COLLEGE RISKY/HAZARDOUS DRINKING: UNDERSTANDING HOW ASPECTS OF PATIENT-PROVIDER COMMUNICATION RELATE TO THE LIKELIHOOD OF BRIEF PROVIDER INTERVENTION

by

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DEDICATION

I whole heartedly dedicate this thesis study to my loved ones. I could not imagine going through my academic career without your unconditional and unmatched love and support. Thank you for encouraging me to pursue my dreams and aspirations in life and thank you for nourishing my personal growth so that I may never lose the determination to succeed.

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ABSTRACT

The purpose of the current study was to add to the literature regarding the patient-provider relationship and barriers to communication when discussing substance use, specifically risky/hazardous drinking behaviors. The goal was to identify barriers to communication from the college student perspective. This was a two-part mixed-methods study that included a Qualtrics survey and pilot focus groups, both examining various aspects of patient-provider communication related to risky/hazardous alcohol use. The results indicated that health care providers are potentially missing opportunities to effectively assess alcohol use and provide brief intervention, and other factors besides drinking behaviors may influence the patient-provider relationship. Additional findings demonstrated that substance use stigma may be a barrier to effective provider-patient communication, and more discussion is needed about how to improve the conversation about alcohol use with college students. By expanding our understanding of the patient-provider relationship, researchers can work toward developing and implementing more efficient forms of intervention on college campuses and in other health care settings to address college students' risky/ hazardous alcohol use.

I. INTRODUCTION

The Centers for Disease Control and Prevention (CDC) reported that binge drinking is the most dangerous out of all the problematic drinking behaviors. Binge drinking is when an individual brings their blood alcohol concentration (BAC) to 0.08 grams/dl or higher; this is typically seen when men consume 5 or more drinks or when women consume 4 or more drinks in roughly two hours (Centers for Disease Control and Prevention, 2018). Considering the severity of binge drinking, it's important to acknowledge that thousands of college students begin consuming alcohol as a part of their college experience, and many of these students are drinking in excess (Concerns of Binge Drinking & Alcoholism on College Campuses, 2017). This is demonstrated by the National Survey on Drug Use and Health that was conducted in 2017, that reported over 50% of full-time college students ages 18-22 had consumed alcohol within the last month and over 30% had engaged in binge drinking. Of those participants, almost 10% had engaged in heavy alcohol use, defined as binge drinking 5 or more days out of the month (National Institute on Alcohol Abuse and Alcoholism, 2019).

Not only are these rates of binge drinking higher than non-college attending peers, but these drinking habits can potentially lead to students developing problematic drinking patterns which may leave them vulnerable to long-term harm such as experiencing problems with their family, feeling lonely or having low self-esteem, or experiencing anxiety or depression, to name a few (Centers for Disease Control and Prevention, 2018). In order to address this issue, researchers must develop effective and efficient ways of addressing these students directly. Unfortunately, universities are not utilizing all resources possible for education or advice on problematic/risky substance use such as

health care provider-college student patient communication. Future research must focus on how to develop a more comfortable environment for health care providers and students to engage in a conversation about binge drinking.

This area of research is important because this is an opportunity to understand how we can improve the relationship between college students and health care providers. By improving this relationship, students and health care providers may be able to engage in more meaningful conversations that foster trust and a mutual understanding between the student and health care provider. This topic is also important because enhancing understanding of what factors are important to engaging in successful conversation about binge drinking between college students and health care providers, can potentially reduce the prevalence of risky substance use on college campuses and other risky behaviors that are associated with problematic alcohol use. By having the conversation about alcohol use, health care providers have the opportunity to provide brief intervention (i.e., a one-time brief counseling session where a healthcare provider gives feedback on a patient's health-related habits and behaviors) to students who are high risk for problematic alcohol use.

Overview of Patient-Provider Relationship and Communication

The patient-provider relationship and communication are valuable because patients who develop a strong and positive relationship with their health care providers feel more respected, understood and cared for (Press et al., 2016). By focusing on treating the patient as a whole instead of only focusing on the biological aspects of their health, researchers have seen an increase in effective care provided (George & Engel, 1980; Smith & Hoppe, 1991). In a study by Kim et al. (2008), the patient-provider relationship

is described as a collaborative relationship that has negotiated mutual goals that are shared between both the patient and health care provider. An important aspect to their relationship is the verbal and nonverbal communication that takes place between patients and their health care providers such as effective questioning, understanding the nature of the relationship as a partnership where both parties take part in the decision-making, and finally the expression of empathy and concern for the health of the patient (Bensing & Dronkers, 1992; Roter et al., 2006; Roter et al., 1997). Outcomes such as patient satisfaction, health status, adherence, and memory of information have shown to be linked to effective patient-provider communication (Hall et al. 1988; Stewart, 1995; Ong et al., 1995). This line of communication and relationship can be seen across many different health care settings, all of which can be positively affected by the quality of the patient-provider relationship (Chen et al., 2018; Moreno et al., 2019; Tekeste et al., 2019).

The importance of patient-provider communication was demonstrated in a study by Chen et al. (2017) that examined the association between patient-provider communication and a wide variety of health outcomes for patients with Hepato-Pancreato-Biliary Disease (HPB). Patients with HPB can face many challenges as a result of their condition such as complex treatment plans, complicated clinical management, and a team of many specialists which can make patient-provider communication difficult (Chen et al., 2018; Vibert et al., 2006). With these challenges, researchers have chosen to turn their attention to the patient-provider relationship and focus on the importance of communication as an essential part of healthcare delivery (Chen et al., 2017). In the study, patient-provider communication was demonstrated to be effective in promoting

medication adherence and improving physical and mental health; ultimately, this can lead to decreased hospital utilization (Bertakis & Azari, 2011; Okunrintemi et al., 2017; Zullig et al., 2015).

Considering the significance of the patient-provider relationship in general, it's important to consider how this relationship can play a role for patients who engage in substance abuse. For a patient and health care professional, discussing substance use may present its own set of challenges which can harm the patient-provider relationship. However, if health care providers were able to develop a positive relationship and establish good communication with their patients, they could provide brief intervention to those who are at risk of dangerous substance use. It's important to understand how often brief intervention happens and the communication factors that predict it.

Patient-Provider Relationship and Communication About Substance Abuse

Primary health care settings have the opportunity to address a variety of issues across a large number of patients. This presents health care providers with the chance to assess patients for problematic health behaviors such as substance use and provide brief intervention when necessary (Kaner et al., 2009). Traditionally, treatment for alcohol use includes multiple counseling sessions that can last weeks or months at a time, whereas brief interventions are brief one-time one-on-one counseling sessions that are ideal for those who drink in harmful or abusive ways (U.S. Department of Health and Human Services, 2005). The goals of brief interventions are primarily to lower an individual's alcohol consumption to more appropriate levels and practices, instead of complete abstinence from alcohol all together (Moyer & Finney, 2005). By reducing the amount of alcohol consumed, individuals lower their risk of experiencing the negative outcomes

associated with risky alcohol use such as injuries, domestic violence, and alcohol-related medical problems, to name a few (U.S. Department of Health and Human Services, 2005). Although a clear definition for what constitutes as a brief intervention is still up for debate (Moyer et al., 2002), researchers believe the appropriate intervention depends on the individual being treated (U.S. Department of Health and Human Services, 2005). Medical professionals may consider the severity of use, whether or not the individual is using other substances, if the individual has a co-occurring medical or psychiatric condition and the clinician's own skills and interests in the interest of time. Although simple, a brief intervention typically involving providing feedback in regards to their alcohol behaviors has been shown to be effective in encouraging those at risk to reduce their alcohol consumption (Moyer & Finney, 2005).

As demonstrated in a study with college students, brief intervention can include a number of strategies such as providing feedback in regards to a patient's current health behaviors, discussing the prevalence of high-risk substance use, and discussing personal likes and dislikes about substance use (Fleming et al., 2010). A meta-analysis assessing the effectiveness of brief alcohol intervention in primary health care settings, showed that brief intervention is effective in reducing excessive drinking in primary care settings (Kraner et al., 2009). The intervention can be short and still effective when applied to those who are at risk of developing harmful drinking habits or for those who are interested in reducing or discontinuing their alcohol use (Fleming et al., 2010; Hingson et al., 2009). When practiced in general primary care and emergency settings, this can help promote an overall improvement in health for those at risk of developing serious alcohol-related health issues (Kraner et al., 2009; Thom et al, 1999). However, more research is

needed to understand how the patient-provider relationship relates to the likelihood of brief intervention being implemented in this college student setting.

The importance of health care providers in addressing substance abuse has been demonstrated in previous research examining different populations (Denny et al., 2003; Hingson et al., 2013). More specifically, research has shown how often health care providers aren't asking about substance use or providing advice for problematic alcohol use. In a study by Denny et al. (2003), researchers examined the prevalence of health professional advice to adult patients to quit smoking or alcohol use during a routine checkup in a given year. They found that less than 30% of those who were classified as binge drinkers were talked to about their alcohol use during a routine checkup. This rate is notably low and shows that many opportunities are potentially being missed to intervene in medical settings (Baldwin et al., 2006; Denny et al., 2003; Hingson et al., 2013). Although asking someone if they've talked to a health care professional about their alcohol use can be very subjective, it's still important for researchers to try and understand why this occurrence may not be as prevalent.

Adolescents are another population that has demonstrated the importance of health care providers in addressing substance use. A study by Hingson et al. (2013) hoped to examine how adolescents were asked about their alcohol consumption and whether or not they received advice about their alcohol use. The results showed that although a large number of adolescents had a routine checkup, not many were asked about their alcohol use or advised about their use. This represents another missed opportunity for health care providers to intervene on potentially problematic substance use (Baldwin et al., 2006; Denny et al., 2003; Hingson et al., 2013). Research has demonstrated that although health

care providers have the opportunity to assess substance use and provide brief intervention in health care settings, there are existing barriers preventing this from successfully taking place. The current study hopes to better understand the existing barriers for patients.

Patient-Provider Relationship and Communication About Alcohol Use Among College Students

Due to alcohol being accepted as a social norm among college students, they may associate this behavior with positive outcomes such as making new friends, feeling less anxiety or stress, and having a good time. Unfortunately, because of the positive reinforcement students receive from consuming alcohol, they may be at high risk of developing an Alcohol Use Disorder (AUD) (Meyer et al. 2019). An AUD is defined as a problematic pattern of alcohol use which leads to individuals becoming clinically impaired or distressed (American Psychiatric Association, 2013). Young adults, ages 18 to 22, who are in college, are more likely than their non-college peers to drink in excess (Centers for Disease Control and Prevention, 2018). In a national study conducted by the National Institute on Alcohol Abuse and Alcoholism, 60% of students reported consuming alcohol in the month prior; of those, two out of the three reported binge drinking during the periods of alcohol consumption (National Institute on Alcohol Abuse and Alcoholism, 2019). This may be attributed to the students feeling social pressure to drink, experiencing stress related to their academics, or being involved with an organization that promotes peer drinking. Whether it be experiencing sexual assault, having academic problems, or developing an AUD; college binge drinking can negatively impact students' lives in serious ways (An American Addiction Centers Resource, 2019); this is why developing efficient prevention and intervention programs are important to

reducing the prevalence of college binge drinking and helping those who are at high risk for AUD.

There have been many different attempts to reduce binge drinking on college campuses. Prevention programs can be classified into three different categories: ecological or environmental, group-centered, and individual-centered approaches. Ecological or environmental approaches focus on targeting institutions, communities, and public policy in order to change the social and physical environment surrounding substance use. For example, this can include addressing substance use within an individual's local community and proposing initiatives to promote safe drinking habits and bring awareness to the issue (Ziemelis et al. 2002; DeJong & Langford, 2002). Group-centered is targeting students on an interpersonal level to change norms associated with substance use on college campuses, which can include an event planned by an organization on campus to address the perceptions of college drinking from the student perspective (Barnett et al., 1996; Mattern, & Neighbors, 2004). Finally, individual-centered approaches focus on reaching students on a one-on-one level. This can include awareness and educational programs that focus on providing information to students and discussing topics such as peer drinking, acceptability, and the consequences of drinking (Larimer & Cronce, 2002).

Efforts to reduce binge drinking are focused around education and awareness surrounding substance use and can be administered in a variety of ways. The individual-centered approach is most common with college students because this provides the opportunity for brief intervention. Brief interventions are the most beneficial when used early on before an individual's substance use becomes problematic and for those who

wish to reduce or abstain from substance use all together (Babor et al., 1996). Other research has shown that brief interventions as part of a two-step model can be effective in reducing drinking-related problems in college students (Borsari et al., 2012). Although much research is still needed in this area, providing brief intervention to college students has demonstrated positive results in reducing alcohol consumption along with other negative consequences from this behavior (Marlatt et al., 1998; Barnett et al., 2004; Colby et al., 2018).

One potential barrier to the success of these attempts to reduce binge drinking could be the stigma students may feel about their alcohol use. Although there are conflicting definitions of stigma within the literature (Corrigan et al., 2004; Heijnders & Van Der Meij, 2006; Herek, 2007), a three-level framework is a useful guide for developing strategies to reduce stigma related to health conditions (Livingston et al., 2012). Self-stigma is subjective and can be seen when an individual has negative feelings toward themselves or experiences identity transformation as a result of the individual's personal perceptions, experiences, and negative social interaction based on their social status or health condition (Livingston & Boyd, 2010). Stereotype endorsement or identity transformation is when an individual transforms their own identity in order to fit the stigmatized identity they are associated with. Social stigma is a large social group that approves and acts on stereotypes that stigmatize another social group (Corrigan et al., 2005). Finally, structural stigma are rules, procedures, and policies of institutions that restrict the opportunities and rights of the members of a stigmatized group (Corrigan et al., 2005; Corrigan et al., 2011). An example of structural stigma are the restrictions placed on individuals with current or previous felony convictions. Depending on the

state, these individuals aren't allowed to vote and therefore do not have a voice within society. Therefore, understanding how stigma is portrayed throughout our society is important for understanding the overall impact it has on college students within health care settings.

Research evaluating substance use stigma has shown that substance use stigma is a significant predictor of several negative outcomes such as low utilization of health services, poor mental and physical health, and high levels of risky behavior (Cole et al., 2011; Frischknecht et al., 2011; Kulesza et al., 2013). Participants who engage in substance use report experiencing labeling, stereotyping, or discrimination because of their substance use which leads them to avoid or delay seeking treatment (Cohen et al., 2007; Keyes, Hatzenbuehler, McLaughlin et al., 2010). This can lead to health inequalities, such as these individuals not receiving the care that they need because they've been deemed unworthy of such action and opportunities based on their substance use (Link & Phelan, 2006). Individuals who express a concern regarding privacy and stigma often become selective about disclosure, avoiding, and delaying treatment in order to avoid the discrimination associated with their use (Palamer, 2012; Saunders et al., 2006). Therefore, understanding how stigma may influence the patient-provider relationship and likelihood of provider brief intervention is important for developing effective and efficient prevention and intervention programs.

Health care providers have been shown to be one of the most under-utilized resources on college campuses when addressing substance use. Health care providers are a resource that have the ability to screen patients quickly and provide brief interventions to high risk students on a one on one level. Considering how influential this brief

intervention can be, it's important to consider why this may not be happening as frequently as one would hope. In a study by Baldwin et al. (2010), researchers had hoped to address this dilemma by developing a more efficient training program for health-care providers on a college campus by conducting several focus groups with college students and individual interviews with health care professionals. The results of the study provided an interesting perspective to consider when developing prevention programs for college campuses.

First, there were discrepancies between students and health care providers' knowledge about the extent of substance abuse on campus. Health care providers generally thought that alcohol and marijuana were the preferred substances among students, where instead students identified a list of 25 abusable substances they believed were used on campus. The students and health care providers had different opinions on who should bring up the topic of substance abuse in the health care setting. The health care staff had acknowledged their responsibility in addressing substance abuse issues but they reported that student resistance in talking about the topic was a significant barrier. Students differed on whether or not it was the responsibility of a health care provider to discuss such a topic; some believed a psychologist or counselor was more appropriate to discuss this issue. Finally, both groups reported difficulties with communication. This included health care providers feeling students aren't aware of the significance of their substance use and students expressing concern for confidentiality and judgement from the health care provider. This study demonstrated the existing barriers to identifying substance abuse and intervention on college campuses and also how important it is to

consider both perspectives of the conversation when developing more efficient and effective prevention and intervention programs.

Current Study

The purpose of the current study is to add to the literature regarding patient-provider communication, and barriers to effective communication, when discussing substance use, specifically risky/hazardous drinking and binge drinking. The goal was to identify barriers to communication from the college student perspective with the long-term potential of developing and implementing more efficient forms of intervention on college campuses and in other health care settings. Also, the findings from this study could potentially provide a more accurate student perspective for health care providers to take into consideration when addressing this topic with the college student population.

This thesis study was a two-part study. The research questions for part 1 are as follows: 1) How often are health care providers screening for alcohol use in college student patients? 2) Is there a relationship between level of risky/hazardous drinking in college students and screening for risky drinking? 3) How do patient-provider relationship factors relate to the likelihood of health care providers implementing brief interventions to students in regards to their risky/hazardous drinking? 4) How does experience of personal stigma associated with binge drinking relate to the likelihood of health care providers implementing brief interventions to students in regards to their risky/hazardous drinking? The following four hypotheses were developed for part 1:

1. There will be a positive relationship between college student risky/hazardous drinking and health care provider delivery of brief intervention.

2. There will be a negative relationship between risky/hazardous drinking in college students and both patient satisfaction and depth of relationship with the provider.

3. There will be a positive relationship between health care provider delivery of brief intervention and both patient satisfaction and depth of relationship with the provider.

4. There will be a negative relationship between college students' experience of personal stigma and health care provider delivery of brief intervention.

Finally, the research questions for part 2 of the study are as follows:

1. How do college students perceive patient-provider communication regarding risky/hazardous alcohol use? What circumstances or factors influenced college students' decisions to talk to their health care provider about their risky/hazardous alcohol use?

2. How do college students suggest health care providers communicate with young adults about risky/hazardous alcohol use?

There are no hypotheses due to the exploratory nature of part 2 of the study.

II. METHODOLOGY

Design

The current study included two parts. Part 1 was a quantitative, correlational study design with an online Qualtrics survey. The survey included the following variables each assessed by validated measures as described below: alcohol use disorders identification, stigma (experience of personal stigma), screening by providers for alcohol use, patient satisfaction, patient-provider depth of relationship, brief intervention by providers, and demographics (See Appendix A for all Qualtrics survey questions).

Part 2 of the current study was a qualitative, exploratory study that included students participating in a pilot focus group. These students engaged in discussion that was focused on various aspects of patient-provider communication related to risky/hazardous alcohol use. Students were asked to participate in order to provide a more accurate student perspective for health care providers to take into consideration when addressing topics such as risky/hazardous alcohol use, with this specific population. The focus group protocol was developed by the principal investigator and faculty member co-investigator of the study who is trained in interview/focus group discussions. Literature regarding the patient-provider relationship and communication about alcohol use among college students was used to develop the focus group questions (Ziemelis et al., 2002; Baldwin et al., 2010; Meyer et al., 2019; National Institute on Alcohol Abuse and Alcoholism, 2019). The principal investigator and faculty member met three times to discuss and develop the focus group protocol and questions that were used during the pilot focus groups. The focus group protocol was tested using a group of graduate students at Texas State who were asked to participate in order to provide feedback on the

questions and protocol of the study. After the practice focus group, the protocol was finalized between the principal investigator and faculty member co-investigator. The focus group protocol included a script for the principal investigator to read prior to beginning asking questions. The script includes an introduction to the study explaining the purpose of the study and a brief explanation of what is already known about the patient-provider relationship between health care providers and college students. Participants were reminded that their participation was completely voluntary and that the focus group discussion would be audiotaped for data collection accuracy. This study was first approved by the Texas State University IRB on September 5, 2019 with IRB reference number 6458.

Participants

The current study used a convenience sample of college students at Texas State University. The population of undergraduate students at this institution has seen a steady increase in minority enrollment in recent years, with Hispanic enrollment counting for more than 35% of total enrollment and the overall minority enrollment is over 50%. As of Fall 2019, 58.9% of students enrolled were female and 41.1% were male, which lead the researchers to expect most participants to be female (Highlights-Demographics, 2018). Participation was limited to participants that were 18 years of age or older.

For part 1 of the study, a total of 320 participants completed the Qualtrics survey; however, after data cleaning, 54 participants were excluded from the sample. These individuals were excluded from the study because they either had not consumed alcohol in the last 12 months or had not had a visit with a medical provider in the last 12 months. The sample for the current study included 266 individuals who were recruited from the

SONA Human Subjects Pool through the Psychology Department. Participants received compensation for participating in the study by receiving course credit. Of the included participants, 97% were between the age of 18 and 22 years old, and 57 (21.4%) were male and 207 (77.8%) were female (2 participants did not answer this question). The breakdown of year in college was as follows: 1st year 121 (45.5%), 2nd year 75 (28.2%), 3rd year 41 (15.4%), 4th year 22 (8.3%), and 5 or more years 6 (2.3%) (1 participant did not answer this question). For participants' ethnic group ("Please select the ethnic group you most identify with."), 125 (47%) identified as Hispanic or Latino, 118 (44.4%) as not Hispanic or Latino, and 21 (7.9%) as other (2 participants did not answer this question). For participants' reported racial category ("Please select the racial category you most identify with."), 203 (76.3%) were White or Caucasian, 41 (15.4%) were Black or African American, 15 (5.6%) reported other, 2.6% (7) were American Indian or Alaskan Native, and 1.9% (5) were Asian. For this question, participants had the option of selecting more than one racial category. Originally, the goal for part 2 was to recruit from part 1, a total of 30 students to participate in focus groups discussing various aspects of patient-provider communication. These students would be invited to participate based on their reported AUDIT score of risky/ hazardous alcohol use. Instead, students were recruited to participate in pilot focus groups through the Psychology Department's statistics labs via email and by word of mouth. A total of 8 students participated in a one-time pilot focus group discussing various aspects of patient-provider communication regarding risky/hazardous alcohol use. There were two focus groups and each had four participants. Participants must have had a medical visit within the past year and consumed alcohol within the past year to meet inclusion criteria to participate in the pilot

focus group. After students completed the pilot focus group, each student received $20 in cash as compensation for their time.

Of the included participants, five students were under the age of 21 and three were 21 or older. For gender, two participants were male and six were female. The breakdown of year in college was as follows: 1st year (one), 2nd year (one), 3rd year (five), 4th year (none), and 5 or more years included one student. For participants' ethnic group ("Please select the ethnic group you most identify with."), two identified as Hispanic or Latino, four as not Hispanic or Latino, and two participants did not answer this question. For participants' reported racial category ("Please select the racial category you most identify with."), five were White or Caucasian, three were Black or African American, and no other racial categories were selected.

Measures for Part 1

Risky/Hazardous Drinking. The Alcohol Use Disorders Identification Test (AUDIT) (Saunders et al., 1993), is a widely validated 10-item scale measuring alcohol consumption, drinking behaviors, and alcohol-related problems ("How often do you have a drink containing alcohol," "How many drinks containing alcohol do you have on a typical day when you are drinking"). This measure is based on a 5-point Likert scale ranging from 0 to 4, with a maximum possible score of 40. A score of 8 or more is considered to indicate risky or hazardous alcohol use.

Binge Drinking. The Binge Drinking Questionnaire (Cranford et al., 2006), is a 14-item self-report scale measuring frequency of binge drinking ("When you do consume alcohol, how many drinks do you typically have during one drinking episode (like an evening out or a day at the river", "Would you say that 'binge drinking' is your typical

drinking pattern?"). For the purpose of this study, binge drinking is defined as 5 or more drinks for men and 4 or more drinks for women in roughly two hours (Centers for Disease Control and Prevention, 2018). The current study only used 8 items, due to two items being removed because they weren't aligned with the focus of the current study. The measure included a combination of text entry and multiple-choice questions.

Stigma. The Substance Use Stigma Mechanism Scale (SU-SMS) (Smith et al., 2016), is an 18-item self-report measure. The current study only used 11 items to measure enacted (6-items: "health care workers have not listened to my concerns") and internalized (6 items: "Having used alcohol and/ or drugs makes me feel like I'm a bad person") stigma. One item measuring enacted stigma was removed because it was not relevant to the current study ("Healthcare workers have thought that I'm pill shopping, or trying to con them into giving me prescription medications to get high or sell."). The items were measured using 5-point Likert scales with lower scores indicating experiencing less stigma and higher scores indicating experiencing more stigma. Previous research supports the structural and construct validity of the scale, and a high internal consistency was achieved across all stigma scales with a Cronbach's α= .90–.95 (Smith et al., 2016).

Alcohol Use Screening. Screening for alcohol use was assessed using three questions from the 2014 Behavioral Risk Factor Surveillance System (BRFSS) and used in McKnight-Eily et al. (2017): 1) "Did the health care provider ask you in person or on a form how much you drink?" with response options of *yes*, *no*, and *unsure*. 2) Did the health care provider specifically ask whether you drank [5 for men/ 4 for women] or more alcoholic drinks on an occasion?" with response options of *yes*, *no*, and *unsure*. 3)

"Were you offered advice about what level of drinking is harmful or risky for your health?" with response options of *yes, no,* and *unsure*.

Brief Intervention. Brief intervention was assessed by asking participants the following question: "Health care providers may also advise patients to drink less for various reasons. At your last routine checkup, were you advised to reduce or quit your drinking?" Responses were *yes, no,* and *unsure*. This item was derived from BRFSS questions used in McKnight-Eily et al. (2017).

Patient Satisfaction. The Interview Satisfaction Questionnaire (Grayson-Sneed et al., 2016), is a 25-item self-report scale measuring patient satisfaction with their patient-provider relationship ("I told my health care provider everything that was on my mind", "I was able to tell my health care provider what was bothering me"). The measure was based on a 5-point Likert scale with 1 (*strongly disagree*) to 5 (*strongly agree*) to the statement provided. Previous research has shown this measure to have a Cronbach's α= .74- .93 (Grayson-Sneed et al., 2016).

Patient-Provider Depth of Relationship. The Patient-Provider Depth of Relationship Scale (Ridd et al., 2011), is an 8-item scale assessing the patient's point of view regarding their perception of their relationship with their health care provider ("This doctor knows me as a person", "This doctor takes me seriously"). The measure was based on a 5-point Likert scale with 0 (*strongly disagree*) to 4(*strongly agree*) to the statement provided. Previous research has shown this measure to have a Cronbach's α= .93 (Ridd et al., 2011).

Measures for Part 2

The Focus Group questions for Part 2 are included in Appendix B.

Procedures

For part 1 of the study, participants were given access to the Qualtrics survey via SONA. Once participants had opened the survey, they were provided with the procedures and information necessary to understand the purpose of the study. If participants gave consent, they continued with the remainder of the study. The remainder of the study included questions regarding: alcohol use including risky drinking, binge drinking, experience of personal stigma (regarding binge drinking), screening for alcohol consumption, patient satisfaction with the patient-provider relationship, patient-provider depth of relationship, brief intervention, and demographics. There was a total of 76 questions on the survey. The survey took approximately 45 minutes to complete. After completion of the survey, participants received course credit for their participation.

For part 2 of the study, students were recruited to participate in pilot focus groups through announcements in courses offered by the Psychology Department and through word of mouth. If students were interested in participating in the study, they were required to complete a screening questionnaire that included questions regarding their alcohol use and demographics. Participants must have consumed alcohol and had a visit with a health care provider in the last twelve months to be eligible to participate in a one-time focus group that lasted approximately one hour. Topics that were discussed during the focus group included students' perceptions of discussing alcohol use with health care providers, who should bring up the topic of alcohol use, what factors influenced the discussion of alcohol use and any suggestions students may have had for improving this discussion. Before the discussion began, participants were given a consent form containing information about the procedures and details of the study. If they gave

consent, they signed and returned the form, and this was kept in a secure location to maintain records of our participants. Participants were also asked to participate in a member check to ensure accuracy of their data interpretation (description provided below); however, these did not occur due to time constraints. Immediately after the focus groups, participants were provided with the Counseling Center's information if they chose to seek counseling services.

The focus groups were scheduled based on participant availability and occurred during March 2020. The focus groups were originally scheduled to proceed from March-April of 2020. After conducting only two pilot focus groups, Texas State University switched to remote learning at the end of March for the remainder of the Spring 2020 semester in response to COVID-19. Due to these changes, data collection was ended sooner than anticipated.

Data collection for part 2 included a screening questionnaire (see Appendix C), focus group field notes and focus group audio recordings. The focus groups were led by the Principal Investigator or a faculty member Co- Investigator of the study trained in leading interviews/focus group discussions.

Data Analysis and Scoring

For part 1, the data was examined for missing data and outliers. A number of continuous predictor variables were used in this study (i.e., patient satisfaction, depth of relationship with provider, and personal stigma). The descriptive statistics on the continuous variables are reported in Table 1. Risky/ hazardous drinking was treated as both a continuous and as a categorical variable in different analyses. For some analyses, we chose to split participants into two groups of alcohol use. First, risky/hazardous

drinking was measured by calculating the sum of 10 items used from the AUDIT; no items were reverse scored. Participants who scored a total of 7 or less on the AUDIT were considered low-risk drinkers, and participants who scored 8 or more were considered risky/ hazardous drinkers (Saunders et al., 1993). Patient satisfaction was measured by calculating the mean score of 25 items (including 4 reverse scored items) used from the Interview Satisfaction Questionnaire. Patient-provider depth of relationship was measured by calculating the mean score of 8 items from The Patient-Provider Depth of Relationship Scale; no items were reverse scored. Experience of personal stigma was measured by combining the enacted and internalized subscales to calculate the mean score of 11 items from the SU-SMS; no items were reverse scored. Screening for patient alcohol use by provider (yes/no) and brief intervention (yes/no) were treated as dichotomous outcome variables in all analyses although the number of "unsure" responses as well as missing data are provided in Table 2 for reference. Screening of alcohol use was measured using an item from the BRFSS, "Did the health care provider ask you in person or on a form how much you drink?" with response options scored as 1 = *no*, 2 = *yes* , and 3 = *unsure*. Brief intervention was also measured using an item from the BRFSS, "Health care providers may also advise patients to drink less for various reasons. At your last routine checkup, were you advised to reduce or quit your drinking?" with response options scored as 1 = *no*, 2 = *yes*, and 3 = *unsure*. These variables were examined in relationship to the continuous predictor variables described above. The analyses to test these relationships included independent samples *t* tests, chi square, and correlations.

For part 2, focus group discussions were audio recorded and were transcribed by AJ Processing transcription service using clean speech (Riessman, 1993). The principal investigator was trained by the faculty member experienced in qualitative methodology to identify any discrepancies within the transcripts. The principal investigator reviewed all transcripts to check for accuracy and changed participants' names to pseudonyms to protect participant identities. For data analysis, researchers listened to the audio recordings and reviewed transcripts multiple times a week over the course of three weeks. Thematic coding (Tessier, 2012) was utilized to develop a code book for frequently mentioned responses evident in the transcripts, audio recordings, and field notes written during the focus groups. The principal investigator met with the faculty member throughout the data collection and analysis process for guidance on eliciting robust responses from participants, developing and refining the codebook, and finalizing themes. One method to enhance credibility of the researchers' analysis would be to contact participants after the study to do member checks. The member check would have allowed the participant to review a summary of his/her focus group contribution and thematic analysis to confirm findings and provide corrections or additions as needed. The research team decided that since the university suddenly transitioned to remote learning due to COVID-19, member checks might be an undue burden to focus group participants, as they were all students who were dealing with the sudden academic transition. However, a recent literature review by Thomas (2017) found no "evidence that use of member checks improves research quality where the primary purpose of the research is theory development" (p. 39), as was the purpose of part 2.

Finally, triangulation methods (Carter et al., 2014) were used to develop an overall understanding of patient-provider communication in regards to substance use. The triangulation method refers to using multiple data sources and methods in qualitative research to understand a phenomenon (Patton, 1999). The triangulation method is comprised of four types of triangulation: method triangulation, investigator triangulation, theory triangulation, and data source triangulation (Carter et al., 2014). Specifically, method, investigator, and data source triangulation methods were used in this study.

III. RESULTS

Part 1

Frequencies and descriptive data were computed for the demographic characteristics of the sample and each of the variables addressed in the study. Risky/hazardous drinking was measured using the AUDIT (Saunders et al., 1993), which considers a score of 8 or more as hazardous or harmful alcohol use (sample characteristics: $M = 7.65$, $SD = 5.32$). Based on the AUDIT total scores, 102 (38.3%) participants met the criteria for hazardous or harmful alcohol use and 164 (61.7%) did not. The Binge Drinking Questionnaire (Cranford et al., 2006), was also used to assess participants' drinking behaviors, and the results showed that 180 (67.7%) participants indicated engaging in binge drinking (4 or more drinks over the course of a drinking episode) since the time they first started drinking, while 84 (31.6%) participants indicated that they did not, and there were 2 participants who did not answer this question. Also, 208 (78.2%) participants would not consider "binge drinking" as their typical drinking pattern, whereas only 57 (21.4%) participants would consider binge drinking their typical drinking pattern, and one participant did not answer this question. The other items from the Binge Drinking Questionnaire were not considered for further analysis at this point due to timing needed for analyzing and coding the text entry data. Experience of personal stigma was measured using the SU-SMS (Smith et al., 2016), in which participants with higher scores indicated experiencing more personal stigma regarding their substance use ($M = 1.40$, $SD = .53$). Provider screening for alcohol use and brief intervention were assessed using a set of BRFSS screening questions used by the CDC in 2014 to assess screening for excessive alcohol use and brief alcohol counseling to adults (McKnight-

Eily et al., 2017). Based on the results, 125 (47%) participants reported being asked about their alcohol use by their health care provider, 115 (43.2%) report not being asked, 25 (9.4%) participants were not sure if they had been asked, and 1 participant did not answer the question. In addition, 39 (14.7%) participants were asked if they engage in binge drinking, 199 (74.8%) participants were not asked, 27 (10.2%) participants were unsure if they had been asked, and 1 participant did not answer the question. Brief intervention for alcohol use was also assessed if participants had selected "Yes" for any of the three BRFSS questions ("Did the health care provider ask you in person or on a form how much you drink?", "Did the health care provider specifically ask whether you drank [5 for men/ 4 for women] or more alcoholic drinks on an occasion?", "Were you offered advice about what level of drinking is harmful or risky for your health?"). Of those participants, only 14 (5.2%) reported receiving brief intervention for their alcohol use (i.e., being advised to reduce or quit drinking), 122 (45.9%) reported not receiving any form of brief intervention, 6 (2.3%) participants were unsure if they had received brief intervention, and 124 were not given this question to answer. Patient satisfaction was measured using the Interview Satisfaction Questionnaire, in which higher scores indicated greater patient satisfaction (M = 3.62, SD = .49). Finally, patient-provider depth of relationship was measured using The Patient-Provider Depth of Relationship Scale in which higher scores indicated a stronger and deeper relationship with the health care provider (M = 2.31, SD = 1.07). See Tables 1 and 2 regarding descriptive statistics on these variables.

Table 1

Descriptive Statistics (Continuous Variables)

Variable	Mean (SD)	Median	Range	Minimum	Maximum	Cronbach's α
Alcohol Use/Drinking Behavior (AUDIT)	7.65 (5.32)	7.00	29	0	29	.80
Patient Satisfaction	3.62 (.49)	3.68	2.84	1.64	4.48	.90
Patient-Provider Depth of Relationship	2.31 (1.07)	2.38	4	0	4	.95

Table 1. Continued

Experience of Personal Stigma	1.40 (.53)	1.09	3	1	4	.94

Table 2

Screening/ Brief Intervention Items/Categorical Variables Descriptive Statistics

Variable	Frequency (%)
When was your last medical visit?	
Within the last 0-3 months	135 (50.8%)
Within the last 4-6 months	64 (24.1%)
Within the last 7-9 months	42 (15.8%)
Within the last 10-12 months	24 (9%)
Missing	1 (.4%)
Did the health care provider ask you in person or on a form how much you drink? (Screening for alcohol use)	
No	115 (43.2%)
Yes	125 (47%)
Unsure	25 (9.4%)

Table 2. Continued

Missing	1 (.4%)
Did the health care provider specifically ask whether you drank [5 for men/ 4 for women] or more alcoholic drinks on an occasion? (Binge drinking)	
No	199 (74.8%)
Yes	39 (14.7%)
Unsure	27 (10.2%)
Missing	1 (.4%)
Were you offered advice about what level of drinking is harmful or risky for your health?	
No	204 (76.7%)
Yes	49 (18.4%)
Unsure	12 (4.5%)
Missing	1 (.4%)

Table 2. Continued

Health care providers may also advise patients to drink less for various reasons. At your last routine checkup, were you advised to reduce or quit your drinking? (Brief Intervention)	
No	122 (45.9%)
Yes	14 (5.3%)
Unsure	6 (2.3%)
Missing	124 (46.6%)
Risky/Hazardous drinking (AUDIT)	
Low-risk	164 (61.7%)
High-risk	102 (38.3%)

For the first hypothesis, a chi-square test of independence was conducted to examine the relationship between risky/hazardous drinking in college students, as measured by the AUDIT, and provider delivery of brief intervention. The relationship between these variables was not statistically significant, X^2 (2, N = 142) = 4.48, p = .11. Health care providers were not more likely to provide brief intervention based on college students' risky/ hazardous drinking. Chi-square analyses were also conducted for each of the BRFSS screening variables to see if there was a relationship with drinking risk level. No significant relationships were found.

The second hypothesis was tested by conducting correlations and independent samples t-tests. A set of Pearson's *r* correlation tests were conducted to assess the relationships between risky/hazardous drinking among college students (treated as a continuous variable) and two measures of provider-patient relationship: level of patient satisfaction, and depth of relationship with a health care provider. As predicted, there was a negative correlation between level of risky/hazardous drinking and patient satisfaction, and the relationship approached but did not reach significance, r = -.10, p = .095. There was a negative but non-significant relationship between risky/hazardous drinking and depth of relationship with a provider, r = -.04, p = .504. Although it was not a part of the hypothesis, we did compute a correlation between patient satisfaction and depth of relationship, and there was a strong positive relationship between level of patient satisfaction and depth of relationship with a health care provider, r = .64, p = .000. These results are not surprising as they show that the two measures of provider-patient relationship are correlated with each other.

As mentioned previously, we also computed a new dichotomous variable (risky hazardous drinking vs. low-risk drinking) which separated the participants into two categories of alcohol use. Participants were considered risky drinkers if their overall score for the AUDIT was 8 or higher which included 102 (38.8%) participants. Participants who scored a 7 or less on their total AUDIT score were considered low-risk drinkers, and this included 164 (61.7%) participants. An independent samples *t*-test was conducted to examine whether there were mean differences in patient-provider depth of relationship among college students who either engaged in risky/hazardous drinking or low-risk drinking. There was no significant difference in depth of relationship between the low risk drinking group, (M = 2.34, SD = 1.05) and the risky/hazardous drinking group (M = 2.26, SD = 1.10), $t(262) = .559$, $p = .683$. These results suggest that students who engage in risky/hazardous drinking do not have a lower depth of relationship with their health care providers as compared to students who engage in low-risk drinking.

Finally, an independent samples *t*-test was conducted to assess mean differences in level of patient satisfaction among college students who either engaged in low-risk drinking or in risky/hazardous drinking. Between the two groups, there was no significant difference in patient satisfaction between those who engaged in low-risk drinking, (M = 3.66, SD = .46) and those who engaged in risky/hazardous drinking (M = 3.56, SD = .52), $t(262) = 1.636$, $p = .117$. These results suggest college students who engage in risky/hazardous drinking do not have significantly lower satisfaction with their health care providers as compared to students who engage in low-risk drinking.

For the third hypothesis, an independent samples *t*-test was conducted to compare levels of patient-provider depth of relationship among college students who either did or

did not receive a brief intervention from a health care provider. Between the two groups, there was a significant difference between those who did receive a brief intervention (M = 2.77, SD = .628) and those who did not receive a brief intervention (M = 2.29, SD = 1.146), $t(134) = -1.531$, $p = .001$. These results suggest that level of patient-provider depth of relationship does have a significant relationship with the likelihood of health care providers implementing brief interventions. This relationship is significant because greater college student depth of relationship with the health care provider is associated with greater likelihood of receiving a brief intervention related to risky alcohol use from their healthcare provider.

Also, for hypothesis three, an independent samples *t*-test was conducted to examine levels of patient satisfaction among college students who either did or did not receive a brief intervention from a health care provider. Between the two groups, there was no significant difference between those who did receive a brief intervention (M = 3.83, SD = .485) and those who did not receive a brief intervention (M = 3.66, SD = .469), $t(134) = -1.273$, $p = .611$. These results suggest that level of patient satisfaction with a healthcare provider does not have a significant relationship with the likelihood of health care providers implementing brief interventions for risky alcohol use. In other words, there is no difference in the outcome of patient satisfaction based on whether or not college students receive a brief intervention for risky alcohol use from their health care provider.

Finally, for the fourth hypothesis, an independent samples *t*-test was conducted to examine whether there were significant mean differences in levels of stigma in college students who either did or did not receive a brief intervention from a health care provider.

Between the two groups, there was a significantly higher mean score on the stigma scale for those who did receive a brief intervention (M = 1.59, SD = .737) compared to those who did not receive a brief intervention (M = 1.35 , SD = .467), t(57.61) = - 2.15, p = .036. These results suggest that experience of personal stigma associated with binge drinking is significantly related to the receipt of brief intervention for risky alcohol use from one's health care provider. In other words, students who experience more stigma associated with binge drinking are more likely to receive a brief intervention from their health care provider.

In support of this hypothesis, an independent samples t-test was conducted to examine whether there was a significant mean difference in levels of stigma in college students who either engaged in low-risk drinking or in risky/ hazardous drinking. Between the two groups, there was a significant difference between those who engaged in low-risk drinking, (M = 1.29, SD = .403) and those who engaged in risky/hazardous drinking (M = 1.58, SD = .654), t(263) = -4.614, p = .000. Thus, there is a relationship between engaging in risky/ hazardous drinking and experiencing high levels of stigma related to their alcohol use.

Part 2

Three overarching themes emerged during the thematic analysis: 1) experiences discussing alcohol use, 2) experiences of alcohol assessment, and 3) students' perspective and suggestions to professionals. Descriptions of themes with illustrative quotes follow. All participants' names were removed and replaced with participant numbers to protect participant identities.

Theme 1: Experiences Discussing Alcohol Use. As participants recalled their experiences discussing alcohol use with a healthcare provider, participants reported feeling like the conversation of alcohol use with a healthcare provider was normal and a part of the typical process when having a medical visit:

> I thought it was normal because that's the question that they've always asked. It's usually like, about past health, present health, alcohol and sex, those are all like the basic, like the rundown of like doctor's appointment, so it's expected, once you get to a certain age, like 16, they pretty much start asking you those kinds of questions. *Focus Group 1, Participant #4*

Although the majority of the participants believed it to be a normal part of the conversation, some reported that the conversation with their healthcare provider only included top-layer questions that didn't encourage thoughtful responses from the student patient:

> I was going to say, if my healthcare provider asked me a question like do you consume alcohol, have you consumed alcohol in the past six months? Then I'll answer yes or no, but they don't really ask that many questions and its surface level, so I give surface level answers to the questions. I'll basically just answer their questions, but they're not asking anything where it would require me to actually go into what my answers mean like we're doing here. They might ask about other questions like related to health. *Focus Group 1, Participant #4*

Other participants reported having negative experiences with their healthcare provider when discussing alcohol use. While participants recalled discussions with a healthcare

provider, some reported being intimidated and feeling judged by their health care provider:

> So, with my normal healthcare provider, it'll just be like a casual question and they'll go on about life, but I recently went to the health center and then when they asked the question, I feel like the way they ask was intimidating and I felt like because there was this stigma around we're in college, it's almost like expected of me to consume more alcohol than I guess a healthcare provider would feel that I should and I feel like the way it's asked in terms of the numbering is like, do you go out once or certain times a month? Or two or three times a week or there is no middle ground for like where I felt my drinking was. One felt like, no, I drink more than a couple times a month, but I don't consume alcohol three times a week. So, it felt like I was going to be categorized in like, you drink excessively or it didn't feel like I was expressing, this is how much alcohol I consume. It felt like, as soon as I answered, I went with the more frequent option because it was closer to how much I drink, but I didn't quite drink that much, so I felt uncomfortable with the answer and I felt kind of judged. *Focus Group 2, Participant #3*

The majority of the participants agreed and recognized that having a conversation about alcohol use with their health care provider was normal and necessary for the overall goal of a medical visit. However, participants expressed feelings of discomfort and intimidation during these discussions because of the way they were approached by health care providers. Participants believed that healthcare providers weren't asking thoughtful

and intentional questions regarding alcohol use which discouraged students from providing meaningful responses as addressed by the following statement:

> It depends on how they approach the situation and everything because my doctors or wherever I go just in general, ask a general question, it's almost like intimidating, like they don't give a reason for why. So, if they're not approaching in a welcoming open way, I'm not going to be down to give full answers… *Focus Group 2, Participant #4*

Theme 2: Experiences of Alcohol Assessment. Participants were asked to recall the method of alcohol assessment they experienced during their last visit with a healthcare provider. While some students reported being asked using multiple methods of assessment such as a verbal question or a written questionnaire:

> So, for me, I've been to my primary and the clinic in the past year and they both asked about it on a form and then also retouched about it once I got back to the doctor's office. So, it was both. *Focus Group 1, Participant #3*

Other participants report only being asked using a questionnaire and then the healthcare provider only briefly followed up on the responses they provided:

> It would just be, I think like I would just fill it out on a questionnaire and if it ever came up, it was like a really quick question and then move on from there and it felt more like casual. It felt like there was less emphasis on drinking and more emphasis on other healthcare factors. *Focus Group 2, Participant #3*

Students reported different experiences when having discussions with their health care providers regarding their alcohol use. While some reported consistent assessment every time they saw their healthcare provider and various questions regarding the topic such as

"How often? Definitely how often do you drink and then, not on both, but I think on one of them, there was maybe a follow up question, like when you drink, how many drinks, but that's it, max two questions," *Focus Group 1, Participant #4*. Others reported not having a very thorough discussion at all. One student reported that they didn't answer their health care provider's questions honestly when being asked about their alcohol use, which didn't elicit further discussion of the topic because the healthcare provider believed they don't drink alcohol "For me, I think it's a little bit different because I don't usually tell the truth, so I do say like no when they do ask me the questions, so they usually don't ask more deeper questions," *Focus Group 1, Participant #3*.

One participant reported not being asked about their alcohol use at all. This participant mentioned that if they were ever asked about their alcohol use it was usually only in regards to potential medication they would need to take and no other times:

> They won't ask, in my personal experience, they've never asked if I drink, like ever. It's always about, are you sick, have you been taking any medicines in the past few days? It's never been about…I've never gotten questions about drinking with a healthcare professional. *Focus Group 1, Participant #2*

Theme 3: Students' Perspective and Suggestions to Professionals. All participants were asked to provide their opinion on what they believed a healthcare provider's role is when discussing alcohol use with them as the student patient. Participants expressed how they believed the healthcare provider should collect the necessary information to assess their health and provide services in the most efficient way possible:

> Yeah, I feel like their role is to advise and to collect the necessary information they need in order for them to do their job, based off of my experiences. As a healthcare provider, I feel like you definitely should be having more conversations about why you may be asking those questions and why it impacts your health, but as the standard rule in actuality what it is, I feel like their role is just to advise and provide information, but in reality, they should be doing more, but that's the role that they do in my opinion. *Focus Group 1, Participant #4*

Some participants expressed how they believed healthcare providers should give referrals if needed with alcohol use problems, and the student should be responsible for seeking further help or treatment:

> Not trying to diagnose, not trying to tell you what to do, not advising you or anything like that. Simply, hey, I'm going to write you a referral. Here's some options that your insurance may cover, things like that. Not saying you need to go to this one person or anything like that, just because you don't want to limit that person, the patient to just one opinion or to one opportunity of diagnosis and things like that. Simply to be like, I will write this referral for you, you do what you want with it. You take it to who you want to, don't take it to who you want to, that's on you, but I'm doing my job as acknowledging it, giving you the opportunity to seek help. Past that, it's on you to do what you want to do. *Focus Group 1, Participant #3*.

When participants were asked to consider their role as the student patient for the discussion of alcohol use, many believed it was their responsibility to be accountable to their health and provide honest responses to their doctor's questions:

> I feel like being honest, when they ask you a question when it comes to that. When I go to the doctor, it's usually for a person that I'm going for a checkup, so in my head, it's not typically just tell them, oh yeah, I've been taking these… It's just like to answer their questions and be honest, but I'm not just going to start throwing random information about my outside life when I go to the doctor. Because they're supposed to be the professional, so I just want to be as honest as possible about the things that they're asking me, so that I can help them to do their job, so being honest, but it doesn't come to my mind to just start telling them about my daily life and my daily routine unless they ask me, so just to be honest with them, I guess. *Focus Group 1, Participant #4.*

Participants expressed how it was important for them to play an active role during a medical visit because depending on the reason they were there, it could greatly impact their health and safety if they weren't honest with their healthcare provider:

> I think we should definitely be there to like play the role of telling the truth because they are there as a healthcare provider. If we're there for medicine, alcohol or smoking or any of that could block our arteries or our blood flow or something like that, so we should be telling them the truth, but it does suck that we can't trust them or we don't understand some of the reasons why, but we should just tell them. *Focus Group 1, Participant #2.*

Participants made suggestions for how healthcare providers can improve the conversation about alcohol use with college students, and many responses focused on being open, not making assumptions, and being nonjudgmental with students "Don't assume based on gender, don't assume based on race. Don't assume based on where they're at in their life,

whether they're in college, don't assume anything" *Focus Group 1, Participant #4*. Although there was no clear consensus from participants on what method of assessment would be most ideal, many believed that the best way to assess alcohol use included an open and thoughtful discussion between the student patient and health care provider:

> Yeah, I feel like verbally asking the question the way that they do now is better than the questionnaire version of the way that they do now just because verbally, it allows an opportunity to be more personal able and if you do choose to go in depth or not, but I feellike the way that it's handled in a doctor's appointment right now doesn't necessarily stem from how they answer the question. It's just like the comfortability of the situation that you have with the person that's asking it because that also varies. I know for a really long time, I've always wanted a Black female doctor and so, there's certain conversations that if I had one, I'd be more comfortable talking to her about that then a white male doctor. So, it's not necessarily how the question is asked, it's who's asking the question and the relationship that you have with the person asking the question. *Focus Group 1, Participant #4*.

Students expressed how important it was for healthcare providers to allow the students the opportunity to communicate their thoughts and feelings when having this discussion because it builds a rapport that allows students to become more comfortable with having this discussion, "more of an open-ended question from the doctor would be better". *Focus Group 2, Participant #2*

IV. DISCUSSION

Part 1

The goal of the current study was to identify barriers to communication from the college student perspective when discussing alcohol use with a health care provider. The results from this study could potentially provide a more accurate student perspective for health care providers to take into consideration when discussing topics such as substance use with the college student population. For the first hypothesis, we predicted there would be a positive relationship between college students' risky/ hazardous drinking and health care provider delivery of brief intervention. As a reminder, a brief intervention is a brief one-on-one counseling session that allows a health care provider to give feedback in regards to their patient's current health behaviors (U.S. Department of Health and Human Services, 2005; Fleming et al., 2010). In the current thesis study, only 14 participants (5.3% of the sample) reported receiving brief intervention, and the analyses explored factors associated with report of receiving brief intervention. The results showed that health care providers were not more likely to provide a brief intervention based on college students' risky/ hazardous drinking. In other words, health care providers weren't providing brief intervention to students, regardless of the students' level of risky/hazardous drinking. It's important to consider why they aren't often providing brief interventions to students because this could be a result of how health care providers are screening for problematic alcohol use. If health care providers aren't asking about and discussing binge drinking or risky/ hazardous drinking with students, they may be missing the opportunity to provide brief intervention all together. In the current study, only 14.7% of participants were asked about binge drinking, indicating that important

screening is not often being conducted. Although previous research (Marlatt et al., 1998) has shown health care provider brief intervention to be effective in reducing alcohol consumption and other negative behaviors, there is still research needed in this area to address the difficulties between college students and health care providers when discussing alcohol use (Baldwin et al., 2010). In order to ensure health care providers are providing brief intervention to students who need it, researchers must study and understand the barriers to communication that prevent students and health care providers from discussing risky/ hazardous drinking behaviors.

The second hypothesis for the study was that there would be a negative relationship between risky/ hazardous drinking in college students and both patient satisfaction and depth of relationship with their provider. Although the results showed a negative relationship as predicted, there was no difference in both students' depth of relationship or patient satisfaction with their health care provider based on their level of risky/ hazardous drinking. As previously mentioned, there was also a positive relationship between patient satisfaction and patient- provider depth of relationship. Based on the results and the correlational nature of this study, patient satisfaction and provider- patient depth of relationship may be driven by other factors, other than drinking behavior. Although this item wasn't asked in the current study, it would be interesting to know how long each participant knew their doctor that they had seen most recently. There is always the possibility of students having to see multiple health care providers within a given year because of students going from their hometowns to their college. This could mean that students develop a different relationship with their hometown health care provider, in comparison to a health care provider they only see once or twice at a

university health clinic setting. Previous research (Press et al., 2016) has demonstrated the benefits of developing the patient- provider relationship and focusing on the patient as a whole instead of only focusing on the biological aspects of their health (George & Engel, 1980; Smith & Hoppe, 2016). When health care providers work with their patients in a collaborative relationship to achieve mutual goals patients feel more respected, understood, and cared for (Kim et al., 2008; Press et al., 2016) which is why it's important for health care providers to take the time to invest in their college student patients, especially when working in college campus settings. By developing the patient-provider relationship, students may experience greater patient satisfaction and patient-provider depth of relationship, which may alleviate some of the barriers to discussions of risky/ hazardous alcohol use with their student patients.

For the third hypothesis, we predicted that there would be a positive relationship between health care provider delivery of brief intervention and both patient satisfaction and depth of relationship with the provider. The results showed that college students who experienced greater depth of relationship, but not greater patient satisfaction with their health care provider, were more likely to receive a brief intervention related to their risky/ hazardous alcohol use. Once again, patient satisfaction and patient-provider depth of relationship may be driven by other factors unknown to the current study. One possible explanation for the results may be that the students with greater depth of relationship are likely to receive a brief intervention because they've been treated by their health care provider for an extended period of time, in comparison to students who may only have seen their health care provider once, or have had visits with multiple healthcare providers from the university health clinic. When students have seen their health care provider for

an extended period of time, this allows both health care provider and the college student patient the opportunity to develop their patient-provider relationship.

Previous classic studies in the field of doctor-patient communication have shown an important aspect of this relationship is the verbal and nonverbal communication that takes places between patients and their health care providers (Bensing & Dronkers, 1992; Roter et al., 2006; Roter et al., 1997). By taking the time to understand the relationship as a partnership for both individuals, college student patients may experience greater satisfaction and adherence to any brief intervention given by a health care provider, findings which have been demonstrated in classic studies of the doctor-patient relationship and patient outcomes for adult patients (Hall et al., 1988; Stewart, 1995; Ong et al., 1995). It's important for researchers to understand what aspects of communication are important to alleviating the barriers to discussing alcohol use between college students and health care providers. An opportunity for further research could be understanding the differences in patient- provider communication in university health care clinics v. off-campus clinics (which may not focus solely on college student patients). Also, it's important to consider how often health care providers are providing brief interventions to their college student patients which starts with how they are bringing up the topic of alcohol or substance use in general. Sometimes this question is assessed on a form, and a different type of discussion could occur if substance abuse screening is conducted verbally. If health care providers aren't taking the time to have an intentional conversation with their student patients about their alcohol use, not only might they be missing an opportunity to provide brief intervention when needed, but also the student may not be as receptive to the conversation.

The fourth hypothesis predicted there would be a negative relationship between college students' experience of personal stigma and health care provider delivery of brief intervention. The results showed students who experience more stigma associated with binge drinking are more likely to receive a brief intervention from their health care provider regarding risky/ hazardous alcohol use. In support of this hypothesis, the results also showed students who engaged in risky/ hazardous drinking were also more likely to experience high levels of stigma related to their binge drinking. It's important to consider whether students are experiencing more stigma exclusively because of their risky/ hazardous alcohol use or whether they feel more stigmatized because they've received a brief intervention regarding their risky/ hazardous alcohol use. The nature of this study doesn't allow us to answer this question. Previous research (Cole et al., 2011) has shown stigma related to alcohol use to be a significant predictor of negative outcomes whether it be under utilization of health services, poor mental and physical health, or high levels of risky behavior. Researchers also know that patients who experience stigma related to their alcohol use are more likely to become selective about disclosure and treatment seeking in order to avoid discrimination related to their alcohol use (Palamer, 2012; Saunders et al., 2016). It's important to address and acknowledge the stigma students feel regarding their alcohol use. Stigma related to alcohol use can be a significant barrier to the patient- provider relationship and communication. If this prevents students from engaging in a conversation with their health care provider (or being truthful and forthcoming when those conversation occur), those students may not receive the necessary services they need. Although the results showed that students who experience more stigma were more likely to receive a brief intervention related to their alcohol use,

this doesn't mean brief interventions were occurring as frequently as they should. The number of reported brief interventions is very low in this study, so it's important to determine how health care providers are assessing alcohol use and determining if students need a brief intervention.

Although this study has provided some positive insight into the patient-provider relationship between college students and health care providers when discussing risky/ hazardous alcohol use, it is important to consider the limitations to the study. One limitation to the study would be the sample chosen. Although researchers did have a reasonable sample size (N = 266), using a convenience sample of Texas State undergraduate students is not representative of all the college students in the nation. In order to have more generalizable results, future studies should be conducted throughout various geographical regions to see if the current study's results are consistent when looking at other populations within the United States. Also, the sample used in the current study did not report particularly high levels of risky/ hazardous alcohol use or binge drinking in general. Although there is no way to tell if students from the current study really don't have risky alcohol use or if they were giving lower estimates of what they actually drink, the results of the study may be different if a sample with higher levels of risky/hazardous or binge drinking was used. Another possible limitation would be the Qualtrics survey used to measure all items examined within the survey. Due to the length of the survey averaging roughly 30-40 minutes to complete, the participants may have experienced fatigue or boredom while they were trying to complete the survey. In addition, it is valuable to assess doctor-patient communication from multiple perspectives, including the provider's perspective and unbiased observers of recorded

medical visits, in order to have a thorough assessment of the communication that takes place. However, such studies can be costly and more difficult to conduct. Finally, because the nature of the survey is self-report, there is no way to ensure that participants were completely honest when responding to the questions or that other confounding factors may not have influenced their responses while they were completing the survey.

Part 2

For part 2, the current study examined aspects of patient- provider communication regarding risky/hazardous alcohol use between college students and health care providers. Students at Texas State were asked to participate to provide a more accurate student perspective for healthcare providers to take into consideration when addressing this topic with this specific population. The research questions were as follows: 1. How do college students perceive patient- provider communication regarding risky/hazardous alcohol use? What circumstances or factors influenced college students' decisions to talk to their health care provider about their risky/hazardous alcohol use? 2. How do college students suggest health care providers communicate with young adults about risky/hazardous alcohol use? The current study found that students believe discussing alcohol use with their health care provider is a necessary and normal conversation. Participants acknowledged that when they are at a medical visit it is the healthcare provider's job to collect all the necessary information in order to assess their health and well-being as efficiently as possible, which includes discussing alcohol use. However, some participants mentioned that even when they are asked about their alcohol use, the healthcare providers don't ask detailed questions or engage in meaningful discussion with the student patients about alcohol use. Also, although participants believe the

conversation is necessary, there were participants that reported having negative experiences with their healthcare providers because they felt intimidated and judged.

Participants discussed what they believed the role of the healthcare provider and student patient were when discussing alcohol use. Participants believed that healthcare providers were responsible for asking such questions because it is their job to assess the individual's overall health and intervene if patients may be taking certain medications while consuming alcohol. However, some believed that the healthcare provider shouldn't advise or counsel students on their alcohol use but instead provide resources and be knowledgeable of local facilities they can refer students to. Regardless of how involved some participants believed healthcare providers should be, all participants agreed that they as the student patient were responsible for being honest and open when answering the healthcare provider's questions. Although some indicated they aren't always honest, the participants all agreed that the student patient needed to take an active role in the conversation in order to hold themselves accountable for their own health and safety. Finally, participants discussed ways healthcare providers could improve the conversation of alcohol use with college students. Many participants mentioned how they believed it was important for healthcare providers to be thoughtful and intentional when having this discussion with college students. Participants believed that if healthcare providers took the time to explain why they ask certain questions and appeared sincere, they would be more likely to answer their questions honestly and disclose more information. Participants overall explained how they would like healthcare providers to invest more time into them as the student patient, instead of just another patient they need to get through.

Although the results provide valuable insight into college students' experiences discussing alcohol use with a healthcare provider, the limitations must be mentioned. Due to this portion of the study being qualitative research, the findings are limited by time and context and are not generalizable to other populations (Lincoln & Guba, 1985). Also, due to COVID-19, data collection ended sooner than anticipated, which limited the number of participants that were recruited for this portion of the study. Although the sample size was small (N = 8), the results provided valuable insight into college students' experiences discussing alcohol use with their health care providers. Also, despite the focus groups being conducted by a trained graduate student in interview/focus group discussion, answers were dependent on participants' self-reporting responses. There is no way to ensure that all participants were truthful and honest for all of their responses. However, no deception or contradictory responses were detected. Finally, the study used a convenience sample of undergraduate students from Texas State University which is not representative of all college students in the nation. Future research should be conducted throughout different regions of the United States in order to gain a better overall understanding of the patient-provider relationship between healthcare providers and college students.

Implications for the Future

Considering the results for both portions of this study, there are a few different options for future research in this area. First, researchers could take the time to examine the patient-provider relationship by comparing college student patients in different health care settings. Students may have the option of using their university health clinic instead of an off-campus health clinic when they need to be seen and it would be beneficial to

compare the two experiences. This could provide an opportunity to see if there are any differences in barriers to communication when discussing substance use and overall experience of the patient-provider relationship in general. Another important idea to consider would be the provider perspective, focusing on how health care providers are assessing alcohol use in their clinics and what are the procedures for providing brief interventions. Whether healthcare providers are asking verbally, electronically, or on a paper questionnaire about college students' alcohol use, it's important to understand the impact of each method and how it influences the conversation of alcohol use overall. If health care providers aren't effectively screening for alcohol use, this could limit the opportunities to provide brief intervention. Likewise, it's important to understand the procedures health care providers take when implementing brief interventions to students and how confident they feel providing brief interventions. When providing brief interventions, it's important that health care providers are intentional and effective in order to make a lasting impact on the student and ensure the conversation is meaningful. Finally, conducting in-depth qualitative studies to address the topic of the patient-provider relationship with both college students and health care providers to identify barriers to communication would be beneficial. By considering both the student patient and the health care provider's perspective when discussing alcohol use, researchers can gain a better understanding of the existing barriers to communication to further develop and implement interventions to improve this conversation and hopefully reduce risky/ hazardous alcohol use on college campuses.

In conclusion, the purpose of the current study was to address and add to the existing literature regarding the patient-provider relationship in regards to discussing

substance use. This study specifically focused on patient-provider communication between college students and health care providers and barriers to effective communication when discussing risky/ hazardous alcohol use. The current study found that health care providers are potentially missing opportunities to effectively assess alcohol use and provide brief intervention, there are other factors besides patient risky/hazardous drinking that may relate to aspects of the patient-provider relationship (besides patient satisfaction and depth of patient-provider relationship), and experience of personal stigma related to risky/ hazardous alcohol use is associated with barriers to communication. Also, pilot focus groups discussing aspects of patient- provider communication between healthcare providers and college students provide insight into how important it is to improve the conversation of alcohol use on college campuses and other health clinics. It is with great hopes that this study provides future researchers with the opportunity to examine the patient-provider relationship from the college student perspective when discussing not only the topic of alcohol use, but also substance use in general, with college student populations. By gaining a better understanding of the patient-provider relationship, researchers can work toward developing and implementing more efficient forms of intervention on college campuses and in other health care settings to address risky/ hazardous alcohol use.

APPENDIX SECTION

Appendix A: Qualtrics Survey

Introduction/ Consent:

Hello!

I'm Rabecca Hernandez, a graduate student at Texas State University, and the purpose of my study is to better understand different aspects of communication related to binge drinking between college students and health care providers. You are being asked to complete this survey in order to gather more information about this topic and potentially add to future literature.

Participation is voluntary and you may withdraw at any point during the survey. All answers are completely confidential, which means none of the information you provide on the survey will be shared with anyone outside of this research study. The survey will take approximately 35 minutes or less to complete and there will be 76 questions asking about alcohol consumption, binge drinking, stigma related to binge drinking, disclosure of alcohol consumption, patient satisfaction, patient-provider relationship, the likelihood of brief intervention, and demographics. In order to participate in this study you must be at least 18 years old to take this survey, you must have had a medical visit within the past year, and consumed alcohol within the past year.

As a participant, some benefits to participating in the study include gaining experience with participation in research, along with assisting with the development of understanding different aspects of communication related to binge drinking.

This study involves no foreseeable serious risks, however, this survey does ask about past/ current substance use which is considered a sensitive topic. We ask that you try to answer all questions; however, if there are any items that make you uncomfortable or that you would prefer to skip, please leave the answer blank.

If you have any questions or concerns feel free to contact myself, Rabecca Hernandez or my faculty adviser Kelly Haskard-Zolnierek:

Rabecca Hernandez
MA in Psychological Research Program
rwh59@txstate.edu
760-810-9633

Kelly Haskard-Zolnierek
Associate Professor
Department of Psychology

kh36@txstate.edu
512-245-8710

If you require any additional resources please contact the Counseling Center:

Address:
Texas State Counseling Center
5-4.1 LBJ Student Center
601 University Drive
San Marcos, TX 78666

Contact Information:
counselingcenter@txstate.edu
(512) 245- 2234

Office Hours:
Monday- Friday, 8:00 a.m. - 5:00 p.m.

If you're experiencing a crisis during business hours and need to speak with someone immediately, please call (512) 245- 2208 and ask to speak to the on- call counselor.

If you would prefer not to participate, please do not fill out the survey.

If you consent to participate, please continue and complete the survey.

Eligibility Requirements:

1. Have you consumed alcohol in the last year?
    a. Yes
    b. No
    c. Unsure
2. In the last 12 months, have you had a visit with a medical provider?
    a. Yes
    b. No
    c. Unsure

Demographics:

3. What is your age?
    a. 18
    b. 19
    c. 20
    d. 21
    e. 22
    f. Other
4. Please select the gender you identify with

a. Male
b. Female
c. Other

5. Please select the ethnic group you most identify with.
    a. Hispanic or Latino
    b. Not Hispanic or Latino
    c. Other
6. Please select the racial category you most identify with.
    a. American Indian or Alaskan Native
    b. Asian
    c. Black or African American
    d. Native Hawaiian or Pacific Islander
    e. White
    f. Other
7. Please select your highest level of education.
    a. 1st year of college
    b. 2nd year of college
    c. 3rd year of college
    d. 4th year of college
    e. 5 or more years of college
8. What is your primary language?
    a. English
    b. Spanish
    c. Other

The Alcohol Use Disorders Identification Test (AUDIT) (Saunders et al., 1993):

9. How often do you have a drink containing alcohol?
    a. Never
    b. Monthly or less
    c. 2 to 4 times a month
    d. 2 to 3 times a week
    e. 4 or more times a week
10. How many drinks containing alcohol do you have on a typical day when you are drinking?
    a. 1 or 2
    b. 3 or 4
    c. 5 or 6
    d. 7, 8, or 9
    e. 10 or more
11. How often do you have six or more drinks on one occasion?
    a. Never
    b. Less than monthly
    c. Monthly
    d. Weekly
    e. Daily or almost daily

12. How often during the last year have you found that you were not able to stop drinking once you had started?

a. Never
b. Less than monthly
c. Monthly
d. Weekly
e. Daily or almost daily

13. How often during the last year have you failed to do what was normally expected from you because of drinking?

a. Never
b. Less than monthly
c. Monthly
d. Weekly
e. Daily or almost daily

14. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?

a. Never
b. Less than monthly
c. Monthly
d. Weekly
e. Daily or almost daily

15. How often during the last year have you had a feeling a guilt or remorse after drinking?

a. Never
b. Less than monthly
c. Monthly
d. Weekly
e. Daily or almost daily

16. How often during the last year have you been unable to remember what happened the night before because you had been drinking?

a. Never
b. Less than monthly
c. Monthly
d. Weekly
e. Daily or almost daily

17. Have you or someone else been injured as a result of your drinking?

a. No
b. Yes, but not in the last year
c. Yes, during the last year

18. Has a relative or friend or a doctor or another health worker been concerned about your drinking or suggested you cut down?

a. No
b. Yes, but not in the last year
c. Yes, during the last year

The Binge Drinking Questionnaire (Cranford et al., 2006):

19. In the last 12 months, when you do consume alcohol, how many drinks do you typically have during one episode (like, an evening out or a day at the river)?
20. In the last 12 months, what is the highest number of drinks that you've ever consumed during one episode?
21. In the last 12 months, when you consumed your highest number of drinks ever, over how many hours did you drink them?
22. Since you first started drinking alcohol, have you ever engaged in "binge drinking", that is, have you ever consumed 4 or more drinks over the course of a drinking episode?
23. In the last 12 months, typically, when/if you "binge drink", how many drinks do you usually consume during one drinking episode?
24. In the last 12 months, when/if you "binge drink", over how many hours do you usually drink?
25. In the last 12 months, when/if you "binge drink", what types of alcohol do you consume most often? (check all that apply)
    a. Wine
    b. Beer
    c. Liquor (shots)
    d. Mixed drinks
    e. Other
26. Would you say that "binge drinking" is your typical drinking pattern?
    a. Yes
    b. No

The Substance Use Stigma Mechanism Scale (SU-SMS) (Smith et al., 2016):

Enacted Stigma

Below are statements that you may agree or disagree with in regards to your own personal binge drinking. Indicate your agreement with each item by clicking the responses below. Please be open and honest when you are responding.

27. Family members have thought that I cannot be trusted.
28. Family members have looked down on me.
29. Family members have treated me differently.
30. Healthcare providers have no listened to my concerns.
31. Healthcare providers have given me poor care.

Internalized Stigma

Below are statements that you may agree or disagree with in regards to your own personal binge drinking. Indicate your agreement with each item by clicking the responses below. Please be open and honest when you are responding.

32. Having used alcohol makes me feel like I'm a bad person.
33. I feel like I'm not as good as others because I use alcohol.

34. I feel ashamed of having used alcohol.
35. I think less of myself because I used alcohol.
36. Having used alcohol makes me feel unclean.
37. Having used alcohol is disgusting to me.

Behavioral Risk Factor Surveillance System (BRFSS) (McKnight- Eily et al., 2017):

38. When was your last medical visit?
    a. Within the last 0-3 months?
    b. Within the last 4-6 months?
    c. Within the last 7-9 months?
    d. Within the last 10-12 months?
39. Did the health care provider ask you in person or on a form how much you drink?
    a. Yes
    b. No
    c. Unsure
40. Did the health care provider specifically ask whether you drank [5 for men' 4 for women] or more alcoholic drinks on an occasion?
    a. Yes
    b. No
    c. Unsure
41. Were you offered advice about what level of drinking is harmful or risky for your health?
    a. Yes
    b. No
    c. Unsure
42. Health care providers may also advise patients to drink less for various reasons. At your last routine checkup, were you advised to reduce or quit your drinking?
    a. Yes
    b. No
    c. Unsure

The Interview Satisfaction Questionnaire (Grayson-Sneed et al., 2016):

Please indicate how much you agree or disagree with each statement in regards to your most recent visit with a health care provider. Indicate your agreement with each item by clicking the responses below. Please be open and honest when you are responding.

43. I told my health care provider everything that was on my mind.
44. I was able to tell my health care provider what was bothering me.
45. I felt understood by my health care provider.
46. My health care provider did not make me feel rushed.
47. I had confidence in my health care provider.
48. My health care provider made me feel comfortable enough to tell them everything that was bothering me.

49. My health care provider made it easy to understand what, if anything, was wrong with me.
50. My health care provider gave me undivided attention.
51. I got to ask my health care provider all the questions I wanted.
52. My health care provider spends the right amount of time with me.
53. I was pleased with my visits with my health care provider.
54. My health care provider always seemed to know what he/she was doing.
55. I have a good deal of confidence in my health care provider.
56. My health care provider really cared about me as a person.
57. My health care provider never acted like I did not have any feelings.
58. My health care provider treated me with a great deal of respect.
59. My health care provider never "talked down" to me.
60. My health care provider was kind and considerate of my feelings.
61. My health care provider tried to make me feel relaxed.
62. My health care provider relieved my worries about medical conditions.
63. My health care provider made it easy for me to ask questions.
64. My health care provider listened to me closely.
65. I trust my health care provider.
66. My health care provider spent enough time with me.
67. Overall, I am satisfied with my health care provider.

The Patient-Provider Depth of Relationship Scale (Ridd et al., 2011):

Below are statements that you may agree or disagree with in regards to your most recent visit with a health care provider. Indicate your agreement with each item by clicking the responses below. Please be open and honest when you are responding.

68. I know this health care provider very well.
69. This health care provider knows me as a person.
70. This health care provider really knows how I feel about things.
71. I know what to expect with this health care provider.
72. This health care provider really cares for me.
73. This health care provider takes me seriously.
74. This health care provider accepts me the way I am.
75. I feel totally relaxed with this health care provider.

"Thank you" Message

76. Thank you for completing this survey. Do you have any feedback regarding this survey/study?

End of Survey

Appendix B: Focus Group Protocol

Investigator will collect consent forms.

"Thank you for agreeing to participate today in this focus group."

"The purpose of this focus group is to hear about your experiences discussing binge drinking with a health care provider. Specifically, we want to understand how health care professionals can provide resources and services to better serve students, such as yourselves. We want to understand why you may or may not have discussed binge drinking with your doctor and what barriers you've encountered when discussing this topic in this setting."

"The underlying assumption that we are working with is that health care professionals are an underutilized resource when discussing substance use. Additionally, health care professionals may not hold the necessary skills and knowledge to effectively execute this discussion with college students specifically. We want to hear from you what you believe to be common barriers that college students experience when visiting a health care professional and discussing alcohol use or binge drinking. We want to know if and how you were able to overcome those barriers. Someone like you has a better understanding of the situation and that is why we are talking with you."

"We'd like to remind you that to protect the privacy of this focus group, all transcripts will be coded with pseudonyms and we ask that you not discuss what is discussed in the focus group with anyone else."

"The focus group will last about 30-60 minutes and we will audiotape the discussion to make sure that it is recorded accurately. Do you consent to the recording of today's focus group?"

"Do you have any questions for us before we begin?"

1. For the first question, I'd like to ask what you think are some advantages and disadvantages to drinking alcohol.

    a. In what situations do you find yourself drinking alcohol or binge drinking? Binge drinking is defined as having 5 or more drinks for males or 4 or more drinks for females over a 2 hour drinking period.

    b. Do you believe there are any positive or negative consequences to your alcohol use? If yes, please describe them.

2. Do you perceive binge drinking to be a problem on today's American college campus? Why or why not? If yes, ask the following question for identified:

a. In what ways can doctors be helpful with reducing alcohol use on college campuses?

3. How do you feel about talking to your primary doctor you about your alcohol use. Your primary doctor is….(define for the participants and help them clarify who their PCP might be).

a. Do you believe it's necessary? If yes, why? If not, why?

b. Have you discussed your drinking with your PCP? If yes, tell me how the conversation went. If no, why not?

c. How would you describe your doctors' position or role as your health care provider?

d. What do you think your role is as the student patient?

4. Who do you feel comfortable talking to about your alcohol use?

5. Tell me about any visit you've had within the last twelve months, to a health care professional.

a. How would describe the relationship you have with the health care professional you saw?

b. Did they ask about your alcohol use?

If yes, ask the following questions for each person identified:

c. How did they ask about your alcohol use?

d. How would you describe your feelings when the health care professional asked about your alcohol use?

e. Did they specifically ask about your binge drinking?

6. Some people believe that doctors should ask about alcohol use because they can provide direct and immediate advice for people who need it. Do you agree? Why or why not?

7. How would you describe the ideal way for doctors to ask you about your alcohol use?

8. What might affect the quality of conversation regarding binge drinking between a young adult and his/her health care provider?

9. What advice do you have for health care professionals working with college students? What do they need to know or do to ensure they have appropriate and effective services for college students?

a. What else would you say about doctors providing advice to their young adult patients about alcohol use?

Appendix C: Focus Group Screening Questionnaire

Introduction:
Hello!

I'm Rabecca Hernandez, a graduate student at Texas State University, and the purpose of my study is to better understand different aspects of communication related to binge drinking between college students and health care providers. You are being asked to complete this questionnaire in order to determine your eligibility to participate in this study.

Eligibility Requirements:

1. Have you consumed alcohol in the last year?
    a. Yes
    b. No
    c. Unsure
2. In the last 12 months, have you had a visit with a medical provider?
    a. Yes
    b. No
    c. Unsure

Personal Contact Information:
If we determine you are eligible to participate in this study, you will be contacted to schedule a time and date to participate in the pilot focus group. It is important that we have a reliable form of communication and we appreciate you taking the time to full out the following sections.

3. Please enter your first and last name. If you prefer to be called by any other name, please list that name as well.
4. Please enter a reliable email address.
5. Please enter a reliable telephone number.
6. What is your preferred form of communication?
    a. Email
    b. Telephone
    c. Text message

Day/Time:

7. If we determine you are eligible to participate in this study, please select which day/time in the next two weeks you'd be able to attend the pilot focus group (please select all that apply).
    a. Monday at 3:00 pm
    b. Wednesday at 12:00 pm
    c. Thursday at 12:00 pm
    d. None of the above
8. If you are unable to attend any of the days/times previously listed, please tell us what days/times that would work best for you.

Demographics:

1. What is your age?
    a. 18
    b. 19
    c. 20
    d. 21
    e. 22
    f. Other
2. Please select the gender you identify with
    a. Male
    b. Female
    c. Other
3. Please select the ethnic group you most identify with.
    a. Hispanic or Latino
    b. Not Hispanic or Latino
    c. Other
4. Please select the racial category you most identify with.
    a. American Indian or Alaskan Native
    b. Asian
    c. Black or African American
    d. Native Hawaiian or Pacific Islander
    e. White
    f. Other
5. Please select your highest level of education.
    a. 1st year of college
    b. 2nd year of college
    c. 3rd year of college
    d. 4th year of college
    e. 5 or more years of college
6. What is your primary language?
    a. English
    b. Spanish
    c. Other

The Alcohol Use Disorders Identification Test (AUDIT) (Saunders et al., 1993):

7. How often do you have a drink containing alcohol?
    a. Never
    b. Monthly or less
    c. 2 to 4 times a month
    d. 2 to 3 times a week
    e. 4 or more times a week
8. How many drinks containing alcohol do you have on a typical day when you are drinking?

a. 1 or 2
b. 3 or 4
c. 5 or 6
d. 7, 8, or 9
e. 10 or more

9. How often do you have six or more drinks on one occasion?
a. Never
b. Less than monthly
c. Monthly
d. Weekly
e. Daily or almost daily

10. How often during the last year have you found that you were not able to stop drinking once you had started?
a. Never
b. Less than monthly
c. Monthly
d. Weekly
e. Daily or almost daily

11. How often during the last year have you failed to do what was normally expected from you because of drinking?
a. Never
b. Less than monthly
c. Monthly
d. Weekly
e. Daily or almost daily

12. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?
a. Never
b. Less than monthly
c. Monthly
d. Weekly
e. Daily or almost daily

13. How often during the last year have you had a feeling a guilt or remorse after drinking?
a. Never
b. Less than monthly
c. Monthly
d. Weekly
e. Daily or almost daily

14. How often during the last year have you been unable to remember what happened the night before because you had been drinking?
a. Never
b. Less than monthly

c. Monthly
d. Weekly
e. Daily or almost daily

15. Have you or someone else been injured as a result of your drinking?
    a. No
    b. Yes, but not in the last year
    c. Yes, during the last year

16. Has a relative or friend or a doctor or another health worker been concerned about your drinking or suggested you cut down?
    a. No
    b. Yes, but not in the last year
    c. Yes, during the last year

"Thank you" Message:
Thank you for completing this questionnaire. Once your results have been reviewed, I will be in contact with you regarding your eligibility to participate further in the study.

If you have any questions or concerns feel free to contact myself, Rabecca Hernandez or my faculty adviser Kelly Haskard-Zolnierek:

Rabecca Hernandez
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rwh59@txstate.edu
760-810-9633

Kelly Haskard-Zolnierek
Associate Professor
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512-245-8710

If you require any additional resources please contact the Counseling Center:

Address:
Texas State Counseling Center
5-4.1 LBJ Student Center
601 University Drive
San Marcos, TX 78666

Contact Information:
counselingcenter@txstate.edu
(512) 245- 2234

Office Hours:
Monday- Friday, 8:00 a.m. - 5:00 p.m.

If you're experiencing a crisis during business hours and need to speak with someone immediately, please call (512) 245- 2208 and ask to speak to the on- call counselor.

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