A. W. (1993) Alcohol outcome expectancies: Scale construction and predictive utility in higher order confirmatory models.

 *Psychological Assessment. 5, 216-229.
- Lewis, M. A., & Neighbors, C. (2006). Optimizing personalized normative feedback: The use of gender-specific referents. *Journal of Studies on Alcohol and Drugs*, 68(2), 228–237.
- Licciardone, J. D. (2003). Outcomes of a federally funded program for alcohol and other drug prevention in higher education. *American Journal of Drug and Alcohol Abuse*, 29(4), 803-827.
- Lo, C. C., & Globetti, G. (1995). The facilitating and enhancing roles Greek associations play in college drinking. *The International Journal of the Addictions*, 30(10), 1311-1322.

- Locke, B., & Mahalik, J. (2005). Examining masculinity norms, problem drinking, and athletic involvement as predictors of sexual aggression in college men. *Journal of Counseling Psychology*, *52*(3), 279-283.
- Long, L. D., & Snowden, A. (2011). The more you put into it, the more you get out of it:

 The educational gains of fraternity/sorority officers. *Oracle: The Research Journal of the Association of Fraternity/Sorority Advisors*, 6(2), p. 1-14.
- Lowery, J. W., Palmer, C. J., & Gehring, D. D. (2002). Policies and practices of parental notification for student alcohol violations. *NASPA Journal*, 42, 415-429.
- Malaney, G. D. (1990). Student attitudes toward fraternities and sororities. *NASPA Journal*, 28(1), 37-42.
- Mathiasen, R. E. (2003). Moral development of fraternity and sorority members: A research review. *ISPA Journal*, *14*(1), 34-50.
- Maisel, J. P. (1990). Social fraternities and sororities are not conducive to the educational process. *NASPA Journal*, 28(2), 8-12.
- McCabe, D. L., & Bowers, W. J. (1996). The relationship between student cheating and college fraternity or sorority membership. *NASPA Journal*, *33*(3), 280-91.
- McCarthy, D.M., Kroll, L.S. & Smith, G.T. (2001). Integrating disinhibition and learning risk for alcohol use. *Experimental and Clinical Psychopharmacology*, *9*(4), 389-398.
- McCarthy, D.M., Miller, T.L., Smith, G.T. & Smith, J.A. (2001). Disinhibition and expectancy in risk for alcohol use: Comparing Black and White college samples. *Journal of Studies on Alcohol*, 62(3), 313-321.

- McDonald, M. (1994). Gender, drink, and drugs. Providence, RI: Berg.
- McNally, A. M., & Palfai, T. P. (2003). Brief group alcohol interventions with college students: Examining motivational components. *Journal of Drug Education*, *33*(2), 159-176.
- Meilman, P. W., Leichliter, J. S., & Presley, C. A. (1999). Greeks and athletes: Who drinks more? *Journal of American College Health*, 47(4), 187-90.
- Mertens, D. M. (2005). Research methods in education and psychology: Integrating diversity with quantitative and qualitative approaches. (2nd ed.) Thousand Oaks: Sage.
- Menning, C. L. (2009). Unsafe at any house? attendees' perceptions of microlevel environmental traits and personal safety at Fraternity and nonfraternity parties. *Journal of Interpersonal Violence*, 24(10), 1714-1734
- Mitchell, R. J., Toomey, T. L., & Erikson, D. (2005). Alcohol policies on college campuses. *Journal of American College Health*, *53*(4), 149-157.
- Moore, D. M. (1990). Drinking, the construction of ethnic identity, and social process in a Western Australia youth subculture. *British Journal of Addiction*, 85, 1265–1278.
- Moore, J., Lovell, C. D., McGann, T., & Wyrick, J. (1998). Why involvement matters: A review of research on student involvement in the collegiate setting. *College Student Affairs Journal*, 17(2), 4–17.

- Moore, M. J., Soderquist, J., & Werch, C. (2005). Feasibility and efficacy of a binge drinking prevention intervention for college students delivered via the Internet versus postal mail. *Journal of American College Health*, *54*(1), 38–44.
- National Institute on Alcohol Abuse and Alcoholism of the National Institutes of Health (NIAAA). (2004-2005). Alcohol and development in youth—A multidisciplinary overview, V.28,3,111-120. Retrieved from http://pubs.niaaa.nih.gov/publications
- National Institute of Health (NIH) (2002). High risk drinking in college: what we know and what we need to learn. Washington, D.C.: Task Force of the National Advisory Council on Alcohol Abuse and Alcoholism, National Institutes of Health.
- Nederhof, A. J. (1985). Methods of coping with social desirability bias: A review.

 European Journal of Social Psychology, 15, 263-280.
- Neighbors, C., Walker, D. D., & Larimer, M. E. (2003). Expectancies and evaluations of alcohol effects among college students: Self-determination as a moderator. *Journal of Studies on Alcohol*, 64, 292-300.
- Neighbors, C., Lee, C. M., Lewis, M. A., Fossos, N., & Larimer, M. E. (2007). Are social norms the best predictor of outcomes among heavy drinking college students? *Journal of Studies on Alcohol and Drugs*, 68, 556-565.
- Nelson, S. M., Halperin, S., Wasserman, T. H., Smith, C., & Graham, P. (2006). Effects of fraternity/sorority membership and recruitment semester on GPA and retention.

- Oracle: The Research Journal of the Association of Fraternity Advisors, 2(1), 61-73.
- Neuman, (2000). Social research methods: qualitative and quantitative approaches. (4th ed.) Boston: Allyn & Bacon.
- Nuwer, H. (1999). Wrongs of passage: Fraternities, sororities, hazing and binge drinking. Bloomington, IN: Indiana University Press.
- O'Connor, R. M., Cooper, S. E., & Thiel, W. S. (1996). Alcohol use as a predictor of potential fraternity membership. *Journal of College Student Development*, *37*, 669-675.
- O'Hare, T., & Sherrer, M. (1997). Drinking problems, alcohol expectancies, and drinking contexts in college first offenders. *Journal of Alcohol and Drug Education*, 43, 31-45.
- O'Malley, P. & Johnston, L. (2002). Epidemiology of alcohol and other drug use among American college students. Journal of Studies on *Alcohol and Drugs*, 63(14), 23-39. Retrieved from http://www.jsad.com
- O'Sullivan, C. (1991). Acquaintance gang rape on campus. In A. Parrot & L. Bechhofer (Eds.), *Acquaintance rape: The hidden crime* (pp. 140-156). New York: John Wiley & Sons.
- Outside the Classroom (2010, November). The future of alcohol prevention: Navigating changes in higher education. Retrieved from http://www.outsidetheclassroom.com/Upload/PDF/FAP_summary.pdf

- Owen, K. C. (1998). Reflections of the college fraternity and its changing nature. In J. L. Anson & R. F. Marchesani, Jr. (Eds.), *Baird's manual of American college fraternities* (20th ed.) (Part I, pp. 1-24). Indianapolis, IN: Baird's Manual Foundation.
- Pace, D., & McGrath, P. B. (2002). A comparison of drinking behaviors of students in Greek organizations and students active in a campus volunteer organization.

 NASPA Journal, 39(1), 217-232.
- Palfai, T. P., & Wood, M. D. (2001). Positive alcohol expectancies and drinking behavior: the influence of expectancy strength and memory accessibility. Psychology of Addictive Behaviors, 15, 60–67.
- Page, R. M., & O'Hegarty. (2006). Type of student residence as a factor in college students' alcohol consumption and social normative perceptions regarding alcohol use. Journal of Child & Adolescent Substance Abuse, 15(3), 15-31.
- Park, A., Sher, K., Wood, P., & Krull, J. (2009). Dual mechanisms underlying accentuation of risky drinking via fraternity/sorority affiliation: The role of personality, peer norms, and alcohol availability. *Journal of Abnormal Psychology*, 118(2), 241-255.
- Pascarella, E. T., Edison, M. I., & Whitt, E. J. (1996). Cognitive effects of Greek affiliation during the first year of college. *NASPA Journal*, *33*(3), 242-259.
- Patton, M. Q. (2002). Qualitative research & evaluation methods (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Paulhus, D. L. (1991). Measurement and control of response bias. In J.P. Robinson, P.R.

- Shaver, & L.S. Wrightsman (fids.), *Measures of Personality and social* psychological attitudes (pp. 17-59). New York: Academic Press.
- Peralta, R. L. (2007). College alcohol use and the embodiment of hegemonic masculinity among European American men. *Sex Roles*, *56*, 741–756.
- Perkins, H. W., & Craig, D. W. (2006). A successful social norms campaign to reduce alcohol misuse among college student athletes. *Journal of Studies on Alcohol*, 67(6), 880–889.
- Perkins, H. W. (2002). Social norms and the prevention of alcohol misuse in collegiate contexts. *Journal of Studies on Alcohol*, *14*,164-172.
- Perkins, H. W., Haines, M. P., & Rice, R. M. (2005). Misperceiving the college drinking norm and related problems: A nationwide study of exposure to prevention information, perceived norms, and student alcohol misuse. *Journal of Studies on Alcohol*, 66 (4), 470-478.
- Pike, G. R., & Askew, J. W. (1990). The impact of fraternity or sorority membership on academic involvement and learning outcomes. *NASPA Journal*, 28(1), 13-19.
- Pleck, J. H. (1981). The myth of masculinity. Cambridge, MA: MIT Press.
- Plucker, J. A., & Teed, C. M. (2003). Evaluation of an alternative methodology for investigatin leadership and binge drinking among sorority members. *Addictive Behaviors*, 29(2), 381-388.
- Powell, W. J. & Wechsler, H. (2003). Does Alcohol Consumption Reduce Human Capital Accumulation? Evidence from the College Alcohol Study. Applied Economics, 35(10), 1227-1239.

- Presley, C. (1994). Development of the core alcohol and drug survey: Initial findings and future directions. *Journal of American College Health*, 42(6), 248-255.
- Presley, C. A., & Meilman, P. W. (1992). *Alcohol and drugs on American college campuses: A report to college presidents*. Carbondale, IL: The Core Institute
- Presley, C. A., Meilman, P. W., & Cashin, J. R. (1996) Alcohol and Drugs on American

 College Campuses: Use, Consequences, and Perceptions of the Campus

 Environment. Carbondale, Ill.: The Core Institute.
- Rather, B.C. & Goldman, M.S. (1994). Drinking-related differences in the memory organization of alcohol expectancies. Experimental and Clinical Psychopharmacology, 2, 167-183.
- Ratliff, K. G., & Burkhart, B. R. (1984). Sex differences in motivations for and effects of drinking among college students. *Journal of Studies on Alcohol*, 45, 26–32.
- Rauch, S., & Bryant, J. (2000). Gender and context differences in alcohol expectancies. *The Journal of Social Psychology*, 140(2), 240-53.
- Reese, F., & Friend, R. (1994). Alcohol expectancies and drinking practices among black and white undergraduate males. *Journal of College Student Development*, *35*, 319-23.
- Reich, R.R., Goldman, M.S., Noll, J.A. (2004). Using the false memory paradigm to test two key elements of alcohol expectancy theory. *Experimental and Clinical Psychopharmacology*, 12(2), 102-110.

- Reich, R.R. & Goldman, M.S. (2005). Exploring the alcohol expectancy network: The utility of free associates. Psychology of Addictive Behaviors, 19, 317-325.
- Reisberg, L. (1998, November 6). When alcohol kills, who is responsible? MIT's inaction blamed for contributing to death of a freshman. *Chronicle of Higher Education*, A57-A58.
- Reisberg, L. (1998, December 4). When a student drinks illegally, should colleges call mom and dad? [Electronic version]. *Chronicle of Higher Education*, pp. A39-A41.
- Rhoads, R. A. (1995). Whales tales, dog piles, and beer goggles: An ethnographic case study of fraternity life. *Anthropology & Education Quarterly*, 26(3), 306-323.
- Robison, A. (2007). Case study analysis of a college fraternity utilizing alcohol-free housing (Doctoral dissertation, Purdue University, 2007). Dissertation Abstracts International, 68(10A), 4227.
- Robson, J. W. (1966). *The college fraternity and its modern role*. Menasha, Wis: G. Banta.
- Rogers, J. L. W. (2006). The construction of masculinity in homosocial environment: A case study (Doctoral dissertation, Iowa State University, 2006). *Dissertation Abstracts International*, 67(05A), 1921.
- Rotter, J. B. (1954). Social learning and clinical psychology. New York: Prentice Hall. Santovec, M. L. (2004). Fraternity recruitment delay doesn't affect academic success. Recruitment and Retention in Higher Education, 18(9), 1-2.
- Schacht, S. P. (1996). Misogyny on and off the "pitch": The gendered world of male rugby players. *Gender and Society*, 10, 550–565.

- Sessa, F. M. (2005). The influence of perceived parenting on substance use during the transition to college: A comparison of male residential and commuter students.

 **Journal of College Student Development, 46(1), 62–74.
- Sheffield, F. D., Darkes, J., Del Boca, F. K., & Goldman, M. S. (2005). Binge drinking and alcohol-related problems among community college students: Implications for prevention policy. *Journal of American College Health*, *54*(3), 137-41.

 Retrieved from http://www.acha.org/Publications/JACH.cfm
- Sher, K. J., Bartholow, B. D., & Nanda, S. (2001). Short- and long- term effects of fraternity and sorority membership on heavy drinking: a social norms perspective. *Psychology of Addictive Behaviors*, 15, 42-51.
- Sherwood, J. S. (1987). Alcohol policies and practices on college and university campuses. *NASPA Monograph Series*, *7*, 108.
- Singleton, R. A. (2007). Collegiate alcohol consumption and academic performance. *Journal of Studies on Alcohol and Drugs*, 68, 548-555.
- Slivinske, D. (1984). *The manual for Theta Chi Fraternity* (14th ed.). Trenton, NJ: The Grand Chapter of Theta Chi Fraternity.
- Smeaton, G. L., Josiam, B. M. & Dietrich, U. C. (1998). College students' binge drinking at a beach-front destination during spring break. *Journal of American College Health*, 46(6), 247-254.
- Smith, G.T., Goldman, M.S., Greenbaum, P.E., & Christiansen, B.A. (1995). Expectancy for social facilitation from drinking: The divergent paths of high-expectancy and

- low-expectancy adolescents. Journal of Abnormal Psychology, 104, 32-40.
- Stacey, A. W., Widamian, K. F., & Marlatt, G.A. (1990). Expectancy models of alcohol use. Journal of Personality & Social Psychology, 58, 918-928.
- Strano, D., Cuomo, M., & Venable, R. (2004). Predictors of undergraduate student binge drinking. *Journal of College Counseling*, 7(1), 50-64.
- Straus, R., & Bacon, S. (1953). *Drinking in college*. New Haven, CT: Yale University Press.
- Sweet, S. (1999). Understanding fraternity hazing: Insights from symbolic integrationist theory.

 Journal of College Student Personnel, 40(4), 355-364.
- Terenzini, P. T., Pascarella, E. T., & Blimling, G. S. (1996). Students' out-of-class experiences and their influence on learning and cognitive development: A literature review. *Journal of College Student Development*, *37*(2), 149–162.
- Tampke, D. R. (1990). Alcohol behavior, risk perception, and fraternity and sorority membership. *NASPA Journal*, *28*(5), 71-77.
- Thombs, D. L. (1993). The differentially discriminating properties of alcohol expectancies for female and male drinkers. *Journal of Counseling and Development*, 71, 321-325.
- Thombs, D. L., Beck, K. H., & Mahoney, C. A. (1993). Effects of social context and gender on drinking patterns of young adults. *Journal of Counseling Psychology*, 40, 115-119.

- Thombs, D. L., Dotterer, S., Olds, R. S., Sharp, K. E., & Raub, C. G. (2004). A close look at why one social norms campaign did not reduce student drinking. *Journal of American College Health*, 53(2), 61–68.
- Thombs, D. L., & Briddick, W. C. (2000). Readiness to change among At-risk greek student drinkers. *Journal of College Student Development*, 41(3), 313-322.
- Turrisi, R. Mallett, K., Mastroleo, N. & Larimer, M. (2006). Heavy drinking in college students: who is at risk and what is being done about it? *The Journal of General Psychology*, 133(4), 401-420.
- Turrisi R., Jaccard J., Taki R, Dunnam H., & Grimes J. (2001). Examination of the short-term efficacy of a parent intervention to reduce college student drinking tendencies. *Psychology of Addicte Behaviors*, 15(4), 366-72.
- Twenge, J. M. (2006). Generation me: Why today's young americans are more confident, assertive, entitled--and more miserable than ever before. New York, NY: Free Press.
- Trockel, M., Wall, A., Williams, S., & Reis, J. (2008). When the party for some becomes a problem for others: The potential role of perceived second-hand consequences of drinking behavior in determining collective drinking norms. *The Journal of Psychology: Interdisciplinary and Applied*, 142(1), 57-69.
- U.S. Department of Education (2002). Safe and drug free schools program: Alcohol and other drug prevention on college campuses. Washington, D.C: Model Programs.

- U.S. Department of Health & Human Services (2007). Office of the Surgeon General:

 The Surgeon General Call to Action to Prevent and Reduce Underage Drinking.

 Retriebed from http://www.surgeongeneral.gov
- Wall, A. (2005). Alcohol prevention efforts within Illinois institutions of higher education: Assessing the state of prevention. Charleston, IL: Eastern Illinois University, College of Education and Professional Studies, Illinois Higher Education Center for Alcohol, Other Drug and Violence Prevention.
- Wall, A. (2006). On-line alcohol health education curriculum evaluation: Harm reduction findings among fraternity and sorority members. *Oracle: The Research Journal of the Association of Fraternity Advisors*, 2(1), 29-45.
- Wall, A., Reis, J., & Bureau, D. (2012). Fraternity and sorority new members' self-regulation of alcohol use. *Oracle: The Research Journal of the Association of Fraternity Advisors*, 2(2), 108-116.
- Warner, H. (1970). Alcohol trends in college life: Historical perspectives. In G. Maddox (Ed.), *The domesticated drug: Drinking among collegians*. New Haven, CT: College and University Press.
- Weitzman, E. R., Nelson, T. F., Lee, H., & Wechsler, H. (2004). Reduced drinking and related harms in college: Evaluation of the "A Matter of Degree" program.

 American Journal of Preventive Medicine, 27(3), 187-196.
- Weschler, H., & McFadden, M. (1979). Drinking among college students in New England: Extent, social correlates and consequences of alcohol use. *Journal of Studies on Alcohol*, 49, 969-996

- Wechsler, H., Davenport, A., E., Dowdall, G. W., Moeykens, B., & Castillo, S. (1994).

 Health and behavioral consequences of binge drinking in college.

 Journal of American College Health, 272(21).
- Wechsler, H., Davenport, A., Dowdall, G., Moeykens, B. & Castillo, S. (1994). Health and behavioral consequences of binge drinking in college: A national survey of students at 140 campuses. *Journal of the American Medical Association*, 272(21), 1672–1677.
- Wechsler, H., Dowdall, G. W., Maenner, G., Gledhill-Hoyt, J., & Lee, H. (1998).

 Changes in binge drinking and related problems among american college students between 1993 and 1997. *Journal of American College Health*, 47, 57-68.
- Wechsler, H., Kuo, M., Lee, H., & Dowdall, G. W. (2000). Environmental correlates of underage alcohol use and related problems of college students. *American Journal of Preventive Medicine*, 19(1), 24–2
- Wechsler, H., Nelson, T. E., Lee, J. E., Seibring, M., Lewis, C., & Keeling, R. P. (2003).

 Perception and reality: A national evaluation of social norms marketing
 interventions to reduce college students' heavy alcohol use. *Journal of Studies on Alcohol*, 64(4), 484–494.
- Wechsler, H., Kuh, G. D., & Davenport, A. (1996). Fraternities, sororities and binge drinking: Results from a national study of American colleges. *NASPA Journal*, 33(4), 260-279.

- Weehsler, H., Seibring, M., Liu, I. C., Ahl, M. (2004). Colleges respond to student binge drinking: Reducing student demand or limiting access. *Journal of American College Health*, 52(4), 159-168.
- Wechsler, H., Lee, J. E., Kuo, M., & Lee, H. (2000a). College binge drinking in the 1990's: A continuing problem. *Journal of American College Health*, 48, 199-210.
- Wechsler, H., Lee, J. E., Kuo, M., Seibring, M., Nelson, T. F., Lee, H. (2001). Trends in college binge drinking during a period of increased prevention efforts. Findings from 4 harvard school of public health college alcohol study surveys: 1993-2001. *Journal of American College Health, 50* (5) 203-217.
- Wechsler, H., Lee, J. E., Kuo, M., & Lee, H. (2000b). College binge drinking in the 1990s: A continuing problem. Results of the Harvard School of Public Health 1999 College Alcohol Study. *Journal of American College Health*, 48(5), 199-210.
- Wechsler H., Lee J. E., Kuo M., Seibring M., Nelson T. F., & Lee H. P. (2002). Trends in college binge drinking during a period of increased prevention efforts: Findings from four Harvard School of Public Health study surveys, 1993-2001. *Journal of American College Health*, 50(5), 203-217.
- Wechsler, H., Nelson, T., & Weitzman, E. (2000). From knowledge to action: How harvard's college alcohol study can help your campus design a campaign against student alcohol abuse. *Change*, 39-43.

- Weitzman, E. R., & Nelson, T. F. (2004). College student binge drinking and the "prevention paradox:" Implications for prevention and harm reduction. *Journal of Drug Education*, 34(3), 247–266.
- Welte, J. W. & Russell, M. (1993). Influence of socially desirable responding in a study of stress and substance abuse. *Alcoholism: Clinical and Experimental Research*, 17, 758-761.
- Werch, C. E., Pappas, D. M., & Castellon-Vogel, E. A. (1996). Drug use prevention efforts at colleges and universities in the United States. *Substance Use and Misuse*, 31(1), 65-80.
- West, L. A. (2001). Negotiating masculinities in American drinking subcultures. *Journal of Men's Studies*, *9*, 371–392.
- Whipple, E. G., & Sullivan, E. G. (1998). Greek letter organizations: Communities of learners? In E. G. Whipple (Ed.), New challenges for Greek letter organizations:
 Transforming fraternities and sororities into learning communities (New Directions for Student Services No. 81, pp. 7-18). San Francisco: Jossey-Bass.
- White, H. R., McMorris, B. J., Catalono, R. F., Fleming, C. B., Haggerty, K. P., & Abbott, R. D. (2006). Increases in alcohol and marijuana use during the transition out of high school into emerging adulthood: The effects of leaving home, going to college, and high school protective factors. *Journal of Studies on Alcohol*, 67(6), 810–822.
- White, A. M., Kraus C. L., McCracken L. A., & Swartzwelder, H. A. (2003). Do college students drink more than they think? Use of a free-pour paradigm to determine

- how college students define standard drinks. *Clinical & Experimental Research*, 11, 1750-1756.
- Williams, J. G., & Smith, J. P. (1994). Drinking patterns and dating violence among college students. *Psychology of Addictive Behaviors*, 8(2), 51-53.doi: 10.1037/h0090338
- Workman, T. A. (2001). Finding the meaning of college drinking: An analysis of fraternity drinking stories. *Health Communications*, 13(4), 427-44
- Zakletskaia, L., Wilson, E., & Fleming, M. F. (2010). Alcohol use in students seeking primary care treatment at university health services. *Journal of American College Health*, 59 (3), 217-223.

Appendix A

Marlowe-Crowne Social Desirability Scale

THE MARLOWE-CROWNE SOCIAL DESIRABILITY SCALE

Douglas P. Crowne and David Marlowe (1960)

Personal Reaction Inventory

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is True or False as it pertains to you personally.

- 1. Before voting I thoroughly investigate the qualifications of all the candidates.
- 2. I never hesitate to go out of my way to help someone in trouble.
- 3. It is sometimes hard for me to go on with my work, if I am not encouraged.
- 4. I have never intensely disliked anyone.
- 5. On occasion I have had doubts about my ability to succeed in life.
- 6. I sometimes feel resentful when I don't get my way.
- 7. I am always careful about my manner of dress.
- 8. My table manners at home are as good as when I eat out in a restaurant.
- 9. If I could get into a movie without paying and be sure I was not seen, I would probably do it.
- 10. On a few occasions, I have given up doing something because I thought too little of my ability.
- 11. I like to gossip at times.
- 12. There have been times when I felt like rebelling against people in authority even though I knew they were right.
- 13. No matter who I'm talking to, I'm always a good listener.
- 14. I can remember "playing sick" to get out of something.

- 15. There have been occasions when I took advantage of someone.
- 16. I'm always willing to admit it when I make a mistake.
- 17. I always try to practice what I preach.
- 18. I don't find it particularly difficult to get along with loud-mouthed, obnoxious people.
- 19. I sometimes try to get even rather than forgive and forget.
- 20. When I don't know something I don't at all mind admitting it.
- 21. I am always courteous, even to people who are disagreeable.
- 22. At times I have really insisted on having things my own way.
- 23. There have been occasions when I felt like smashing things.
- 24. I would never think of letting someone else be punished for my wrongdoings.
- 25. I never resent being asked to return a favor.
- 26. I have never been irked when people expressed ideas very different from my own.
- 27. I never make a long trip without checking the safety of my car.
- 28. There have been times when I was quite jealous of the good fortune of others.
- 29. I have almost never felt the urge to tell someone off.
- 30. I am sometimes irritated by people who ask favors of me.
- 31. I have never felt that I was punished without cause.
- 32. I sometimes think when people have a mistortune they only got what they deserved.
- 33. I have never deliberately said something that hurt someone's feelings.

Appendix B

Alcohol Expectancy Questionnaire-Adult

ALCOHOL EXPECTANCY QUESTIONNAIRE - III (ADULT)

The following pages contain statements about the effects of alcohol. Read each statement carefully and respond according to your own personal thoughts, feelings and beliefs about alcohol now. We are interested in what <u>you</u> think about alcohol, regardless of what other people might think.

If you think that the statement is true, or mostly true, or true some of the time, then circle "Agree" on the answer sheet. If you think the statement is false, or mostly false, then circle "Disagree" on the answer sheet. When the statements refer to drinking alcohol, you may think in terms of drinking any alcoholic beverage, such as beer, wine, whiskey, liquor, rum, scotch, vodka, gin, or various alcoholic mixed drinks. Whether or not you have had actual drinking experiences yourself, you are to answer in terms of your beliefs about alcohol. It is important that you respond to every question.

Begin answering on Question 1. Please answer every item on the answer sheet.

PLEASE BE HONEST. REMEMBER, YOUR ANSWERS ARE CONFIDENTIAL.

ANY QUESTIONS?	Please ask the examiner.
GO TO THE NEXT F	PAGE

RESPOND TO THESE ITEMS ACCORDING TO WHAT YOU PERSONALLY BELIEVE TO BE TRUE ABOUT ALCOHOL (Circle Agree or Disagree according to your beliefs)

Agree	Disagree	1.	Alcohol can transform my personality.
Agree	Disagree	2.	Drinking helps me feel whatever way I want to feel.
Agree	Disagree	3.	Some alcohol has a pleasant, cleansing, tingly taste.
Agree	Disagree	4.	Alcohol makes me feel happy.
Agree	Disagree	5 .	Drinking adds a certain warmth to social occasions.
Agree	Disagree	6.	Sweet, mixed drinks taste good.
Agree	Disagree	7.	When I am drinking, it is easier to open up and express my feelings.
Agree	Disagree	8.	Time passes quickly when I am drinking.
Ağree	Disagree	9.	When they drink, women become more sexually relaxed.
Agree	Disagree	10.	Drinking makes me feel flushed.
Agree	Disagree	11.	I feel powerful when I drink, as if I can really influence others to do as I want.
Agree	Disagree	12.	Drinking increases male aggressiveness.

ANSWER ACCORDING TO YOUR CURRENT PERSONAL BELIEFS

Agree	Disagree	13.	Alcohol lets my fantasies flow more easily.
Agree	Disagree	14.	Drinking gives me more confidence in myself.
Agree	Disagree	15.	Drinking makes me feel good.
Agree	Disagree	16.	I feel more creative after I have been drinking.
Agree	Disagree	17.	Having a few drinks is a nice way to celebrate special occasions.
Agree	Disagree	18.	can discuss or argue a point more forcefully after I have had a few drinks.
Agree	Disagree	19.	When I am drinking I feel freer to be myself and to do whatever I want.
Agree	Disagree	20 .	Drinking makes it easier to concentrate on the good feelings I have at the time.
Agree	Disagree	21.	Alcohol allows me to be more assertive.
Agree	Disagree	22 .	When I feel "high" from drinking, everything seems to feel better.
Agree	Disagree	23 .	A drink or two makes the humorous side of me come out.

GO TO THE NEXT PAGE

ANSWER ACCORDING TO WHAT YOU PERSONALLY BELIEVE NOW

Agree	Disagree	24 .	If I am nervous about having sex, alcohol makes me feel better.
Agree	Disagree	25 .	Drinking relieves boredom.
Agree	Disagree	26 .	I find that conversing with members of the opposite sex is easier for me after I have had a few drinks.
Agree	Disagree	27 .	After a few drinks, I feel less sexually inhibited.
Agree	Disagree	28 .	Drinking is pleasurable because it is enjoyable to join in with people who are enjoying themselves.
Agree	Disagree	29.	I like the taste of some alcoholic beverages.
Agree	Disagree	30 .	If I am feeling restricted in any way, a few drinks make me feel better.
Agree	Disagree	31.	Men are friendlier when they drink.
Agree	Disagree	32 .	It is easier for me to meet new people if I've been drinking.
Agree	Disagree	33 .	After a few drinks, it is easier to pick a fight.
Agree	Disagree	34 .	Alcohol can eliminate feelings of inferiority.

ANSWER ACCORDING TO YOUR CURRENT PERSONAL BELIEFS

Agree	Disagree	35 .	Alcohol makes women more sensuous.
Agree	Disagree	36 .	If I have a couple of drinks, it is easier to express my feelings.
Agree	Disagree	37 .	I feel less bothered by physical ills after a few drinks.
Agree	Disagree	38 .	Alcohol makes me need less attention from others than I usually do.
Agree	Disagree	39 .	Alcohol makes me more outspoken or opinionated
Agree	Disagree	40.	After a few drinks, I feel more self-reliant than usual.
Agree	Disagree	41.	After a few drinks, I don't worry as much about what other people think of me.
Agree	Disagree	42.	When drinking, I do not consider myself totally accountable or responsible for my behavior.
Agree	Disagree	43.	Alcohol enables me to have a better time at parties.
Agree	Disagree	44.	Anything which requires a relaxed style can be facilitated by alcohol.

GO TO THE NEXT PAGE

4

ANSWER ACCORDING TO WHAT YOU PERSONALLY BELIEVE NOW

Agree	Disagree	45.	Drinking makes the future seem brighter.
Ağree	Disagree	46.	I am not as tense if I am drinking.
Agree	Disagree	47.	I of ten feel sexier after I have had a couple of drinks.
Agree	Disagree	48.	Having a few drinks helps me relax in a social situation.
Agree	Disagree	49.	I drink when I am feeling med.
Agree	Disagree	50 .	Drinking alone or with one other person makes me feel calm and serene.
Agree	Disagree	51 .	After a few drinks, I feel brave and more capable of fighting.
Agree	Disagree	52 .	Drinking can make me more satisfied with myself.
Agree	Disagree	53 .	There is more camaraderie in a group of people who have been drinking.
Agree	Disagree	54.	My feelings of isolation and alienation decrease when I drink.
Agree	Disagree	55 .	A few drinks makes me feel less in touch with what is going on around me.

ANSWER ACCORDING TO WHAT YOU BELIEVE NOW

Agree	Disagree	56 .	Alcohol makes me more tolerant of people I do not enjoy.
Agree	Disagree	57 .	Alcohol helps me sleep better.
Agree	Disagree	58 .	Drinking increases female aggressiveness.
Agree	Disagree	59 .	I am a better lover after a few drinks.
Agree	Disagree	60 .	Women talk more after they have had a few drinks.
Agree	Disagree	61.	Alcohol decreases muscular tension.
Agree	Disagree	62 .	Alcohol makes me worry less.
Agree	Disagree	63 .	A few drinks make it easier to talk to people.
Agree	Disagree	64.	After a few drinks I am usually in a better mood.
Agree	Disagree	65 .	Alcohol seems like magic.
Agree	Disagree	66 .	Women can have orgasms more easily if they have been drinking.
Agree	Disagree	67 .	At times, drinking is like permission to forget problems.
Agree	Disagree	68 .	Drinking helps me get out of a depressed mood.

ANSWER ACCORDING TO WHAT YOU PERSONALLY BELIEVE NOW

Agree	Disagree	69.	After I have had a couple of drinks, I feel I am more of a caring, sharing person.
Agree	Disagree	70 .	Alcohol decreases my feelings of guilt about not working.
			GO TO THE NEXT PAGE

Agree	Disagree	71.	I feel more coordinated after I drink.
Agree	Disagree	72 .	Alcohol makes me more interesting.
Agree	Disagree	73 .	A few drinks make me feel less shy.
Agree	Disagree	74.	If I am tense or anxious, having a few drinks makes me feel better.
Agree	Disagree	75.	Alcohol enables me to fall asleep more easily.
Agree	Disagree	76.	If I am feeling afraid, alcohol decreases my fears.
Agree	Disagree	77.	A couple of drinks makes me more aroused or
J	J		physiologically excited.
Agree	Disagree	78 .	Alcohol can act as an anesthetic, that is, it can deaden pain.
Agree	Disagree	79.	I enjoy having sex more if I have had some alcohol.
Agree	Disagree	80.	I am more romantic when I drink.
Agree	Disagree	81.	I feel more masculine/feminine after a few drinks.
Agree	Disagree	82 .	When I am feeling antisocial, drinking makes me more gregarious.
Agree	Disagree	83.	Alcohol makes me feel better physically.
Agree	Disagree	84.	Sometimes when I drink alone or with one other person it is easy to feel cozy and romantic.
Agree	Disagree	85 .	I feel like more of a happy-go-lucky person when I drink.
Agree	Disagree	86.	Drinking makes get-togethers more fun.
Agree	Disagree	87.	Alcohol makes it easier to forget bad feelings.
Agree	Disagree	88.	After a few drinks, I am more sexually responsive.
Agree	Disagree	89.	If I am cold, having a few drinks will give me a sense of warmth.

ANSWER ACCORDING TO WHAT YOU PERSONALLY BELIEVE NOW

Agree	Disagree	90.	It is easier to act on my feelings after I have had a few drinks.
Agree	Disagree	91.	I become lustful when I drink.
Agree	Disagree	92.	A couple of drinks makes me more outgoing.
Agree	Disagree	93.	A drink or two can make me feel more wide awake.
Agree	Disagree	94.	Alcohol decreases my hostilities.
Agree	Disagree	95 .	Alcohol makes me feel closer to people.
Agree	Disagree	96.	I tend to be less self -critical when I have something alcoholic to drink.
Agree	Disagree	97.	I find that conversing with members of the opposite sex is easier for me after I have had a few drinks.
Agree	Disagree	98.	Drinking makes me feel flushed.

GO TO THE NEXT PAGE

Agree	Disagree	99 .	It is easier to remember funny stories or jokes if I have
			been drinking.
Agree	Disagree	100.	After a few drinks, I am less submissive to those in positions of authority
Agree	Disagree	101.	Alcohol makes me more talkative.
Agree	Disagree	102.	I am more romantic when I drink.

ANSWER ACCORDING TO WHAT YOU PERSONALLY BELIEVE NOW

Agree	Disagree	103.	Men can have orgasms more easily if they have had a drink.
Agree	Disagree	104.	A drink or two is really refreshing after strenuous physical activity.
Agree	Disagree	105.	Alcohol enables me to have a better time at parties.
Agree	Disagree		I can be more persuasive if I have had a few drinks.
Agree	Disagree	107.	· ·
Agree	Disagree	108.	Alcohol helps me sleep better.
Agree	Disagree		After a drink or two, things like muscle aches and pains do not hurt as much.
Agree	Disagree	110.	Women are friendlier after they have had a few drinks.
Agree	Disagree		Alcohol makes me worry less.
Agree	Disagree		Alcohol makes it easier to act impulsively or make decisions quickly.
Agree	Disagree		Alcohol makes me feel less shy. Alcohol makes me more tolerant of people I do not enjoy.

ANSWER ACCORDING TO WHAT YOU PERSONALLY BELIEVE NOW

Agree	Disagree	115.	Alcohol makes me need less attention from others than I usually do.
Agree	Disagree	116.	A drink or two can slow me down, so I do not feel so rushed or pressured for time.
Agree	Disagree	117.	I feel more sexual after a few drinks.
Agree	Disagree	118.	Alcohol makes me feel better physically.
Ağree	Disagree	119.	Having a drink in my hand can make me feel secure in a difficult social situation.
Agree	Disagree	120.	Things seem funnier when I have been drinking, or at least I laugh more.

Appendix C

Informed Consent Form

Appendix C INFORMED CONSENT DOCUMENT OLD DOMINION UNIVERSITY

PROJECT TITLE: EXPECTATIONS OF ALCOHOL AND SOCIAL DESIRABILITY STUDY

INTRODUCTION

The purposes of this form are to give you information that may affect your decision whether to say YES or NO to participation in this research, and to record the consent of those who say YES. The title of this research project is Expectations of Alcohol and Social Desirability and will be conducted with participating fraternity chapters.

RESEARCHERS

Responsible Principle Investigator: Alan M. Schwitzer Title: Professor of Counseling Degree: Ph.D. College: Darden College of Education Department: Counseling and Human Services

Investigator: Pietro A. Sasso Title: Doctoral Candidate Degree: M.S.

College: Darden College of Education Department: Educational Foundations and Leadership

DESCRIPTION OF RESEARCH STUDY

Several studies have been conducted looking into the subject of expectations of alcohol use or social desirability in college students. None of them have explained alcohol use and social desirability among active and new members (pledges) in fraternities.

If you decide to participate, then you will be asked to complete three inventories as a part of a doctoral dissertation study. You will be asked how often you consume alcohol and what kind benefit or consequences you gain from alcohol. You will also be asked several questions about your social interactions with others. You will be asked to provide demographic information and standing in the fraternity. If you say YES, then your participation will last for no more than 45 minutes. Approximately 300 fraternity members will be participating in this study.

EXCLUSIONARY CRITERIA

To the best of your knowledge, you should not have be a member of a fraternity chapter who engaged in a nontraditional new member education or orientation process such as a four-year development program, mentor program, or training process in lieu of a traditional pledge process. Additionally, you should not be a member of an organization that is within the National Pan-Hellenic Council, National Multicultural Greek Conference, National Association of Latino Fraternal Organizations, National IPA Panhellenic Association, or the National Panhellenic Conference that would keep you from participating in this study. You also cannot be under 18 years of age.

RISKS AND BENEFITS

RISKS: If you decide to participate in this study, then you may face a risk of feeling uncomfortable from answering specific questions. The researchers tried to reduce these risks by ensuring anonymity. Also, as with any research, there is some possibility that you may be subject to risks that have not yet been identified.

BENEFITS: There are no direct benefits to participants in this study. Also, as with any research, there is some possibility that you may be subject to benefits that have not yet been identified.

COSTS AND PAYMENTS

The researchers want your decision about participating in this study to be absolutely voluntary. The researchers are unable to give you any payment for participating in this study.

NEW INFORMATION

If the researchers find new information during this study that would reasonably change your decision about participating, then they will give it to you.

CONFIDENTIALITY

The researchers will take reasonable steps to keep private information, such as questionnaires confidential and anonymous. The researcher will remove identifiers from the information and store information in a locked filing cabinet prior to its processing. The results of this study may be used in reports, presentations, and publications; but the researcher will not identify you. Of course, your records may be subpoenaed by court order or inspected by government bodies with oversight authority.

WITHDRAWAL PRIVILEGE

It is OK for you to say NO. Even if you say YES now, you are free to say NO later, and walk away or withdraw from the study -- at any time. The researchers reserve the right to withdraw your participation in this study, at any time, if they observe potential problems with your continued participation.

COMPENSATION FOR ILLNESS AND INJURY

If you say YES, then your consent in this document does not waive any of your legal rights. However, in the event of harm, injury, or illness arising from this study, neither Old Dominion University nor the researchers are able to give you any money, insurance coverage, free medical care, or any other compensation for such injury. In the event that you suffer injury as a result of participation in any research project, you may contact Dr. Alan Schwitzer at 757-683-3251 or Dr. George Maihafer the current IRB chair at 757-683-4520 at Old Dominion University, who will be glad to review the matter with you.

VOLUNTARY CONSENT

By signing this form, you are saying several things. You are saying that you have read this form or have had it read to you, that you are satisfied that you understand this form, the research study, and its risks and benefits. The researchers should have answered any questions you may have had about the research. If you have any questions later on, then the researchers should be able to answer them:

Dr. Alan Schwitzer: at 757-683-3251 Pete Sasso, M.S.: 757-683-6277

If at any time you feel pressured to participate, or if you have any questions about your rights or this form, then you should call Dr. George Maihafer, the current IRB chair, at 757-683-4520, or the Old Dominion University Office of Research, at 757-683-3460.

And importantly, by signing below, you are telling the researcher YES, that you agree to participate in this study. The researcher should give you a copy of this form for your records.

Subject's Printed Name & Signature	Date

INVESTIGATOR'S STATEMENT

I certify that I have explained to this subject the nature and purpose of this research, including benefits, risks, costs, and any experimental procedures. I have described the rights and protections afforded to human subjects and have done nothing to pressure, coerce, or falsely entice this subject into participating. I am aware of my obligations under state and federal laws, and promise compliance. I have answered the subject's questions and have encouraged him/her to ask additional questions at any time during the course of this study. I have witnessed the above signature(s) on this consent form.

Investigator's Printed Name & Signature	Date

Appendix D

Demographic Questionnaire

Demographic Questionnaire

Please answer all of the following questions.

Membership S What is your me	tatus embership status? Please check one of the two options below.
Pledge	Active (Initiated Member)
Academic Leve	you been enrolled in college? Please check one of the options below.
l year 3 years	(two or less semesters) 2 years (3 to 4 semesters) 4 years (7 to 8 semesters) s or more (9 or more semesters)
Major What is your ma	ajor? Please choose a category that describes your major.
Business	Accounting, Marketing, Logistics, Business Administration, Business Education, Fashion, Public Relations, Finance, Economics, International Business, Management, Supply Chain
Science	Chemistry, Biochemistry, Oceanography, Psychology, Math, Astronomy, Environmental, Marine Science, Earth Science
Engineerii	
Technolog	
Arts	Acting, Drama, Stage Design, Studio Art, Art, Sculpture, Graphic Design, Music, Music Production, Dance, Music Composition, Music Performance
Humanitie	African-American Studies, Asian Studies, Islamic Studies, Criminal Justice, Sociology, Anthropology, Communication, Journalism, History, English, American Studies, International Relations, Political Science, Geography, Women's Studies, Philosophy, Creative Writing
Language	Spanish, Korean, Japanese, Arabic, French, German
Education	Special Education, Primary Education (K-6), Secondary (7-12), Special Education, Training Specialist
Human Services	Social Work, Counseling, Human Services
Health Sciences	Pre-med, Dental Hygiene, Public Health, Environmental Health, Nursing, Exercise Science, Physical Therapy, Health Education, Speech-Language Patholgoy
Hospitality	
Military Science	ROTC
Leadership What is the high	nest role of leadership you have you held to date?
President Pledgen	Vice President Secretary Treasurer Recruitment aster/ New Member Educator Risk Management Scholarship Other Chair

Appendix E

Debriefing Statement

Debriefing Statement

About The Study

You have just completed a study as a part of a dissertation for a doctoral student from Old Dominion University. This study is concerned with the relationship between socially desirable behaviors and expectations of alcohol. Previous studies have found that fraternity members consume the most alcohol of any college student subculture. Fraternity members have been found to have distorted perceptions of positive benefits of alcohol use. Additionally, it has been found the hyper-masculine environment and assimilation of new members into the chapter may potentially encourage accommodating behaviors among members to include conformity. Therefore, as active and new members assimilate, they become acculturated into a chapter culture that encourages alcohol misuse. Members may continue to project a favorable image of themselves based on distorted expectations of alcohol. As a response to this, members may potentially consume increasing amounts of alcohol. This study is attempting to further understand the influence of expectations of use with alcohol and conformity in new and active members in fraternities.

Benefit of the Study

Your participation in this study is valuable. If the results of this study are significant, the potential benefits of this study include data that can be utilized to inform the design of interventions. This would help educate fraternity members about the dangers of binge drinking and continued heavy alcohol use. Additionally, this information may help inform the design of new member education programs by national fraternities. This would encourage the development of strategies to cope with alcohol misuse and conformity by new members and such changes overtime may reduce these behaviors as they become initiated into the fraternity.

About the Researcher

The researcher authoring this dissertation is a member of a fraternity and joined as an undergraduate. He originally was the victim of extreme hazing and considerable forced drinking in pledging an initial fraternity. He disassociated and later became the primary founder of a chartered chapter of another fraternity. As an undergraduate he served his chapter as president, community service chair, chaplain, secretary, and recruitment chair. He served on the Interfraternity Council and as the standards chairperson. He additionally interned for the student activities office at his undergraduate alma mater, assisting with fraternity and sorority administration as well as programming. Professionally, he was also a traveling leadership consultant for a small fraternity and later became the chief administrative officer as its national vice president. In addition, he has served as a consultant to an emerging national sorority and as a faculty/staff advisor to another fraternity chapter. He also has served as a fraternity and sorority advisor to a community at a music conservatory and has also worked in student activities as both a career and academic advisor to freshmen sophomore undergraduate students. Additionally, the researcher is a certified commercial alcohol educator and served as an alcohol educator for a large state-assisted university.

For More Information

For more information, please contact the researcher, Pete Sasso. You can contact him at Old Dominion University at 757-683-6277 or through e-mail at PSasso@odu.edu. If you have concerns about your rights as a participant in this experiment, please contact the ODU Office of Research at (757) 683-3460.

Thank you for your participation!

Appendix F

Tables of Results

Table 1: Research methodology and analysis summary

Question	Hypothesis	Independent Variable(s)	Dependent Variable(s)	Analyses
Does social desirability as measured by the MCSD relate to alcohol expectancy as measured by the AEQ-A among fraternity members?	It is hypothesized that a significant positive relation will exist such that as social desirability increases alcohol expectancy will also increase	Social Desirability-the tendency to respond in a socially desirable manner measured by fraternity members' personal endorsement of specific behaviors (MCSD)	Alcohol Expectancy- a total score from 6 subscales based on self-reported fraternity members' expectations about alcohol: Global Positive Changes, Sexual Enhancement, Physical and Social Pleasure, Social Assertion, Relaxation and Tension Reduction, and Arousal and Aggression (AEQ)	Bivariate analysis will be performed to estimate the strength and direction of a potential linear relationship between alcohol expectancy and social desirability
Do levels of social desirability as measured by responses on the MCSD and as measured by the AEQ-A total score and as measured by the AEQ-A subscales (e.g., Global Positive Changes, Sexual Enhancement, Physical and Social Pleasure, Social Assertion, Relaxation and Tension Reduction, and Arousal and Aggression) differ between pledges and active members?	1.It is hypothesized that there will be a significant main effect for group membership (pledge v. member) and the dependent measures (AEQ-A and MCSD). 2. It is hypothesized that there will be there will be significant differences between group membership (active v. pledge) and social desirability and subscales of Sexual Enhancement. Social Assertion, and Physical and Social Pleasure on the AEQ-A. 3. It is additionally hypothesized that there will be no significant differences between membership (pledges vs. actives), social desirability, and subscales of Global Positive Changes. Relaxation and Tension Reduction, and Arousal and Aggression on the AEQ-A	Fraternity Membership- students self-reported their membership status as either as a pledge (new member) or initiated member.	1. Social Desirability-the tendency to respond in a socially desirable manner measured by fraternity members' personal endorsement of specific behaviors (MCSD). 2. Alcohol Expectancy- a total score from 6 subscales based on self-reported fraternity members' expectations about alcohol: Global Positive Changes, Sexual Enhancement, Physical and Social Pleasure, Social Assertion, Relaxation and Tension Reduction, and Arousal and Aggression (AEQ)	An analysis of variance (ANOVA) will be used to determine if are any significant differences between the groups on the demographic variable of membership level. If a significant difference exists between the groups the variable will be used a covariate for subsequent analyses. MANOVA will be used to determine if there is a main effect for group measurement and scores on the MCSD, AEQ-A total score and the six subscales of the AEQ-A.
What is the relation between the AEQ-A subscale scores and social desirability as measured by the MCSD?	 It is hypothesized there will be at least moderate positive correlation (r= > 0.5) between social desirability and the various subscales of the AEQ-A. it is hypothesized that several of the subscales will have least moderate positive correlation (r= > 0.5) between each another. It is hypothesized that there will be no statistical significance among several of the AEQ-A subscales and social desirability (r = < 0.5) 	Social Desirability-the tendency to respond in a socially desirable manner measured by fraternity members' personal endorsement of specific behaviors (MCSD)	Alcohol Expectancy- a total score from 6 subscales based on self- reported fraternity members' expectations about alcohol: Global Positive Changes, Sexual Enhancement, Physical and Social Pleasure, Social Assertion, Relaxation and Tension Reduction, and Arousal and Aggression (AEQ)	Bivariate correlations will be calculated to determine the strength and direction of a potential linear relationship between social desirability among the six subscales of alcohol expectations.

Table 2: Hypothesis for research question 3

	MCSD	Global Positive Change	Sexual Enhancement	Physical & Social Pleasure	Social Assertion	Relaxation & Tension Reduction	Arousal and Aggression
MCSD		NS	S	S	S	NS	S
Global Positive Change	NS		S	S	NS	S	NS
Sexual Enhancement	S	S		S	S	S	S
Physical & Social Pleasure	S	S	S		NS	S	NS
Social Assertion	S	NS	S	NS		NS	NS
Relaxation & Tension Reduction	NS	S	S	S	NS		NS
Arousal and Aggression	S	NS	S	NS	NS	NS	

Key:

NS-Non-Signifigance, $r \le 0.5$

S= Signifigance, $r \ge 0.5$

Table 3. Demographic characteristics of participants

Type of Demographic		Total Responses	Percentage	Cumulative Percent
Marchard Con				
Membership Status	Pledge	99	30.6	30.6
	Active	225	69.4	100.0
	Active	223	09.4	100.0
Academic Level				
	Transfer	3	.9	.9
	2 or < semesters	102	31.5	32.4
	3 to 4 semesters	107	33.0	65.4
	5 to 6 semesters	62	19.1	84.6
	7 to 8 semesters	46	14.2	98.8
	9 or more semesters	4	1.2	100.0
Academic Major				
	No Major	49	15.1	15.1
	Business	68	21.0	36.1
	Science	39	12.0	48.1
	Engineering	54	16.7	64.8
	Technology	16	4.9	69.8
	Arts	20	6.2	75.9
	Humanities	37	11.4	87.3
	Language	5	1.5	88.9
	Education	7	2.2	91.0
	Human Services	11	3.4	94.4
	Health Sciences	12	3.7	98.1
	Hospitality	3	.9	99.1
	Military Science	3	.9	100.0
Highest Level of Leadership				
ringhest Level of Leadership	No Leadership	139	42.9	42.9
	Position			
	President	27	8.3	51.2
	Vice President	15	4.6	55.9
	Secretary	16	4.9	60.8
	Treasurer	18	5.6	66.4
	Recruitment	17	5.2	71.6
	Pledgemaster - New Member Educator	10	3.1	74.7
	Risk Management	14	4.3	79.0
	Scholarship	6	1.9	80.9
	Other Chair	62	19.1	100.0

Table 4. Means and standard deviations for dependent variables by group (pledge vs. active member)

Variable		n	Normative Range	Mean	SD
AEQ-A Global Positive Change			28 - 56		
5	Pledge	99		47.62	4.37
	Active	225		44.65	6.50
AEQ-A Sex Enhancement			7 - 14		
	Pledge	99		11.59	1.75
	Active	225		11.07	1.99
AEQ-A Physical/Social Pleasure			9 - 18		
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Pledge	99		16.27	1.30
	Active	225		16.23	1.77
AEQ-A Social Assertion			11 - 22		
•	Pledge	99		19.39	1.66
	Active	225		19.14	2.62
AEQ-A Relaxation Tension Reduction	n		9 - 18		
`	Pledge	99		15.78	1.63
	Active	225		15.43	1.91
AEQ-A Arousal and Aggression			2 to 10		
	Pledge	99		8.37	1.17
	Active	225		8.14	1.31
AEQ-A Total Score			66 - 240		
-	Pledge	99		208.33	12.09
	Active	225		200.00	21.51
MCSD Total Score			0 - 33		
	Pledge	99		22.12	4.97
	Active	225		21.66	5.24

Table 5. Pearson product-moment correlation coefficients between AEQ-A subscales and MCSD

	MCSD Total Score	AEQ-A Global Positive Change	AEQ-A Sexual Enhacement	AEQ-A Physical Social Pleasure	AEQ-A Social Assertion	AEQ-A Relaxation Tension Reduction	AEQ-A Arousal and Aggression
MCSD Total Score		.304**	.305**	.061	.042	030	.185**
AEQ-A Global Positive Change	.304**		.586**	.477**	.607**	.468**	.531**
AEQ-A Sexual Enhacement	.305**	.586**		.339**	.410**	.299**	.358**
AEQ-A Physical/Social Pleasure	.061	.477**	.339**		.574**	.409**	.320**
AEQ-A Social Assertion	.042	.607**	.410**	.574**		.544**	.358**
AEQ-A Relaxation Tension Reduction	030	.468**	.299**	.409**	.544**		.247**
AEQ-A Arousal and Aggression	.185**	.531**	.358**	.320**	.358**	.247**	

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Table 6: Hypothesis outcomes for research question 3

	MCSD	Global Positive Change	Sexual Enhancement	Physical & Social Pleasure	Social Assertion	Relaxation & Tension Reduction	Arousal and Aggression
MCSD		NS^	S*	S^	S^	NS^	S*
Global Positive Change	NS^		S*	S*	NS^	S*	NS^
Sexual Enhancement	S*	S*		S*	S*	S*	S*
Physical & Social Pleasure	S^	S*	S*		NS^	S*	NS^
Social Assertion	S^	NS^	S*	NS^		NS^	NS^
Relaxation & Tension Reduction	NS*	S*	S*	S*	NS^		NS^
Arousal and Aggression	S*	NS^	S*	NS^	NS^	NS^	

Key:

NS-Non-Signifigance, r < 0.5

S= Signifigance, r > 0.5 * =Hypothesis Correct ^ = Hypothesis Incorrect

Table 7: Distribution Levels of MCSD scores (pledge v. active)

Level	Range	Pledge	Percentage	Active	Percentage	Cumulative Percentage
Low	0-8	1	1.0%	2	0.9%	0.9%
Medium	9-19	29	29.3%	74	32.9%	31.8%
High	20-33	69	69.7%	149	66.2%	67.3%
Total		99	100%	225	100.0%	100.0%

Table 8: MCSD and AEQ-A scores by level and academic status

Level	Variable	Range	0 Semesters	2 or < semesters	3 to 4 semesters	5 to 6 semesters	7 to 8 semesters	9 or more semesters
Low								
Low.	MCSD	0-8	0	1	1	0	1	0
	AEQ	0-80	0	0	0	0	0	0
Medium								
	MCSD	9-19	0	32	34	17	17	3
	AEQ	81-160	1	5	15	13	7	2
High								
_	MCSD	20-33	3	69	72	45	28	I
	AEQ	161-240	2	97	92	49	39	2