Attachment to God, Locus of Control, and Outcomes in the Brief Alcohol Screening and Intervention for College Students

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ABSTRACT

Research shows that aspects of religion and spirituality can influence drinking behavior among university students. Some believe that an internalized commitment to God, or to another spiritual force, is an important component in explaining relationships between religion, spirituality, and drinking behavior. One way of understanding and measuring this internalized commitment to God is based on attachment theory. Another way of measuring and understanding internalized beliefs about the degree to which God shapes behavior is based on the social learning theory concept called locus of control. Conceptually, low God locus of control indicates that one believes God is passive and not involved in decisions pertaining to drinking. Research shows that college or university students who have anxious God attachments are likely to experience negative consequences as a result of binge drinking. These individuals believe God is inconsistent in their lives. Likewise, low (passive) God locus of control (LOC) seems to increase drinking and negative consequences from drinking. In this study, 19 students (15 males, 4 females) attending Abilene Christian University (ACU) participating in a Brief Alcohol Screening and Intervention for College Students (BASICS) program completed the following four measures: Attachment to God Inventory (AGI), Alcohol-related God Locus of Control Scale for Adolescents (AGLOC-A), General Drinking Questionnaire, and Negative Outcomes of Drinking were assessed to determine if attachment to God and God LOC impacted their drinking. Results indicated that low (passive) God locus of
control was associated with increased drinking and that anxious attachment to God was associated with negative consequences of drinking. Implications are discussed.
Attachment to God, Locus of Control, and Outcomes in the Brief Alcohol Screening and Intervention for College Students

A Thesis
Presented To
The Faculty of the Graduate School
Abilene Christian University

In Partial Fulfillment
Of the Requirements for the Degree
Master of Science
Social Work

By
Misty Schoephoerster
May 2017
This thesis, directed and approved by the candidate’s committee, has been accepted by the Graduate Council of Abilene Christian University in partial fulfillment of the requirements for the degree

Master of Science in Social Work

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Date

4-17-2017

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Dr. Alan Lipp, Chair

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Rachel Slaymaker

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Steve Rowlands
DEDICATION

I would like to dedicate this research thesis to my husband, Ephraim Schoephoerster, who is truly the ‘left’ to my ‘right’ shoe

“Now faith is the assurance of things hoped for, the conviction of things not seen.”

Hebrews 11:1 ESV
ACKNOWLEDGEMENTS

I would like to thank my thesis chair, Dr. Alan Lipps, for his continual support, dedication, and humor in making my thesis and research successful and enjoyable. His depth of understanding in addiction has made me stronger in practice. I would also like to acknowledge and thank my thesis committee members, Rachel Slaymaker and Steve Rowlands. Their individual strengths and expertise have not only helped me with this research, but also prepared me to be a competent professional. I will confidently go into the work place knowing I have the skills to succeed. Thank you all for your time, guidance, and support!
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CHAPTER I
INTRODUCTION

Drinking has become a major health problem for today’s college students (National Institute on Alcohol Abuse and Alcoholism, 2002; Quinn & Fromme, 2011). On average, college males are more likely to binge drink than their female peers (White & Hingson, 2013). Binge drinkers often have faulty perceptions about the amount of binge drinking happening on their campuses; which, leads them to believe binge drinking is normal (Wechsler & Kuo, 2000). Binge drinking can result in a host of negative consequences, such as: drunk driving, experiencing police involvement and lowered academic performance, among others (White & Hingson, 2013). Therefore, university administrators and mental health care providers need to be able to intervene on behalf of students struggling to drink in moderation and help them implement harm reduction strategies.

According to Social Learning Theory (SLT), learned experiences with students’ parents and peers impacts drinking behaviors in college students. Deviant behavior, underage drinking, and binge drinking are determined by social norms set by parents and friends (Durkin, Wolfe, & Clark, 2005). For instance, children of alcoholics (COAs) are more likely to drink at earlier ages and drink more than their peers, especially if their father was an alcoholic (Braitman et al., 2009). Parenting styles have also been linked to drinking behaviors (Walls, Fairlie, & Wood, 2009; Newman, Harrison, Dashiff, & Davies, 2008). College students also determine willingness to drink based on perceived
descriptive drinking rates of their best friends (Litt, Stock, & Lewis, 2012). Students weigh the costs and benefits of their drinking behaviors (Durkin et al., 2005).

The Brief Alcohol Screening and Intervention for College Students (BASICS) Brief Motivational Interviewing (BMI) approach has been shown to be a highly effective intervention among college students (Miller & Rollnick, 2013). This intervention uses a non-threatening approach, facilitated by a peer, to provide psycho-education, feedback, and harm reduction strategies (Miller & Rollnick, 2013). BASICS practitioners find student’s internal motivation to change and attempt to reduce negative consequences experienced by students (Miller & Rollnick, 2013).

One aspect that the BASICS program does not evaluate is the spiritual aspect of students and how it affects their drinking. Consistent with attachment theory, Hazen & Shaver (1987) asserted that bonds made in infancy extend into adulthood and affect social relationships and drinking. Individuals with anxious and avoidant attachment styles have been shown to drink greater amounts of alcohol (Horton, Ellison, Loukas, Downey, & Barrett, 2012) and those with an anxious attachment style experience more negative outcomes as a result of their drinking (Molnar, Sadava, DeCourville, & Perroer, 2010). Researchers also assert that parental attachments can transfer onto God attachment styles and can influence drinking patterns (McDonald, Beck, Allison, & Norsworthy, 2005; Kirkpatrick & Shaver, 1992; Hazen & Shaver, 1990).

Locus of control (LOC) is a theoretical concept proposed to explain the degree to which individuals perceive that gained rewards are due to individual efforts or external forces beyond their control (Rotter, 1966). According to Holt, Clark, and Klem (2007), “God control beliefs are primarily considered an external force, although there are
believed to be different dimensions regarding active or passive spirituality” (as cited in Moore, 2014, p. 579). Moore (2014) found that those who had a high (active) God LOC believed God is in control of their drinking choices and were less likely to drink. Moore (2014) stated, “This suggests that internal LOC can play a role with active spirituality, exerting their own efforts along with good to stay healthy, whereas passive God-related LOC indicates that the person turns over their health to God and believes their own efforts do not matter” (p. 579).

At a faith-based university, officials strive to assess and evaluate the spiritual well-being of college students. Students that have the belief that God is in control of their drinking habits are less likely to binge drink. Thus, the relationship between drinking, attachment to God, and the extent to which a student believes God is in control of his life should aid facilitators in intervention on behalf of students that drink at religious universities.
CHAPTER II
LITERATURE REVIEW

College Students

College students drink heavier and consume more alcohol than their non-college peers (Dawson, Grant, Stinson, & Chou, 2004; Grucza, Norberg & Bierut, 2009; O’Malley & Johnston, 2002; Quinn & Fromme, 2011). Full-time students are more likely to drink compared to part-time students (CBHSQ, 2013). College drinking has been a national concern for at least a decade (The Department of Health and Human Services, 2007) and drinking has remained comparable to 2002 binge drinking rates (CBHSQ, 2013). Each year, nearly 2,000 college students die from unintentional alcohol related injuries and approximately 1,400 die from alcohol-related motor vehicle crash deaths (Hingson, Zha, & Weitzman, 2009). Therefore, it is important for university administrators and health care staff to understand the social and health consequences of excessive alcohol consumption so that effective interventions can be offered.

Gendered Drinking

Caucasian male college students are the prominent demographic of drinkers on college campuses (Primack, Kim, Shensa, & Sidani, 2012). Males associated with fraternities and athletics are especially at risk for excessive drinking (Meilman, Leichliter, & Presley, 1999). In recent decades, female enrollment in higher education institutions has outpaced male enrollment, but consumption of excessive amounts of alcohol is still a largely male problem (White & Hingson, 2013). This is likely due to
differences between males and females in terms of the role that alcohol consumption and associated behavior plays in gender identity. For example, Connell (1995) states that “aggression, authoritativeness, toughness, and hardness” are still traits men want to exude to peers on campus (as cited in Engstrom, 2012, p. 407). Males from lower socioeconomic groups are even more likely to engage in risk-taking behaviors; perhaps, to substitute for lack of financial resources and be perceived as independence (Connell, 1995, as cited in Engstrom, 2012).

College females, on the other hand, are not likely to drink as much as their male counterparts (Johnston, O’Malley, Bachman, & Schulenberg, 2009). Although, females associated with Greek organizations are at a higher risk for HED, as well as drinking more times per week than females not associated with Greek organizations (Murphy, McDevitt-Murphy, & Barnett, 2005). Murphy et al. (2005) conducted a study on negative consequences of drinking on 353 male and female undergrads (78.2% female) to assess life satisfaction and alcohol use. This study asserted males were more associated with heavy drinking than females. It also showed that males and females had a lower life satisfaction as a result of their drinking; however, females were more likely to suffer from low life satisfaction across all six domains: general, social, school, family, date, and future. This might indicate that female drinkers suffer in more areas of their life than males when they engage in alcohol consumption.

Furthermore, it might not be as culturally acceptable for females to engage in heavy episodic drinking (Wilsnack & Wilsnack, 1997). Females are more likely to suffer adverse consequences from drinking, such as date rape, sexual assaults, sexual pressure, or unwanted sexual advances (Wechsler, Moeykens, Davenport, Castillo, & Hansen,
To summarize, male college students are likely to drink more frequently, as well as have their drinking habits to be viewed as favorable, as opposed to their female college peers. Therefore, practitioners should consider gender differences, social and cultural influences, and socioeconomic status (SES) when working with student drinkers (Hughes, Wilsnack, & Kantor, 2016). Practitioners should also consider the differences in social norms and consequences of drinking on both genders.

**HED Consequences**

Heavy episodic drinking (HED) is defined as, “5 drinks in a row for men or 4 drinks in a row for women” in the past thirty days (Wechsler & Kuo, 2000, p. 58). HED is also synonymously defined as binge drinking. On average, it is reported that in a two-week period 37% of college students will binge drink (Johnston et al., 2009). College students engaged in HED are 21x more likely to experience alcohol-related problems such as legal trouble, breaking things, and missing class (Wechsler, Lee, Kuo, & Lee, 2000).

Other consequences experienced by HED students range from minor to severe. Some minor consequences of drinking are headaches, vomiting, blackouts, and hangovers, which are all common symptoms of HED (Bridges & Sharma, 2015). Major negative physical results can vary from injury, getting hurt, or increasing the risk of drunk driving (Wechsler et al., 2002). Some argue that alcohol consumption increases risky behavior by slowing down, or disinhibiting the central nervous system (Erickson, 2007). Because the frontal cortex is affected, those impaired by alcohol are more likely than those not impaired to experience poor judgment and take more chances (Erickson, 2007). This theory is supported by research that shows that alcohol is involved in about
one third of all suicides cases (Ray & Ksir, 1993). Decreased inhibition is also linked to increased sexual activity that tends to be viewed more favorably post-intoxication. Research documents that the odds of engaging in sexual acts or unprotected sex are positively associated with alcohol consumption (Ray & Ksir, 1993).

Aside from individual harm and consequences, HED college students frequently affect their peers and the environment around them. Wechsler et al. (1995) defined this problem as ‘secondary heavy drink[er] effects’. Non-drinking students can experience any of the following negative consequences from their HED peers: unwanted sexual advances, property damage, arguments and fights, study and sleep disruptions, and being tasked with babysitting their intoxicated friend.

Peers

Alcohol consumption, in terms of both frequency and quantity, is shaped by social factors. One such factor is the perception of the quantity and frequency of peer drinking. Research indicates that perceptions of peer drinking are strongly associated with drinking engagement (Litt et al., 2012). A nationwide sample from Wechsler’s and Kuo’s (2000) 1999 College Alcohol Study (CAS) survey, showed nearly 50% of the 14,000+ students surveyed underestimated the amount of binge drinking that was happening on their campuses (Wechsler et al., 1995; Wechsler, Kuo, Lee, & Dowdall, 2000; Wechsler, Lee, Kuo, & Lee, 2000;). Zarrett & Eccles (2006) also attribute one of the reasons of high dropout rates, “social norms that encourage high levels of risky behaviors, particularly alcohol use” (p.18).

Among students that feel the need to belong, the effect of peer perceptions seems to be strong. The fear of peer disapproval can be anxiety provoking and some students
may prefer to fit in and belong than to be considered a non-drinking social deviant. For students with social anxiety, social pressure to drink alcohol can be enormous. Therefore, those with increased social anxiety are likely to drink to cope with being in a large gathering. Those with social anxiety are resistant to change in drinking behavior post-alcohol interventions (Buckner, Heimberg, Ecker, & Vinci, 2013).

Durkin et al., (2005) noted that social learning theory (SLT), derived from behaviorism and identifies deviant behavior as mainly learned from peer groups. Durkin et al. (2005) identified two key factors to SLT, which are the concepts of differential association and differential reinforcement. Differential association is the notion that when peers associate with people that engage in other forms of conduct non-normative to their own, their values and norms can be altered as a consequence (Durkin et al., 2005). Differential reinforcement is the weighing out of consequences and rewards of an action (Akers, 2000; Durkin et al., 2005). Hence, the college atmosphere introduces new values and norms that students weigh through the lens of consequences and rewards, such as, “praise, acceptance, scorn, and ridicule of friends and family members” (Durkin et al., 2005, p. 259). This dilemma can create positive motivation for students to drink and potentially create a reward for drinking behaviors (Cox & Klinger, 1988).

According to Erik Erikson’s psychosocial developmental theory, college students are in either the identity vs. identity confusion (10-20 years old) or the intimacy vs. isolation (20-30 years old) stages (Ya-Rong, 2006). Zarrett & Eccles (2006) noted college is a transitional time in a young adult’s life because they are becoming more independent from parents and trying out multiple lifestyles. Students will value peer relationships and acceptance among peer groups to aid in the development of their identity. Students that
are overly concerned about peer acceptance can be more susceptible to peer pressure and engage in risky behaviors. Thus, the college environment is a vulnerable time for this population to be influenced by peer drinking, negative behaviors, and risk-taking.

**Parents**

Consistent with SLT, parents also have a significant influence on their adult children’s drinking behavior. Research indicates that college students who live at home with their parents are less likely to abuse alcohol compared to students who lived on campus (Dawson et al., 2004). However, parents can prepare children living on campus by talking openly about alcohol use, alcohol education, establishing rules, and displaying positive and responsible drinking behavior at home (Wood, Read, Mitchell, & Brand, 2004).

Parenting behaviors can influence child behavior (Darling & Steinberg, 1993, as cited in Ahmed & Bhutto, 2016). In 1971, Baumrind developed the Parenting Styles Model that categorized three types of parenting styles from the extent to which parents were demanding and responsive in their parenting practices (as cited in Ahmed & Bhutto, 2016). Ahmed & Bhutto (2016) define the three parenting styles as: “[A] permissive style is high on responsiveness but low on demandingness. An authoritarian style of parenting is low on responsiveness but high on demandingness. And lastly an authoritative style is high on responsiveness and also on demandingness” (p. 442).

Parenting style has shown to be a variable in students’ drinking patterns. One longitudinal study found that parents who were permissive in their parenting or had low SES were more apt to have children that drink (Walls et al., 2009). Yet, Newman et al., (2008) concluded that an authoritarian parenting style, as compared to authoritative and
permissive styles, had the strongest association with adolescent drinking. These researchers also found that permissive parenting was associated with adolescent drinking. Although different researchers concluded different parenting styles result in adolescent drinking, authoritative parenting, which is marked with warmth and autonomy, is optimal in reducing adolescent drinking.

**Faith-Based Universities**

Christian universities are diverse with respect to policies concerning student drinking. Historically, most Christian universities have insisted on an abstinence policy towards substance use. However, studies show abstinence policies can lead students to be discreet about their drinking patterns as students tend to go to other locations to engage in alcohol consumption (Wechsler, Lee, Gledhill-Hoyt, & Nelson, 2001). Yet, colleges and universities that ban on campus alcohol use report less HED. Christian students also tend to be less pressured to drink, as they want to maintain reputations and positive perceptions among their church-going peers (Horton et al., 2012). The unique factor of Christian students and drinking is their relationship to God and its effect on their drinking behaviors.

**Attachment Theory**

According to attachment theory, infants build a bond with their mother that is necessary for infant survival and lasts over time (Ainsworth, 1969; Bowlby, 1982). Bowlby (1982) referred to infant proximity seeking as orientation behavior, which is experienced by the mother coming to the baby or vice versa. Infants display signaling behavior by crying, smiling, or motioning. In approach behavior, the infant goes to the mother by following, clinging, or rooting (making sucking motions) in an effort to
maintain closeness. This behavior has been found to aid in baby survival by dissipating threats (Bartholomew & Horowitz, 1991).

In Mary Ainsworth’s Strange Situation Experiment in 1969, infants, approximately 12 months of age, were observed in a playroom with their mother, then without their mother, then again upon the mother's reentrance into the playroom. Stress observed from infants in this strange situation resulted in three different behavioral patterns known as secure, anxious, and avoidant attachment styles. Infants classified as having a secure attachment explored the playroom, were not alarmed by a stranger entering the room, and greeted their mother upon return. Insecure classified infants respond with confusion when the mothers returned by wanting to be picked up but also not wanting to be picked up. Insecure attachment was apparent in about 20% of the infants. Avoidant infants showed complete disinterest in their mother’s return and avoided her altogether. This attachment style was only shown in approximately 10% of infants (Bowlby, 1982).

Attachment behavior has been empirically shown to translate into adulthood as well. Hazan & Shaver (1987) postulated the inner working models (i.e., schemas) developed through the parent-child attachment relationship continued into adulthood and affected social and romantic relationships. These researchers classified respondents according to one of the three best fitting labels. Table 1, reprinted from Hazan and Shaver, characterizes each of these attachment styles.
Table 1

Adult Attachment Types and Their Frequencies

Question: Which of the following best describes your feelings?

<table>
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<th>Answers and percentages:</th>
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<tr>
<td>Secure ($N = 319$, 56%): I find it relatively easy to get close to others and am comfortable depending on them and having them depend on me. I don’t often worry about being abandoned or about someone getting too close to me.</td>
</tr>
<tr>
<td>Avoidant ($N = 145$, 25%): I am somewhat uncomfortable being close to others; I find it difficult to trust them completely, difficult to allow myself to depend on them. I am nervous when anyone gets too close, and often, love partners want me to be more intimate than I feel comfortable being.</td>
</tr>
<tr>
<td>Anxious/Ambivalent ($N = 110$, 19%): I find that others are reluctant to get as close as I would like. I often worry that my partner doesn’t really love me or won’t want to stay with me. I want to merge completely with another person, and this desire sometimes scares people away (p. 515).</td>
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Note. This table is a reproduction of Table 2 in Hazan and Shaver (1987)

Hazen & Shaver's conclusions were similar to Bowlby’s theory. Secure attached adults trusted their spouse despite faults and were less likely to divorce than avoidant and anxious individuals. Avoidant partners experienced fear of intimacy, while anxious individuals had an obsession for intimacy and their lover. Both avoidant and anxious individuals experienced emotional highs and lows as well as jealousy.

Attachment to God and Parents

As in parent-child and romantic love attachments, Kirkpatrick & Shaver (1992) believed people could develop an attachment style to God that informed their relationship with God, as well as their religious beliefs and behaviors. As cited in Kirkpatrick & Shaver (1992), in 1990 Hazan & Shaver surveyed 213 participants (84.9% female) to compare childhood, romantic relationships, and religious beliefs. Fifty percent of respondents identified as having a secure attachment to God. Secure individuals perceived their relationship with God as warm, responsive, and supportive.
Approximately 30% identified as avoidant and believed that God lacked interest in their lives. Those identified as anxious (19.2%) believed that God was inconsistent in His responsiveness. The study also demonstrated that securely attached individuals have the highest commitment levels in their faith. Individuals with an avoidant attachment had the highest identification with agnosticism, while the anxious participants scored highest in atheism. There was a correlation between anxious and avoidant parent-child and God attachment; however, this was not evident in individuals with secure attachments.

McDonald et al. (2005) studied 101 students within a faith-based university (76 females, 23 males) to determine a correlation between parent’s religiosity, parent-child attachment, and student’s attachment to God. The researchers concluded that parental attachments corresponded to how close students felt towards God. For instance, parental spirituality measured by whether parents read their Bible and went to church was associated with students being less avoidant towards God. Parents that did not go to church or were hypocritical in their religious practices and teachings tended to result in students having difficulty being intimate with God. Parents that were not warm, supportive, or tender resulted in students being avoidant toward God. These researchers also asserted overprotective parents produced anxiety in their children and these children “report[ed] concerns over lovability with God with associated fears of abandonment (p. 24).” Lastly, authoritarian parents, especially fathers, led students to have a harder time being intimate with God. Students have the chance of transferring their parent-child attachments onto God, as theorized by these researchers.
Attachment Style and Drinking

Molnar et al. (2010) conducted research on 696 drinking university students (194 men, 502 women) to assess attachment styles and their association to high-risk drinking, alcohol-related consequences, and motivation for drinking (e.g., coping or drinking to avoid social rejection). The results showed students with avoidant or anxious attachment styles were motivated to drink for coping reasons; however, only an anxious attachment resulted in drinking for social approval. Anxiously attached students also showed a higher risk for engaging in negative consequences associated with drinking. This shows that HED might be more troublesome for anxiously attached individuals than avoidant individuals, as they are likely to experience more negative outcomes from drinking in an effort to be perceived as sociable, likable, and to avoid social ostracism.

Attachment to God and Drinking

Hernandez, Salerno, & Bottoms (2010) assessed students’ attachment to God, alcohol use, and alcohol use for general and spiritual coping. Four-hundred and twenty-nine (40% men, 60% women) students from a large public university utilized the attachment to God scale developed by Kirkpatrick and Shaver (1992), the religious problem-solving scale developed by Pargament (1998), the alcohol-related coping scale developed by Cooper, Russell, Skinner, & Windle (1992), and the alcohol frequency scale developed by Cooper et al. (1992). The results identified three coping categories: self-directing, deferring, and collaborative. The researchers clarify the differences…

People who see themselves as independent from God when coping and solving problems use a self-directing coping style. People who believe they are waiting for God to offer solutions to their problems use a deferring coping style. People
who feel they work together with God to solve problems use a collaborative
coping style (Hernandez et al., 2010, p. 99).

As Table 2 indicates, securely attached individuals use two coping styles:
collaborating and deferring, while anxious and avoidant individuals utilize self-directing
coping mechanisms. Each attachment coping style has different perceptions of God. For
instance, securely attached individuals identify God as a sign of comfort, security, and
satisfaction. Anxious attachments associate God with confusion and aloofness, while
avoidant styles perceive God as distant (Kirkpatrick & Shaver, 1990; Kirkpatrick &
Shaver, 1992).

Table 2

*Attachment Styles, Coping Style, and Perception of God*

<table>
<thead>
<tr>
<th>Attachment Style</th>
<th>Coping Style</th>
<th>Perception of God</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secure</td>
<td>Collaborating &amp; Deferring</td>
<td>Comfortable</td>
</tr>
<tr>
<td>Anxious</td>
<td>Self-Directing</td>
<td>Inconsistent</td>
</tr>
<tr>
<td>Avoidant</td>
<td>Self-Directing</td>
<td>Distant</td>
</tr>
</tbody>
</table>

Hernandez et al. (2010) further added, “[O]ne could argue that self-directing
coping is synonymous with constructs such as independence, autonomy, and internal
locus of control” (p. 100). Phillips, Pargament, Lynn, & Crossley (2004) noted self-
directing coping styles, as in anxious and avoidant attached individuals, can result in
negative feelings such as abandonment by God. Since Hernandez et al. (2010) concluded
anxious and avoidant individuals drink more than secure individuals, it is important to
explore internal and external locus of control (LOC) to determine if students feel
abandoned or independent from higher forces in their drinking decision-making.
Locus of Control

Julian Rotter (1966) connected SLT to LOC by attributing one’s LOC identification to past experiences of learned reinforcement, which strengthened based on one’s expectation and perception of rewards obtained. An internal LOC accredits success to individual effort and skill, whereas an external LOC attributes success to outside forces, such as fate, higher being, or the world around them. Since Rotter’s influential research in the 1960s, LOC has been applied to many research fields including drinking.

In 1972, Keyson and Janda developed the drinking-related locus of control scale (DRIE) which showed alcohol-dependents with an external LOC blame others and do not believe they are responsible for their drinking behavior (Donovan & O’Leary, 1978; Yeh, Lee, & Hwang, 2008). External LOC has also been shown to be more associated with relapsing (Kivlahan, Donovan, & Walker, 1983; Viela & Iraurgi, 2001). Researchers generally assume that internal LOC is a better predictor of alcohol recovery because these individuals take more accountability and responsibility for their actions and consequences (Rohsenow & O’Leary, 1978). The DRIE also shows alcoholics tend to move towards an internal LOC as they progress in treatment (Abbott, 1984) and throughout aftercare (Walker, Nast, Chaney, & O’Leary, 1979).

LOC, spirituality, and drinking have been studied to determine correlations among them. Alcohol treatment groups, such as Alcoholics Anonymous (AA), rely on a divine intervention or ‘Higher Power’ to aid in sobriety. Li, Feifer, & Strohm (2000) compared SMART (Self Management and Recovery Training), a recovery program focused on self-reliance with AA. The findings showed external LOC individuals preferred AA to SMART. This finding might indicate that external LOC substance users
look to a ‘Higher Power’ for their success. However, this could also mean external LOCs individuals do not search for other treatment options based on their lack of initiative (Li et al., 2000).

Moore (2014) assessed 404 college students, God’s LOC, and alcohol consumption by utilizing a 12-item Alcohol-related God Locus of Control Scale for Adolescents (AGLOC-A) and a Religious Background and Behavior Questionnaire (RBB). These measures were utilized to identify student’s beliefs regarding God being active (internal God LOC) or passive (external LOC) in their drinking. The results showed that students who believed God was active in their lives were less likely to drink, and if they did drink, they were more likely to drink in moderation. Faith-based universities and their alcohol interventions could incorporate God LOC in their assessments to further spiritual education to students on underlying HED motivations.

**Interventions**

A 1999 Harvard School of Public Health study showed that nearly one in every three college students met DSM-IV criteria for alcohol abuse and 1 in every 17 college students met the criteria for alcohol dependence (Knight et al., 2002). Because drinking rates were comparable to those found in 2002 (CBHSQ, 2013), it is likely that effective alcohol interventions for college students will continue to be a topic of concern for university officials. Furthermore, students are also in a vulnerable time and may need intervention tools to learn safe drinking habits and how to drink in moderation.

**Motivational Interviewing**

The Substance Abuse and Mental Health Services Administration’s (SAMHSA) National Registry of Evidence-based Practice and Programs (NREPP; SAMSHA, 2007)
defines Motivational Interviewing (MI) in the following way: “MI is a goal-directed, client centered counseling style for eliciting behavioral change by helping clients to explore and resolve ambivalence” towards change (p. 1).

Similar to humanism and Carl Roger’s client-centered approach, MI utilizes empathy, genuineness, and unconditional positive regard in its methodology (Rogers, 1957; Miller & Rollnick, 2013). The unique spirit of MI lies in collaboration, acceptance, evocation, and compassion (The University of Chicago, 2014). Miller and Rollnick (2013) defined the client-practitioner relationship as “an active collaboration between experts” (p. 15). As opposed to traditional treatment programs, MI views the client and practitioner views both the client and practitioner as experts. MI sessions consist of partnering conversations between the client and practitioner to evoke the client’s own motivation to change their drinking behavior; hence, the collaborative relationship is equal in importance towards motivation and behavioral change (Miller & Rollnick, 2013). The practitioner shows acceptance by not moralizing, judging, labeling, or blaming client behavior (Miller & Heather, 1986; The University of Chicago, 2014). This results in respect and compassion being shown, as the client likely desires to change their undesirable behavior but has not yet figured out how to do so (The University of Chicago, 2014).

Besides the basic counseling skill of listening, other core skills of MI are asking open-ended questions, affirming the client, utilizing reflective listening and summarizing, and informing and advising with permission (Miller & Rollnick, 2013). The MI practitioner utilizes the following four processes in sessions: engaging, focusing, evoking, and planning, as a means to guide clients through their own personal motivation
to achieve goals. Miller & Rollnick (2013) define engaging as rapport building and “the process of establishing a mutually trusting and respectful helpful relationship” (p. 40). Focusing is the technique of goal setting for the client to concentrate on, which is established between the practitioner and client. Evoking is the essence of MI, as the practitioner aids the client through their ambivalence towards change. The planning stage is individualized steps that are established by the client to meet their set goals.

**Stages of change.** MI utilizes Prochaska and DiClemente’s stages of change model to match client's ambivalence, interest level, and readiness to change (Prochaska, DiClemente, & Norcross, 1992; Miller & Rollnick, 2013). The main question Prochaska et al. (1992) attempted to answer was: ‘How do people change without psychotherapy?’ They discovered and created the transtheoretical model of self-motivation, which theorizes change takes place via self-motivation, over time, and through stages (Van Leer, Hapner, & Conner, 2008). The model has changed a few times from its origin (DiClemente & Prochaska, 1982). Currently the model has five stages of change that individuals fluctuate through in the change process (Miller & Heather, 1986). Those five stages are: precontemplation, contemplation, preparation, action, and maintenance (Van Leer et al., 2008).

**Precontemplation.** The first stage in Prochaska and DiClemente’s model is precontemplation. Van Leer et al. (2008) define this stage as, “individuals are not seriously considering behavioral change” (p. 689). These individuals typically do not perceive a problem with their behavior, although their problem is obvious to others. Also, in this stage, people are mostly coerced into getting help and they do not perceive their current behavior as problematic (DiClemente & Prochaska, 1982).
Contemplation. Prochaska et al. (1992) defined the second stage as, “people are aware that a problem exists and are seriously thinking about overcoming it but have not yet made a commitment to take action” (p. 1103). People have been known to remain in this stage for a lengthy amount of time.

Preparation. Individuals in the preparation stage have the intention of taking action towards change in the next 30 days, but have not done so in the past year. Smaller changes might be observed in this stage; for instance, a smoker might decrease the amount of packs of cigarettes smoked in a day (2 packs of cigarettes to 1 pack per day). This stage was originally known as the decision-making stage, as it was considered the precursor to the action stage (Prochaska et al., 1992).

Action. The action stage, as opposed to the previous stages, is a commitment stage, where the individual has decided to change by setting a goal and meeting it (DiClemente & Prochaska, 1982). This stage has been marked as stressful, as individuals rely on others to avoid old patterns, environments, and behaviors (DiClemente & Prochaska, 1982). This stage includes the most substantial behavioral changes. This stage lasts from the day the behavior change was made until six months (Prochaska et al., 1992).

Maintenance. The maintenance stage lasts from six months past the action stage for an indefinite length of time, as the individual attempts to avoid relapsing into old patterns and strengthen reasons for change. This stage does not imply an individual has reached inferiority towards their addictive behavior, since individuals can relapse and recycle through some of the previous stages to once more reach the maintenance stage (DiClemente & Prochaska, 1982).
**BMET**

Brief Motivational Enhancement Therapy (BMET) is an adaptation of MI that incorporates assessments, feedback, and significant others (family members, friends, or spouses) for alcohol treatment in four sessions with the intent of eliciting motivational psychology for change talk in drinking behavior (Miller, Zweben, DiClemente, & Rychtarik, 1992). SO’s were encouraged to participate in treatment, as research indicates individuals are more committed to spouse out-patient approaches than to individual approaches. The program also involves SO by helping the client discover motivation for change (Miller et al., 1999). Akin to MI, BMET’s objective is to resolve ambivalence towards change in substance use (SAMSHA, 2007). BMET originated from the ‘Drinker’s Checkup’ (DCU). The DCU consisted of free assessments and follow-ups to see if alcohol consumption caused harm to the individual. The intervention consisted of providing the clients information from the assessment process and asking open-ended question to elicit talk about changing (Miller & Rollnick, 2013). Participants were allowed to do what they wanted with the intervention and feedback information and only 14% of participants returned for a follow-up, as the majority showed an instant reduction in their alcohol consumption continuing until the 18-month follow-up. This intervention was framed as non-labeling, not coercive, and brief to reduce drinking behaviors (Miller & Rollnick, 2013).

Motivational Enhancement Therapy is an effective intervention for reducing problem drinking behaviors in a condensed amount of time. In 1993 Project MATCH (Matching Alcoholism Treatment to Client Heterogeneity), evaluated the effectiveness of three interventions: Motivational Enhancement Therapy (MET), Cognitive Behavioral
Coping Skills (CB), and Twelve-Step Facilitation (TSF) over the course of five years to evaluate in-patient clients to determine if one specific type of intervention could be utilized universally on every type of drinking client (Miller et al., 1999). The findings showed that all three treatments were successful in reducing drinking over a three to ten year time period; hence, no single treatment type was found to be better than the others (Miller et al., 1999). However, MET was successful at reducing drinking within four weeks, as compared to the 12-week BC and TSF interventions. A higher session attendance was also shown for MET clients compared to CBT and TSF clients over a 12-week period (Mattson, 1998).

**BASICS BMI**

Borsari et al. (2012) noted, “The Brief Assessment and Screening Intervention for College Students (BASICS) was the first empirically tested BMI developed for use with college students” (p. 1063). BASICS is a brief intervention program that incorporates MI skills, assessment, and feedback for self-referred or mandated college students for failure to meet school substance use policies on alcohol. A peer coordinator meets with an individual student for two, one-hour sessions scheduled two weeks a part. The first session assesses the student’s past and current drinking patterns, motivations for drinking, and gets permission from the student to monitor their alcohol consumption on a self-monitoring sheet that is reviewed in session two. The second session provides personalized feedback that reviews student risks and negative consequences experience, as a result of their drinking behaviors and compares drinking behavior to the rest of the student body, discusses motivation and options to reduce risky drinking, and overviews
the student’s drinking behavior over the past two weeks (SAMHSA, 2008; Borsari et al., 2012).

Although brief motivational intervention (BMI) was originally adopted for the healthcare field, it has been proven empirically effective in reducing alcohol substance abuse among college students (Rollnick, Butler, & Miller, 2008). According to SAMHSA (2008), there are approximately 1,100 sites around the U.S. utilizing BASICS BMI. As with MI, BMI incorporates reflective listening, change talk, and the client-centered approach (Rollnick et al., 2008). Its effectiveness has also been shown post-intervention. In a 2012 study, participants were measured on their drinking habits post-BASICS at three and six months. The findings showed students drank less at three and six months than prior to undergoing intervention (Kazemi et al., 2012). Random-control trial (RCT) studies have also shown reductions in heavy drinking two and four years post-brief intervention (Baer, Kivlahan, Blume, McKnight, & Marlatt, 2001).

**Harm reduction.** BASICS BMI also includes a harm reduction approach to decrease the amount of negative consequences experienced by college students in an effort to avoid alcohol-related problems and heavy drinking (SAMHSA, 2008). The philosophy of harm reduction avoids taking the traditional abstinence or AA approach to addictive behaviors. The goal of harm reduction is to avoid condemning or labeling language and, alternatively, focusing on the user’s substance use consequences and effects and not their behavior itself. This involves having the client as an active participant in their change, as well as allowing them to be responsible for their actions in the change process. It does not minimize the importance for some addicts to be abstinent, rather it ‘meets clients where they are at’. This approach takes into account that
university populations are college students and they do not necessarily need to be abstinent, but rather need assistance in resolving risky drinking behavior by learning safer drinking habits. Since college is a highly influential time to drink among peers, it can be assumed that students found in violation of alcohol policies are not necessarily alcoholics but are drinking to fit in with the culture and their peers (Marlatt, Tucker, Donovan, & Vuchinich, 1997).

**Alcohol education.** Alcohol education is another component for students to understand HED and its effect on their body. However, education should not be used in isolation, otherwise it may not result in effective intervention (DeJong & Langford, 2002; Larimer & Crone, 2002; National Institute on Alcohol Abuse and Alcoholism, NIAAA, 2002). In collaboration with other interventions, such as BASICS BMI, students can be educated on the various alcohol facets, such as blood alcohol content levels and serving sizes in a standardized drink (NIAAA, 2002). Once students know how much alcohol is in various types of drinks, such as wine compared to hard liquor, it is likely they will gain knowledge in how alcohol affects various parts of the body (NIAAA, 2002).

To summarize, college students are at a vulnerable age and context which results in them being confronted with the crisis of drinking to fit in. Studies have shown that spirituality affects one’s drinking behaviors. Research shows that the locus of control concept can be applied to a person's beliefs about how much control God has over their drinking behavior. Research (e.g., Moore, 2014) also shows that students who believe that God is active in their lives are less likely to drink; or, are more likely to drink in moderation. Other research (e.g., Hernandez et al., 2010) concluded that individuals with anxious and avoidant attachment to God drink more than secure individuals. Therefore,
understanding how passive God LOC beliefs (i.e., God has no control over my drinking),
and anxious or avoidant attachment to God, influence college students’ drinking
behavior, can help inform interventions on university campuses. In particular,
establishing links between attachment to God, God locus of control, drinking behavior,
and negative consequences of excessive drinking, can potentially add to motivational
methods for university-based intervention and prevention programs. The following study,
therefore, seeks to test the following research hypotheses:

1. Higher scores on anxious and avoidant scales of the attachment to God instrument
   will be significantly associated (i.e., $p < .05$) with rates of current drinking,
   drinking in the past 30 days, and binge drinking.

2. Higher scores on anxious and avoidant scales of the attachment to God instrument
   will be significantly associated (i.e., $p < .05$) with negative outcomes as a result of
   their drinking.

3. Students with a low (passive) God LOC will be more likely to consume larger
   quantities of current alcohol use, drinking in the past 30 days, and binge drinking
   than students with a high (active) God LOC.

4. Students with a low (passive) God LOC will be more likely to experience
   negative outcomes of their drinking than students with a high (active) God LOC.
CHAPTER III
METHODOLOGY

The purpose of this study is to explore relationships between attachment to God, locus of control, and drinking behavior among participants in the BASICS program at ACU. More specifically, this study addresses the following research hypotheses:

1. Higher scores on anxious and avoidant scales of the attachment to God instrument will be significantly associated (i.e., \( p < .05 \)) with rates of current drinking, drinking in the past 30 days, and binge drinking.

2. Higher scores on anxious and avoidant scales of the attachment to God instrument will be significantly associated (i.e., \( p < .05 \)) with negative outcomes as a result of student drinking.

3. Students with a low (passive) God LOC will be more likely to consume larger quantities of current alcohol use, drinking in the past 30 days, and binge drinking than students with a high (active) God LOC.

4. Students with a low (passive) God LOC will be more likely to experience negative outcomes of their drinking than students with a high (active) God LOC.

A cross-sectional study using self-report, and interview measures of variables, was used to test these hypotheses.

**Design**

This quantitative study was designed to determine if relationships exist between attachment to God, locus of control, drinking behavior and amount of alcohol consumed
by participants in the BASICS intervention at Abilene Christian University. The variables that were evaluated in this study were the frequency, quantity, and consequences of alcohol, as well as attachment to God and God-related locus of control. Institutional Review Board (IRB) approval (see Appendix A) was granted for this study.

The ACU Office of Student Life and the ACU Athletic Department refer participants to the BASICS program for failure to comply with ACU drinking policies. Prospective study participants included students referred to the BASICS program during the fall and spring semesters of the 2016-2017 academic year. A total of 19 students participated in the study. Participants included 15 males and four females.

**Procedures**

To help answer the research questions, the following four questionnaires were administered to college students attending (ACU) who were enrolled in the BASICS program during the 2017 academic year: General Drinking Questionnaire (Appendix B), Negative Outcomes of Alcohol Use (Appendix C), Attachment to God Inventory (AGI) (Appendix D), and Alcohol-related God Locus of Control Scale for Adolescents (AGLOC-A) (Appendix E). These surveys were selected out of a host of other measuring tools because of their ability to measure student attachment to their parents and compare it to their attachment with God, as well as to measure their belief on how involved God in their drinking lives.

**BASICS Intervention**

BASICS participants were mandated to attend two to three intervention sessions of the BASICS program for disciplinary reasons. Students were not coerced into undergoing the BASICS intervention; however, students are likely to be discharged from
the university for failure to complete the remedial requirements established by the
disciplinary recourse actions set by the university. All students enrolled in BASICS were
offered the option to participate in this research by signing a consent form (Appendix F).
Students were not offered any compensation for their participation since they were
strongly encouraged to participate in the intervention or would be expelled by the
university.

Measurement

A total of four measurements were used to gather data for this study. These
instruments collect information on a student’s drinking frequency, negative consequences
experienced from drinking, attachment style to God, and internal or external locus of
control to better understand the level of association among these variables. The following
three surveys were given and compared to find any correlation among college males
drinking patterns and attachment to God and their parents.

**General drinking questionnaire.** The General Drinking Questionnaire
(Appendix B) is an open-ended five-question form that provides the BASICS
Coordinator with the student’s past, current, and binge drinking patterns to better
understand the student’s scope of drinking. Questions #3, #4, and #5 were used for this
study, these included questions ask: “Now when you party/socialize, how many drinks do
you have? Over how many hours?”, “Think of the occasion when you drank the most
alcohol in the past 30 days. How many drinks did you have? Over how many hours?” and
“How often do you have 5 or more drinks on one occasion (never, less than monthly,
monthly, weekly, more than once a week?” These questions were made by a previous
BASICS Coordinator and are used to assess drinking frequency and binge drinking.
After collection of data on the 19 participants, it was realized that responses on this instrument were difficult to quantify. For instance, many of the participants answered in approximate terms such as: ‘I drank 4-5 drinks over 2-3 hours’. As a result, drink amounts were averaged to quantify the amount of alcohol consumed.

**Negative outcomes of alcohol.** The Negative Outcomes of Alcohol Use Questionnaire (Appendix C) is a closed-ended, 17-question survey in a yes or no format that assesses student’s negative consequences from drinking. The BASICS Coordinator asked for explanations for ‘yes’ answers for more clarification and knowledge on the student; however, this gathered information was used for the BASICS practitioner and not the researcher. All 17 questions were coded for this study. Some of the negative consequences assessed range from experiencing a black out to skipping class because of a hangover. This survey was also created by a former BASICS Coordinator to aid in program development and personalized risk feedback.

**Attachment to God inventory.** The Attachment to God Inventory (AGI; Appendix D) is a 28-question survey that assesses anxious and avoidant attachments to God, which was developed by Brennan, Clark, and Shaver in 1988, as cited in McDonald et al. 2005. Beck and McDonald (2004) studied the psychometric properties of the AGI and determined that the instrument was both reliable and valid. Specifically, factor analysis indicated the presence of two distinct factors and reliability analysis of subscales yielded alpha coefficients of .86 for the Avoidance items and .84 for the Anxiety items.

**Alcohol-related locus of control.** The Alcohol-related God Locus of Control for Adolescents (AGLOC-A; Appendix E) is a 12-question survey that measures God’s power in adolescents drinking patterns and behaviors. The AGLOC-A has a 4-point scale
(0 – strongly disagree, 1 - disagree, 2 – agree, 3 – strongly agree) that can sum to a total of 36 points. To create high and low categories, scores of 18 and lower were coded as low locus of control (meaning God does not have control over a participants’ drinking behavior). Scores higher than 18 were coded as high locus of control and these participants were identified as believing God has more control over their drinking behaviors. This was done in an effort to determine if higher drinking rates and/or experiencing more negative consequences were associated with high or low God-locus of control. Murray, Goggin and Malcarne (2006) established that the AGLOC-A had excellent reliability with an internal consistency of .89 for the total scale.

**Informed Consent**

A Master of Science in Social Work student, who also served as the ACU BASICS program coordinator, conducted this research. As part of normal BASICS program operations, some data was collected prior to ACU Institutional Review Board (IRB) review. Because some data existed prior to ACU IRB approval, and some data was collected after ACU IRB approval, two separate modifications to the consent process were sought. Because retroactively seeking signatures on an informed consent document could potentially violate the privacy of former participants, a decision was made to seek a waiver of consent and treat this data as pre-existing (see alteration/waiver of consent form; Appendix F).

A separate waiver of consent application was approved by the ACU IRB to allow additional data to be collected (see alteration/waiver of consent form; Appendix G). Following ACU IRB approval for this study, all participants were informed about the study, were informed that their participation was voluntary, and were informed that
participation in the study was distinct from participation in the BASICS program. They were also informed that participation in the study was voluntary. All prospective study participants were given an information sheet explaining the study details (i.e., purpose, rights of participants, risks, benefits, etc.; (see consent form; Appendix H). Those willing to participate were asked to give verbal consent and told that consent would be documented in the case file.

Data Analysis

Data was entered into an electronic data format suitable for statistical analysis (e.g., Microsoft Excel, SPSS, tab-delimited text, etc.). Various statistical methods were used to evaluate relationships between key variables (i.e., Drinking Behavior, Attachment to God, Locus of Control). Depending on group sizes, tests of statistical significance were used to test for differences between attachment categories, locus of control (i.e., internal vs. external) on drinking variables (e.g., number of drinks, negative effects of drinking, etc.).
CHAPTER IV
RESULTS

The number (N) of study participants was 19 (15 males, four females). As Table 3 indicates, the majority of participants in the BASICS program were males (78.95%). The ages of participants ranged from 18 to 23 with the predominant age being 19 (47.37%). Consistent with the school’s denomination, the majority of participants were Church of Christ (36.84%). The majorities of participants identified as Caucasian (84.21%) and were classified as freshmen (36.84%).

Gendered Drinking

Independent samples t-tests were conducted to compare male and female drinking behaviors. For all general drinking questions (GDQ3, GDQ4, GDQ5) males averaged higher means than females. On GDQ4 drinks, females were relatively close to males on average drinks in the past 30 days (6.9 vs. 6.4) and showed a smaller standardized deviation (4.18 vs. 2.86). Males seemed on average to drink more than females by approximately one drink. However, there were not enough females in the study for the results to be significant.

Attachment to God and Drinking

Tables 5-7 present linear regression results with attachment to God as the predictor variable, and drinking patterns as dependent variables. On the first drinking question, number of drinks usually consumed during a drinking occasion, the overall regression model was not statistically significant, $R^2 = .183$, $F(2, 16) = 1.79$, $p = .20$. 
Table 5 shows the regression coefficients and statistical test results for the attachment to God subscales. As the table shows, there were no significant findings among attachment style to God and typical drinking amount.

Table 3

Demographics of Gender, Age, Religion, Race, and Classification*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency (n)</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>15</td>
<td>79%</td>
</tr>
<tr>
<td>Female</td>
<td>4</td>
<td>21%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>2</td>
<td>11%</td>
</tr>
<tr>
<td>19</td>
<td>9</td>
<td>47%</td>
</tr>
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<td>20</td>
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<td>21%</td>
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<td>21</td>
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<td>5%</td>
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<tr>
<td>22</td>
<td>2</td>
<td>11%</td>
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<tr>
<td>23</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>Religion</td>
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<td></td>
</tr>
<tr>
<td>Non-Denom</td>
<td>4</td>
<td>21%</td>
</tr>
<tr>
<td>Church of Christ</td>
<td>7</td>
<td>37%</td>
</tr>
<tr>
<td>Christian</td>
<td>3</td>
<td>16%</td>
</tr>
<tr>
<td>Anglican</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>Baptist</td>
<td>3</td>
<td>16%</td>
</tr>
<tr>
<td>Episcopal</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>Race</td>
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<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>3</td>
<td>16%</td>
</tr>
<tr>
<td>Caucasian</td>
<td>16</td>
<td>84%</td>
</tr>
<tr>
<td>Classification</td>
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<td></td>
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<tr>
<td>Freshmen</td>
<td>7</td>
<td>37%</td>
</tr>
<tr>
<td>Sophomore</td>
<td>5</td>
<td>26%</td>
</tr>
<tr>
<td>Junior</td>
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<td>26%</td>
</tr>
<tr>
<td>Senior</td>
<td>2</td>
<td>11%</td>
</tr>
</tbody>
</table>

*N = 19

Similarly, the regression analysis used to test the ability of the attachment to God groups to explain variation in most alcohol consumed in the past 30 days (Q4), was not statistically significant, $R^2 = .121$, $F (2, 16) = 1.105, p = .36$. Table 6 shows the regression
coefficients between AGI groups on the dependent variable GDQ4. As the table shows,
neither AGI subscale was a significant predictor of drinking in the past 30 days.

Table 4

Descriptive Statistics of Drinking Variables

<table>
<thead>
<tr>
<th>GDQ Item</th>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Male</td>
<td>15</td>
<td>4.73</td>
<td>2.88</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>4</td>
<td>2.38</td>
<td>2.93</td>
</tr>
<tr>
<td>4</td>
<td>Male</td>
<td>15</td>
<td>6.9</td>
<td>4.18</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>4</td>
<td>6.5</td>
<td>2.86</td>
</tr>
<tr>
<td>5</td>
<td>Male</td>
<td>15</td>
<td>1.4</td>
<td>1.06</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>4</td>
<td>0.75</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Table 5

Linear Regression Attachment to God and Drinking Question #3

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coef</th>
<th>Beta</th>
<th>SE</th>
<th>t</th>
<th>p</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.67</td>
<td>3.22</td>
<td>-0.22</td>
<td>0.83</td>
<td>-8.41</td>
<td>4.90</td>
<td></td>
</tr>
<tr>
<td>Anxiety</td>
<td>0.07</td>
<td>0.40</td>
<td>0.04</td>
<td>1.77</td>
<td>0.08</td>
<td>-0.00</td>
<td>0.17</td>
</tr>
<tr>
<td>Avoidance</td>
<td>0.03</td>
<td>0.15</td>
<td>0.04</td>
<td>0.67</td>
<td>0.49</td>
<td>-0.05</td>
<td>0.12</td>
</tr>
</tbody>
</table>

Table 6

Linear Regression Attachment to God and Drinking Question #4

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coef</th>
<th>Beta</th>
<th>SE</th>
<th>t</th>
<th>p</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1.11</td>
<td>3.45</td>
<td>0.27</td>
<td>0.71</td>
<td>-6.53</td>
<td>7.58</td>
<td></td>
</tr>
<tr>
<td>Anxiety</td>
<td>0.03</td>
<td>0.14</td>
<td>0.05</td>
<td>0.62</td>
<td>0.43</td>
<td>-0.07</td>
<td>0.13</td>
</tr>
<tr>
<td>Avoidance</td>
<td>0.08</td>
<td>0.32</td>
<td>0.06</td>
<td>1.35</td>
<td>0.17</td>
<td>-0.03</td>
<td>0.21</td>
</tr>
</tbody>
</table>
Lastly, attachment to God did not significantly explain variation in responses to the question pertaining to the number of times participants consumed five or more drinks on one occasion, $R^2 = .009, F (2, 16) = .070, p = .93$. Table 7 shows regression coefficients between AGI groups and the dependent variable GDQ5. As the table shows, there were no significant findings among attachment to God subscales and drinking five or more drinks (never, less than monthly, monthly, weekly, more than once a week).

Table 7

*Linear Regression Attachment to God and Drinking Question #5*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coef</th>
<th>Beta</th>
<th>SE</th>
<th>$t$</th>
<th>$p$</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.92</td>
<td>0.91</td>
<td>0.83</td>
<td>0.23</td>
<td>0.50</td>
<td>-1.08</td>
<td>2.70</td>
</tr>
<tr>
<td>Anxiety</td>
<td>0.00</td>
<td>0.01</td>
<td>0.01</td>
<td>0.04</td>
<td>0.95</td>
<td>-0.03</td>
<td>0.03</td>
</tr>
<tr>
<td>Avoidance</td>
<td>0.01</td>
<td>0.09</td>
<td>0.01</td>
<td>0.37</td>
<td>0.62</td>
<td>-0.02</td>
<td>0.04</td>
</tr>
</tbody>
</table>

**Attachment to God and Negative Consequences**

Table 8 represents attachment to God groups and negative consequences. Table 8 shows a linear regression between AGI groups on the dependent variable negative consequences. As the table shows, the $p$ value for negative outcomes of alcohol use and attachment to God anxiety groups were statistically significant.

Table 8

*Linear Regression Attachment to God and Negative Outcomes*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coef</th>
<th>Beta</th>
<th>SE</th>
<th>$t$</th>
<th>$p$</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-1.55</td>
<td>2.29</td>
<td>-0.67</td>
<td>0.50</td>
<td>-6.19</td>
<td>2.86</td>
<td></td>
</tr>
<tr>
<td>Anxiety</td>
<td>0.13</td>
<td>0.74</td>
<td>0.03</td>
<td>4.60</td>
<td>0.00*</td>
<td>-0.07</td>
<td>0.17</td>
</tr>
<tr>
<td>Avoidance</td>
<td>0.03</td>
<td>0.16</td>
<td>0.03</td>
<td>1.00</td>
<td>0.33</td>
<td>-0.03</td>
<td>0.10</td>
</tr>
</tbody>
</table>
AGLOC-A Groups, Negative Outcomes, and Drinking

A cross-tabulation was conducted to tabulate frequencies by gender and AGLOC subgroups. Table 9 shows, over half of the participants in this study identified in the low AGLOC subcategory. The majority of males (67%) identified in the low AGLOC subcategory, which corresponds to a low God locus of control. Only 7 participants identified as having a high God locus of control, which indicates at varying levels God is involved in their drinking behaviors.

Table 9

Cross-tabulation of Gender of Participant by AGLOC-A Subgroups

<table>
<thead>
<tr>
<th>Gender</th>
<th>AGLOC Score is &lt;= 18</th>
<th>AGLOC Score is &gt; 18</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Percent</td>
</tr>
<tr>
<td>Male</td>
<td>10</td>
<td>67%</td>
</tr>
<tr>
<td>Female</td>
<td>2</td>
<td>50%</td>
</tr>
</tbody>
</table>

Table 10 shows the mean differences between AGLOC groups on dependent variables. As the table shows, significant mean differences were observed on GDQ3 and GDQ4. The $p$ value for negative outcomes of alcohol use was slightly above .05 and the statistical significance of this mean difference is questionable. The mean value for drinking regularly was significantly higher for the group with AGLOC scores less than, or equal to, 18 (5.33 vs. 2.36). Similarly, the mean value for drinking in the past 30 days was significantly higher for the group with AGLOC scores less than, or equal to, 18 (8.21 vs. 4.43).

Negative Consequences

Figure 1 shows a bar graph with the frequency of which study participants experienced negative outcomes. The two groups used for this bar graph separated as all
participants and male participants. Police involvement was the most reported negative consequence experienced by all participants, as well as for males only. Drinking more alcohol than planned for and vomiting as a result of alcohol consumption were also frequently reported. Zero participants reported being taken advantage of while under the influence of alcohol. Two participants identified that someone might have slipped something into their alcoholic beverage.

Table 10

*Mean Differences on Dependent Variables by AGLOC-A Subgroups*

<table>
<thead>
<tr>
<th>Variable</th>
<th>AGLOC Group</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
<th>p</th>
<th>Lower 95% CI</th>
<th>Upper 95% CI</th>
<th>g</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDQ3 Drinks</td>
<td>&lt;= 18</td>
<td>5.33</td>
<td>2.96</td>
<td>2.36</td>
<td>0.03*</td>
<td>0.31</td>
<td>5.64</td>
<td>0.49</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&gt; 18</td>
<td>2.36</td>
<td>1.99</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDQ4 Drinks</td>
<td>&lt;= 18</td>
<td>8.21</td>
<td>3.88</td>
<td>2.28</td>
<td>0.04*</td>
<td>0.29</td>
<td>7.27</td>
<td>0.48</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&gt; 18</td>
<td>4.43</td>
<td>2.59</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDQ5 Drinks</td>
<td>&lt;= 18</td>
<td>1.50</td>
<td>1.17</td>
<td>1.76</td>
<td>0.10</td>
<td>-0.14</td>
<td>1.43</td>
<td>0.47</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&gt; 18</td>
<td>0.86</td>
<td>0.38</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOOAUQTotal</td>
<td>&lt;= 18</td>
<td>7.67</td>
<td>3.23</td>
<td>2.11</td>
<td>0.05</td>
<td>0.00</td>
<td>5.62</td>
<td>0.48</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&gt; 18</td>
<td>4.86</td>
<td>1.77</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05
Figure 1. Participants’ Experiences with Various Negative Consequences
In Tables 3 and 4, Caucasian males were among the most represented in this study and drinkers referred to the BASICS program. This is consistent with the literature stating this gender and ethnicity is most at risk during college years. Few females were represented in this study; thus, the low participation rate makes their findings not reliable or generalizable. It is also important to note that no African American students were referred to BASICS for violating school policies on drinking. This is consistent with other researchers’ conclusions that African Americans are not as likely to binge drinking (Durkin et al., 2005; Wechsler et al., 2000).

As shown in Tables 5-7, relationships between attachment to God and drinking amounts (Q3, Q4, and Q5) were not statistically significant. This finding was contrary to the first hypothesis. There are several possible explanations for this finding. One obvious explanation for the lack of statistical significance is the lack of statistical power due to the small sample size. In addition, the drinking measures used do not have established psychometric properties and are likely responsible for greater measurement error than other measurement tools. In other words, a more precise measure of drinking behaviors could have generated different results.

The questions on the General Drinking Questionnaire were ambiguous and likely introduced more measurement error than would a standardized instrument. Therefore, one way BASICS Coordinators can improve measurement of drinking is by using an
instrument that already has established reliability and validity. Additionally, given a larger sample size, the results might have been different. The SPSS bootstrapping application was used to overcome violations of the assumptions of the linear model, but there was still no significant relationship between attachment to God subscales and drinking behaviors.

Arguably, results shown in Table 5 indicate the presence of a potential moderately strong effect of anxious attachment on drinking question number three. Though it was not statistically significant, indicating this may be a chance finding, the $\beta$ of .40 ($p = .08$) would likely be significant given a larger sample. In other words, though the research hypothesis cannot be confirmed, the data indicate further study of the association between anxious attachment to God and drinking behavior might yield different findings.

Table 8 shows a statistically significant relationship between anxious attachment to God and negative consequences of drinking. This supports the second research hypothesis. This finding indicates that scoring higher on the anxious attachment to God scale is associated with more negative consequences as a result of student drinking (for instance, experiencing a blackout, vomiting, driving while intoxicated, etc.). This is consistent with Molnar et al. (2010) assertion that anxious attachment resulted in more negative consequences, as compared to secure or avoidant attachments.

Table 9 shows the majority of males scored in the low locus of control category. A low locus of control is associated with students perceiving God not having control over their drinking. This could indicate these students do not involve God in their decisions on alcohol consumption. Table 10 shows significant relationships between LOC subgroups and variables Q3 (How many drinks do you usually have?) and Q4 (Think of the
occasion when you drank the most alcohol in the past 30 days. How many drinks did you have?). Those with a lower LOC (less than or equal to 18) drink significantly more than participants who scored 18 or higher in Q3 and Q4. There is support for the hypothesis that students with a low (passive) God LOC are more likely to consume larger quantities of current alcohol than students with a high (active) God LOC.

Figure 1 shows the rates of negative consequences experienced by all participants and males in this study. Nearly all participants (89%) experienced police involvement as a result of their drinking. This is predictable, as 79% percent of participants were under 21 and police involvement was a primary reason participants were referred to the BASICS program. The next highest reported negative consequences items were consuming more alcohol than planned (68%) and vomiting (63%). Only two participants (approximately 11%) reported driving while under the influence (1 male, 1 female). Zero participants reported being taken advantage of while under the influence. Since this is a self-report measure, clients may have not answered honestly to avoid feeling associated with drinking problem.

**Implications for Research**

This study helped identify the need for more reliable measures of drinking behaviors. Questions on the General Drinking Questionnaire (Appendix B) are open-ended, broad and likely resulted in excessive measurement error. Many of the participants in this study self-reported a range of drinks consumed and were unable to give a precise number of drinks consumed. There are several possible reasons for high variability in this data. Prior to BASICS education, college students typically have little knowledge of what
constitutes a drink per different alcohol types. In addition, binge drinkers are not likely able to remember how much they consumed due to the effects of intoxication.

Future BASICS Coordinators might consider utilizing the Alcohol Use Disorders Identification Test (AUDIT) for more accurate reporting on client drinking. According to the National Institute on Drug Abuse (NIDA, n.d.), “The AUDIT is a 10-item screening tool developed by the World Health Organization (WHO) to assess alcohol consumption, drinking behaviors, and alcohol-related problems” (p. 1). The AUDIT screening tool has also been shown to have reliability and validity among both genders and varying cultures (Peng, Wilsnack, Kristjanson, Benson, & Wilsnack, 2012). However, rapport building is essential in the beginning processes of assessment in the BASICS program and adding a closed-ended survey could hinder the client-practitioner relationship.

Future BASICS Coordinators could also utilize the one and three-month follow-up questions that are already in place in the program to assess if client’s God identifications with LOC and attachment categories could change over time, as well as if that decreases student’s drinking amounts. A one and three-month survey are already in place, as a post-evaluation to monitor any student drinking behavior changes. Thus, this implementation through SurveyMonkey would not be difficult to incorporate.

Although the hypothesized association between God LOC and negative consequences from drinking is rejected, the \( t \) value of 2.11 \((p = .05)\) suggest the possibility that a larger sample might yield results showing a non-random difference in means between God LOC groups on negative outcomes of drinking. In addition, a larger sample with a more precise measure of drinking behavior would likely be significant given a larger sample. In other words, there is good reason to believe an association
between attachment to God and drinking behavior will be found given a larger sample and a reliable and valid measure of drinking behavior.

**Implications for Practice**

As indicated in the literature review and the research findings, spiritual assessment is an important component in assessing the student drinker, especially among faith-based universities. Since anxious God attachment was significantly related to negative consequences, practitioners should include personalized spiritual feedback per the AGI to reduce harm among these individuals. Negative consequences were also very closely associated with low God LOC. Future ACU BASICS practitioners could also include the AGLOC-A scale to aid in discussions with clients to understand the clients’ spiritual life in more depth. Many of the students wanted to improve upon their relationship with God, as they indicated in clinical sessions. These measures could help clarify spiritual concerns and their link with negative consequences.

Low God LOC also showed significance among current drinking and drinking in the past thirty days compared to a high God LOC. This further suggests that spirituality is an important component when assessing a student’s drinking behavior. Students might feel less pressure to control their drinking patterns if they felt God was involved in their drinking decisions. However, anxious individuals may not be able to trust God with this burden or be overly concerned about fitting in (Litt et al., 2012). Further assessment would need to be observed to make this assertion.

The Negative Outcome of Alcohol Use also showed interesting implications, such as: no clients reported being taken advantage of while under the influence. As the researcher had the dual-relationship of being the researcher and practitioner, as well as
most of the clients being male, clients may not have felt comfortable discussing this topic to a female practitioner. This question could be changed to a less direct or personal question by asking, “When drinking, have you ever done something you later regretted?” BASICS Coordinators should continue to update negative consequences as they present themselves. For instance, research indicated many binge drinkers inconvenienced their friends because of their inebriated state, had to drop a class or got a GPA lower than a 2.0, or got in trouble or fired from work (Wechsler et al., 1995). This form should be continuously reviewed to match the negative consequences students experience with their drinking behaviors. This is to ensure students are fully aware and knowledgeable about the negative consequences they are experiencing as a result of their drinking behaviors.

Lastly, practitioners should enter into the BASICS program understanding that the majority of the clients will be Caucasian males and should have a good understanding of this population. This study also shows males are more likely to have a low God locus of control, which furthers the idea that this demographic will not seek external help for problem drinking behaviors. No conclusions can be made about how females involve external forces in their drinking decisions; thus, this population would need further assessment in spirituality.

**Implications for Policy**

Since ACU is a faith-based university, incorporating a spiritual 12-step program on campus might benefit college student believers. In a Christian community, Celebrate Recovery (CR) might aid in discussions on the Christian God instead of a broader definition of a higher power in programs such as AA (Brown, Tonigan, Pavlik, Kosten, & Volk, 2013). CR also incorporates drugs, which could serve as a dual-purpose
intervention for students suffering from multiple or varying addictions (Brown et al., 2013). CR has been shown to increase confidence and self-efficacy to reduce substance abuse (Brown et al., 2013). This is important considering that some college students can have a hard time saying ‘no’ to negative peer influences or feel pressure to fit in (Li et al., 2000).

At the mezzo level, ACU could engage parents before their students enter into the university freshmen year. Given the appropriate amount of funding, ACU could implement the Parent Based Intervention, as a preventive measure against problem drinking. Parent Based Intervention is an alcohol education pamphlet to reduce parent permissiveness and aid in teen discussions towards drinking (Cleveland, Lanza, Ray, Turrisi, & Mallett, 2012). In a 2012 study, 1,121 student’s parents were given the educational alcohol pamphlet the summer before student’s freshmen year. Parents that discussed the information in the pamphlet with their college-aged children resulted in these students drinking less and reducing negative consequences, as opposed to parents that did utilize the pamphlet (Cleveland et al., 2012). Parents could help the transition from high school to college by having open discussion with their children before entering freshmen year.

At a macro level, ACU could find opportunities to educate the student body on drinking rates taking place among the student body utilizing the 2011 Core Alcohol and Drug Survey (CORE) study. ACU could also incorporate more preventative strategies, as the university seems to only have a small number of opportunities each year for alcohol education and outreach. This goal would help reduce referrals for individual BASICS
intervention by hopefully decreasing the social acceptability of binge drinking and its negative consequences on campus.

Lastly, ACU could consider imitating Texas Tech University in their Collegiate Recovery Community (CRC) program. According to Harris, Baker, Kimball, & Shumway (2007) the CRC program is similar to AA and motivational interviewing, as it merges 12-step meetings and peer support. Although in its pilot stages, the CRC attempts to include, teach, and provide information to family members on how to help their college-aged child attend college while struggling with an addiction. The CRC has shown to improve upon relapse and graduation rates, as well as GPA. However, the CRC has not fully been able to understand parental support and effectiveness in the program. Hence, research on this program’s effectiveness may need to be expanded, especially if parental attachments are associated with drinking and perceptions of God in one’s life.

Limitations

Although this study reached its objective, it was not without its limitations. First, because of the time constraints and limited amount of students referred to the BASICS program for alcohol, this study was conducted on a small size of homogeneous individuals. If this researcher had more time, money, and access to a larger population or a control group, the findings would have been more generalizable and reliable. Secondly, the sample represented in this study was clinical, as a result of students referred by the university officials for violating to meet university substance use policies. Therefore, the sample is non-representative of a regular student body and cannot be generalizable, except among clinical populations. Thirdly, the predominant student type represented in the study were Caucasian males, consistent with research indicating Caucasian males
were the most prominent alcohol users in college (Primack et al., 2012). Hence, the data gathered in this study on females is not representative of a larger female clinical population. This study would have been interesting to research if homosexual males feel some of the same social pressures of heterosexual males to drink and display their ‘maleness’ to their peers. However, attraction was not identified in this study and this information might be hard to collect as same-sex attractions can still be viewed as taboo on faith-based universities. Fourthly, the research and collection of information was gathered at a faith-based, Christian university. Thus, the research presented in this study is only descriptive of this religion and is not generalized to non-clinical, non-Caucasian males, attending secular colleges.

Also, to better quantify the frequency of student’s binge drinking behaviors, a more reliable assessment could have been utilized. However, it was impossible for this researcher to know prior to the study that the General Drinking Questionnaire (Appendix B) would have produced such a range of responses from participants. A better measure might have yielded significance among attachment groups and drinking behaviors. Nonetheless, this researcher is unable to make this assumption without further studies conducted on similar populations.

**Conclusion**

Since parent attachment style can impart onto God attachment style, it is important for university officials and BASICS Coordinators to collaborate with student’s parents before freshmen year. This gives parents an opportunity to facilitate a discussion about safe drinking habits with students before entering an environment where drinking is more accessible and often encouraged by peers. This study is more relevant to young
Caucasian males, as they are at an increased risk for binge drinking, even on faith-based universities. Additionally, ACU BASICS Coordinators should consider the importance of spirituality in college students, as most identify with some form of religious denomination. Results indicated negative consequences of drinking are more prevalent among individuals with an anxious God attachment and individuals classified with a low God locus of control. This study shows the complexities of spiritual health and drinking, which should be evaluated in the BASICS assessment process.
REFERENCES


Engstrom, C. E. (2012). “Yes …, but I was drunk”: Alcohol references and the (re)production of masculinity on a college campus. Communication Quarterly, 60(3), 403-423.


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http://legacy.nreppadmin.net/ViewIntervention.aspx?id=124


http://doi.org/10.1016/j.jvoice.2007.01.011


APPENDIX A

IRB Approval Letter

ABILENE CHRISTIAN UNIVERSITY
Educating Students for Christian Service and Leadership Throughout the World

Office of Research and Sponsored Programs
320 Hardin Administration Building, ACU Box 29101, Abilene, Texas 79599-9103
325-674-2885

11/22/2016

Misty Schoepferster
Department of Social Work
ACU Box 27866
Abilene Christian University

Dear Ms. Schoepferster

On behalf of the Institutional Review Board, I am pleased to inform you that your project titled Attachment to God, Locus of Control, and outcomes in the Brief Alcohol Screening and Intervention for College Students program was approved by expedited review (46.110(b)(1) category 7) on 11/22/2016 for a period of one year (IRB #16-091). The expiration date for this study is 11/22/2017. If you intend to continue the study beyond this date, please submit the Continuing Review Form at least 30 days, but no more than 45 days, prior to the expiration date. Upon completion of this study, please submit the Inactivation Request Form within 30 days of study completion.

If you wish to make any changes to this study, including but not limited to changes in study personnel, number of participants recruited, changes to the consent form or process, and/or changes in overall methodology, please complete the Study Amendment Request Form.

If any problems develop with the study, including any unanticipated events that may change the risk profile of your study or if there were any unapproved changes in your protocol, please inform the Office of Research and Sponsored Programs and the IRB promptly using the Unanticipated Events/Noncompliance Form.

I wish you well with your work.

Sincerely,

Megan Roth

Megan Roth, Ph.D.
Director of Research and Sponsored Programs

Our Promise: ACU is a vibrant, innovative, Christ-centered community that engages students in authentic spiritual and intellectual growth, equipping them to make a real difference in the world.
APPENDIX B

General Drinking Questionnaire

1. At what age did you first drink alcohol? What was the experience like (positive, negative; Why)?

2. What was your drinking pattern like when you were in high school (how often, how heavy, etc)?

3. Now when you party/socialize, how many drinks do you usually have? Over how many hours?

4. Think of the occasion when you drank the most alcohol in the past 30 days. How many drinks did you have? Over how many hours?

5. How often do you have 5 or more drinks on one occasion (never, less than monthly, monthly, weekly, more than once a week)?
APPENDIX C

Negative Outcomes Of Alcohol Use

- Are you currently taking any medications?  
  Yes/No

  Have you ever…
- Missed class because of a hangover?  
  Yes/No

- Been unable to finish assignments on time/study adequately because of drinking?  
  Yes/No

- Argued or acted uncharacteristically mean after drinking (gotten in a fight)?  
  Yes/No

- Physically hurt yourself while under the influence?  
  Yes/No

- Damaged property while or after drinking?  
  Yes/No

- Vomited from drinking too much?  
  Yes/No

- Have you ever passed out while drinking?  
  Yes/No

- Experienced a blackout?  
  Yes/No

- Drove after drinking?  
  Yes/No

- Had police involvement related to alcohol?  
  Yes/No

- Suspected someone had slipped something into your drink without your knowing?  
  Yes/No
- Have you ever been taken advantage of while under the influence? Yes/No
- Felt your drinking has created problems between yourself and your parents/family/friends/girlfriend/boyfriend? Yes/No
- Noticed an increase in tolerance for alcohol? Yes/No
- Felt you’re developing a drinking problem? Yes/No
- Have you ever found that when you started drinking, you ended up drinking more than you were planning to? Yes/No
APPENDIX D

AGI

Please respond to each of the following items by circling the number that most closely matches your level of agreement with the statement.

<table>
<thead>
<tr>
<th></th>
<th>Disagree Strongly</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Neutral</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Agree Strongly</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I worry a lot about my relationship with God.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>2. I just don’t feel a deep need to be close to God.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>3. If I can’t see God working in my life, I get upset or angry.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>4. I am totally dependent upon God for everything in my life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>5. I am jealous how God seems to care more for others than for me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>6. It is uncommon for me to cry when sharing with God.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>7. Sometimes I feel that God loves others more than me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>8. My experiences with God are very intimate and emotional.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>9. I am jealous at how close some people are to God.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>10. I prefer not to depend too much on God.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>11. I often worry about whether God is pleased with me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>12. I am uncomfortable being emotional in my communication with God.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>13. Even if I fail, I never question that God is pleased with me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Disagree Strongly</td>
<td>Disagree</td>
<td>Somewhat Disagree</td>
<td>Neutral</td>
<td>Somewhat Agree</td>
<td>Agree</td>
<td>Agree Strongly</td>
</tr>
<tr>
<td>---</td>
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<td>----------------</td>
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</tr>
<tr>
<td>14.</td>
<td>My prayers to God are often matter-of-fact and not very personal.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>Almost daily I feel that my relationship with God goes back and forth from “hot” to “cold.”</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>I am uncomfortable with emotional displays of affection to God.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>I fear God does not accept me when I do wrong.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>Without God I couldn’t function at all.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>I often feel angry with God for not responding to me when I want.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>I believe people should not depend on God for things they should do for themselves.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>I crave reassurance from God that God loves me.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>Daily I discuss all of my problems and concerns with God.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td>I am jealous when others feel God’s presence when I cannot.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24.</td>
<td>I am uncomfortable allowing God to control every aspect of my life.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td>I worry a lot about damaging my relationship with God.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26.</td>
<td>My prayers to God are very emotional.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27.</td>
<td>I get upset when I feel God helps out others, but forgets about me.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28.</td>
<td>I let God make most of the decisions in my life.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX E

AGLOC-A

1. God participates in my decision to not drink
   0 - strongly disagree  1 – disagree  2 – agree  3 – strongly agree

2. God plays a role in whether my alcohol use increases or not
   0 - strongly disagree  1 – disagree  2 – agree  3 – strongly agree

3. God plays a role in whether I drink or not
   0 - strongly disagree  1 – disagree  2 – agree  3 – strongly agree

4. If someone asked me to try alcohol, God would keep me from trying it
   0 - strongly disagree  1 – disagree  2 – agree  3 – strongly agree

5. God helps me handle my problems so that I don’t need to drink
   0 - strongly disagree  1 – disagree  2 – agree  3 – strongly agree

6. God helps me to keep from drinking when I have a lot of problems
   0 - strongly disagree  1 – disagree  2 – agree  3 – strongly agree

7. When there are too many problems in my life, God keeps me from drinking
   0 - strongly disagree  1 – disagree  2 – agree  3 – strongly agree

8. Most things that affect whether I drink or not happen because of God
   0 - strongly disagree  1 – disagree  2 – agree  3 – strongly agree

9. God controls how much I drink
   0 - strongly disagree  1 – disagree  2 – agree  3 – strongly agree

10. God helps me say no when others pressure me to try alcohol
    0 - strongly disagree  1 – disagree  2 – agree  3 – strongly agree

11. God helps me resist pressure from others to try alcohol
    0 - strongly disagree  1 – disagree  2 – agree  3 – strongly agree

12. If I start to drink, God plays a role in whether I slow down or quit
    0 - strongly disagree  1 – disagree  2 – agree  3 – strongly agree
APPENDIX F

Alteration/Waiver Of Consent (Pre-Existing Data)

1. Please note whether you are requesting:
   - Waiver of Consent [Complete #2-6]
   - Alteration of Consent [Complete #2-6]
   - Waiver of Documentation of Consent [Complete #2, 7-9]

2. Please describe what waiver/alteration is being requested:
   - Informed consent will not be sought
   - Participants will be screened prior to providing informed consent
   - Required elements will be excluded from the consent form
   - Deception will be used in the consent process
   - Full consent will be obtained without a signature
   - Other: Participants did sign a consent form for participation in the BASICS program that included a statement about use of data for research. Since the data collection process, and the informed consent process, were already in place prior to the beginning of this study, it is not feasible to obtain consent from those who have already completed the BASICS program. Essentially, that data is pre-existing. All personally identifiable information will be removed from the electronic dataset to minimize the threat of breach of confidentiality.

For Waiver or Alteration of Consent:

3. Please describe how the research involves minimal risk: As described above, this application for waiver of consent applies to already existing data. That data is routinely collected by the BASICS program and is used as part of the feedback BASICS participants receive (i.e., program related). For the purpose of conducting this research, the pre-existing data will be stripped of names, identification numbers (i.e., Banner ID’s, Drivers License numbers, or Social Security numbers) and program participation dates so that the electronic record set cannot be associated with the program participant.

4. Please explain why the research couldn’t be carried out without this alteration/waiver: This waiver applies to data that has already been collected from former BASICS program participants. Those participants did sign a
consent form through the ACU Counseling Center giving permission to use that data for research. However, that informed consent document was not reviewed by the ACU IRB. As data is pre-existing, obtaining signed consent for research would require re-contacting program participants. To re-contact those participants would be potentially harmful and a potential violation of privacy.

5. Please explain how the participants' rights and welfare are not being adversely affected by this alteration/waiver: **The data already exists, and is maintained in a secure location inside of the ACU Counseling Center. The researcher will access data only within the ACU Counseling Center and remove all personally identifiable information (as described above) from the electronic dataset used for research. That electronic dataset will be password protected and maintained by the researcher; a social work professional bound by an ethical mandate to protect the rights of individuals. All reporting of research results will be on an aggregate, group level.**

6. Will the participants be provided any additional information after the completion of their participation/the study pertaining to this waiver/alteration? ☑ Yes ☒ No Explain: N/A

For Waiver of Documentation of Consent:

7. Provide justification for waiving documentation of consent:
   ☐ The only record linking the subject and the research would be the consent document, and the **principal risk** would be potential harm resulting from breach of confidentiality. (Subjects should be asked whether they wish to document consent in this case.);
   OR
   ☐ The research presents **no more than minimal risk** of harm to subjects, and involves no procedures for which written consent is normally required outside of the research context.

8. Will participants be provided with a written statement regarding the research, such as a short summary or a copy of the consent form? ☐ Yes ☐ No Explain: N/A (If yes, please include a copy of this communication)

9. How will the researchers document that verbal consent was provided? (or if electronic consent is being given, please describe) N/A
APPENDIX G

Alteration/Waiver Of Consent (Prospective Data)

1. Please note whether you are requesting:
   - Waiver of Consent [Complete #2-6]
   - Alteration of Consent [Complete #2-6]
   - Waiver of Documentation of Consent [Complete #2, 7-9]

2. Please describe what waiver/alteration is being requested:
   - Informed consent will not be sought
   - Participants will be screened prior to providing informed consent
   - Required elements will be excluded from the consent form
   - Deception will be used in the consent process
   - Full consent will be obtained without a signature
   - Other:

   For Waiver or Alteration of Consent:

3. Please describe how the research involves minimal risk: N/A

4. Please explain why the research couldn’t be carried out without this alteration/waiver: N/A

5. Please explain how the participants’ rights and welfare are not being adversely affected by this alteration/waiver: N/A

6. Will the participants be provided any additional information after the completion of their participation/the study pertaining to this waiver/alteration? [ ] Yes  [ ] No
   Explain: N/A

   For Waiver of Documentation of Consent:

7. Provide justification for waiving documentation of consent:
   - The only record linking the subject and the research would be the consent document, and the principal risk would be potential harm resulting
from breach of confidentiality. (Subjects should be asked whether they wish to document consent in this case.); OR

☐ The research presents no more than minimal risk of harm to subjects, and involves no procedures for which written consent is normally required outside of the research context.

8. Will participants be provided with a written statement regarding the research, such as a short summary or a copy of the consent form? ☒ Yes ☐ No Explain: (If yes, please include a copy of this communication)

See Appendix A

9. How will the researchers document that verbal consent was provided? (or if electronic consent is being given, please describe) The researcher, in her role as BASICS Coordinator, will document that the client gave consent by acknowledging such consent in the client file.
APPENDIX H

Consent Form

BASICS: Brief Alcohol Screening Intervention for College Students Participant
Information and Informed Consent

Purpose:
The purpose of the BASICS program is:
1) To better understand students’ patterns of alcohol consumption and drug use.
2) To help students become more aware of risks that can be involved with some types of drinking and drug use.
3) To collaborate with students to prevent or reduce future issues and risks related to alcohol and drug use.

Description of Procedures

You will meet with the BASICS coordinator for two one-hour sessions. The first meeting will be an information-gathering session about your past and present drinking and drug use patterns (if applicable). The last meeting, scheduled approximately two weeks later, will consist of feedback and education, based on the information you provided in the first session.

Confidentiality

The information you share with the BASICS coordinator will be kept strictly confidential unless there is an explicit concern of harm to self or others (duty to warn) or violations within Title IX. Although the referral is initially made by Student Life, that office is only privy to information related to whether or not you completed both sessions by the assigned deadline. All records will be housed in the Counseling Center and will remain confidential. Some assessment information may be used for research purposes, however, all identifying information will be kept confidential.

Risks and Inconveniences:
There are moderate risks and/or inconveniences to participating in this program. Students may feel emotionally or mentally uncomfortable discussing alcohol consumption, drug use, and other related activities. However, we believe that honesty in reporting use will drastically influence the students overall understanding of positive and negative outcomes related to alcohol and drugs.
Benefits

If students participate fully and openly in this program, they will benefit in many ways. Students could be given the opportunity to gain insight into reasons why they may choose to participate in alcohol and drug-related activities (what motivates you to drink or use drugs, what you expect to gain from your actions, etc). Students could also obtain information that can help them make safer choices when they do choose to drink and/or use drugs.

Voluntary Participation:
While we recognize that students are required to participate and successfully complete the BASICS program as assigned by Student Life, ultimately the student determines how involved he or she becomes in each session of the program. Students may choose to sign a consent form allowing Student Life to confirm three types of participation:

1) Dates of each session.
2) Compliance in scheduling each session.
3) Level of engagement in each session.

You determine the types of participation Student Life is allowed to confirm.

Invitation to Participate
While we recognize that you are mandated to complete the BASICS program, we invite you to authentically participate in the program. You determine how much you get out of the program. We hope you use this requirement as a way to learn more about alcohol and/or drugs when relating to yourself as well as others.

Questions:
If you have any questions about the BASICS program, the BASICS coordinator will be happy to answer them during the first session. If you have questions after the first session or upon completion of the program, please contact the BASICS Coordinator, Misty Schoephoerster, at alcoholedu@groupmail.acu.edu.

☐ I agree to actively participate in the BASICS Alcohol Education Program.

☐ I confirm that I am over 18 years of age.

☐ I agree to be videotaped only for the purposes of future improvement and/or re-Evaluation of the program.

___________________________________________  ____________________
Participant’s Printed Name                                  Date

___________________________________________
Participant’s Signature

___________________________________________
BASICS Coordinator Signature
Consent and Authorization to Release Information

Pursuant to state and federal laws concerning my rights to confidentiality, I, __________________________________________, (Student) consent and authorize the BASICS Coordinator to release the following information to Student Life staff.

- Dates of/attendance to each session
- Compliance in scheduling each session
- Level of engagement in each session

I also consent and authorize Student Life to request and receive the released information.

I understand that I may revoke this Consent and Authorization to Release Information (Consent) at any time by providing written notification to the BASICS Coordinator. However, I also understand that any release of information made in reliance of this Consent and prior to my revocation shall not constitute a breach of my right to confidentiality. This Consent shall expire on the following date, event or condition unless I revoke it before that time:

(State Date, Event, or Condition)

Upon the stated date, event, or condition, the Consent will automatically terminate. I have carefully read the foregoing Consent, and I understand its contents. I further state that I have signed voluntarily under my own free will, and I am 18 years or older.

______________________________________________  ____________________________
Student’s Signature (If 18 or older)  Date

________________________  ______________________________  ______________________
Banner ID Number

________________________________
Witness’ Signature

________________________  ____________________________
Date