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## **Social Anxiety and Sexual Victimization in a Latina Sample: A Moderated Mediation**

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SOCIAL ANXIETY AND SEXUAL VICTIMIZATION IN A LATINA SAMPLE: A  
MODERATED MEDIATION

A Thesis

by

ANDREW E. DIALS

Submitted to the Graduate College of  
The University of Texas Rio Grande Valley  
In partial fulfillment of the requirements for the degree of  
MASTER OF ARTS

August 2019

Major Subject: Clinical Psychology



SOCIAL ANXIETY AND SEXUAL VICTIMIZATION IN A LATINA SAMPLE: A  
MODERATED MEDIATION

A Thesis  
by  
ANDREW E. DIALS

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August 2019



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## ABSTRACT

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The current study sought to explore the relationships between social anxiety, sexual victimization, acculturation, and alcohol use. To the author's knowledge, this is the first study to explore the relationship between social anxiety and sexual victimization in a 100% Latina sample.

It was seen that social anxiety predicted severity of sexual victimization, but not presence or absence of sexual victimization experience. It was also seen that while alcohol did not predict severity of sexual victimization experience, it did predict presence or absence of sexual victimization experience. Results, clinical implications, and future research directions are discussed.





## ACKNOWLEDGEMENTS

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## CHAPTER I

### INTRODUCTION

#### **Literature Review**

##### *Prevalence and Consequences of Sexual Victimization*

Sexual victimization occurs at alarming rates, recent studies have seen 11.6% to 12.5% of men and 20% to 51.1% of women reporting some type of sexual victimization during their time at college (Carey, Durney, Shepardson, & Carey, 2015; Conley et al., 2017; Howard, Potter, Guedj, & Moynihan, 2018; Mellins et al., 2017). College women report over twice as many instances of sexual victimization than college men. In a 2018 study of 800 community college students, it was found that participants who identified as female, younger than 26, not heterosexual, or a race other than Caucasian were significantly more likely to report victimization (Howard, Potter Guedj, & Moynihan, 2018). Sexual victimization can include various types of unwanted sexual contacts. Touching the victim's body sexually or removal of clothes without consent is a common type of unwanted sexual contact reported by college students (Fedina, Homes, & Backes, 2018). Coercion refers to sexual intercourse (e.g. oral, vaginal, anal sex) obtained without the consent of the victim when the perpetrator used verbal persuasion (e.g. criticism, lies, threats) but does not include the threat of physical harm. Rape refers to sexual intercourse obtained when the victim was too intoxicated to consent (incapacitation rape) or the perpetrator used physical force or threats of violence towards the victim or their loved ones (Koss et al., 2007). There has been a severity ranking of unwanted

sexual contacts based on assumptions and legal precedent (Koss et al., 2007). Studies over the years have demonstrated that women rated sexual coercion at the midpoint of a seriousness scale (Abbey, Beshears, Clinton-Sherrod, & McAuslan, 2004). In an attempt to address the severity weighting, Testa and colleagues asked about subjective trauma at the time of the incident; rape was rated as more traumatic at the time than all other types of experiences (Testa, VanZile-Tamsen, Livingston, & Koss, 2004). Based on a review of prevalence of college campus sexual assault, the authors found that unwanted sexual contact and sexual coercion are the highest among all forms of sexual victimization reported by college students (Fedina, Holmes, & Backes, 2018).

Sexual victimization can have many negative consequences on mental and physical well-being. In a 2018 study it was found that participants who reported victimization were significantly more likely to score negatively on well-being scales than those who did not (Howard, Potter, Guedj, & Moynihan, 2018). In a qualitative review of the prevalence of various mental disorders in survivors of adult sexual assault the authors found that 17–65% of people with a history of sexual victimization develop PTSD, 13–51% meet diagnostic criteria for depression, 12–40% experience symptoms of anxiety, 13–49% develop alcohol use disorders, 28–61% develop drug use disorders, 23–44% experience suicidal ideation, and 2–19% attempt suicide (Campbell, Dworkin, & Cabral, 2009; Clum, Calhoun, & Kimerling, 2000; Kilpatrick et al., 1989; Kilpatrick & Resnick, 1993; Kilpatrick, Saunders, Veronen, Best, & Von, 1987; Rothbaum, Foa, Riggs, Murdock, & Walsh, 1992). It has also been found that college students who experienced sexual victimization were more likely to experience poor academic performance as a result of depression symptoms caused by sexual victimization experience (Edman, Watson, Patron, 2016). In a 2017 study on the effects of sexual victimization on

academic outcomes it was found that those who had been victimized reported lower academic efficacy, higher college-related stress, lower institutional commitment, and lower scholastic conscientiousness (Banyard, Demers, Cohn, Edwards, Moynihan, Walsh, & Ward, 2017). Previous victims of sexual victimization also experience a 2–3 fold increased risk of being revictimized compared with those without a history of abuse (Messman-Moore & Long, 2003; Messman-Moore, Ward, Zerubavel, 2013; Waldron, Wilson, Patriquin, Scarpa 2014). While most of the studies have not reported differences in ethnicities other than “white and non-white”, it was reported in one study that Hispanic women had higher levels of PTSD symptoms as well as the highest level of psychological distress compared with Caucasian and African American sexual assault survivors; however they did not report incident rates (Campbell, Dworkin, & Cabral, 2009). As evidenced above, understanding the consequences of sexual victimization is an important subject that has been researched extensively. However, research efforts to understand risks before the event and examine how they affect the severity of the sexual victimization are lacking.

#### *Social Anxiety as a Risk Factor for Sexual Victimization*

Research has suggested that social anxiety is associated with an increased risk of coercion based sexual victimization in college women through use of ineffective resistance techniques (Schry & White, 2013), ineffective sexual assertiveness (Schry & White, 2013), or increased use of alcohol (Schry, Maddox, & White, 2016). Other forms of sexual victimization (e.g., unwanted sexual contact, attempted rape, and rape) were tested but only coercion based sexual victimization was associated with social anxiety (Schry & White, 2013). In Schry & White (2013), they concluded that social interaction anxiety was a significant predictor of victimization by coercive perpetration tactics. Their findings suggest that there is something specific about the

perpetration tactics used in coercion that cause women who are socially anxious or who have poor sexual assertion skills to be more likely to experience this type of victimization. They may be unable to effectively communicate or fail to attempt to communicate their objections when they are in sexual situations that are risky or not desired. Perpetrators of coercive approaches may target women they expect will be likely to concede, and women high in social anxiety may be seen as vulnerable (Creed & Funder, 1998).

### *Alcohol Use as a Risk Factor for Sexual Victimization*

It has been seen that approximately 70% of undergraduate females who experienced sexual victimization reported they were under the influence of alcohol at the time of the incident (Benson, Gohm, Gross, 2007; Gidycz, Van Wynsberghe, Edwards, 2008). In particular, women with a history of rape were more likely to consume more alcohol than non-victims (Messman-Moore, Coates, Gaffey, & Johnson, 2008). Heavy episodic drinking or consuming four or more beverages for a woman confers particularly large risk for sexual assault victimization which highlights that level of intoxication, not just alcohol use in general, may play an important role in risk for sexual victimization (Howard, Griffin, & Boekeloo, 2008). Furthermore, in a longitudinal study on alcohol intoxication in college students the authors' results indicated that alcohol use and blackouts are potent risk factors for victimization; their results emphasized the effects of hazardous drinking and blackouts on sexual victimization and perpetration (Wilhite, Mallard, & Fromme, 2018). Hines and Straus (2007) examined the connection among binge drinking, "partner violence" (PV), and other factors contributing to dating violence and found a strong association between binge drinking and partner violence. For every increase in binge drinking, there was a 26% increase in PV (Hines & Straus, 2007). Overall, the above literature

suggests that episodic, binge-drinking that leads to high levels of intoxication is a risk factor for sexual victimization.

### *Social Anxiety and Alcohol Use*

Researchers have used the Stress-Response Dampening Model to explain the link between social anxiety and drinking (Levenson, Sher, Grossman, Newman, & Newlin, 1980). This model suggests that socially anxious individuals are more sensitive to the calming effects of alcohol when in socially stressful situations. Because of this, these individuals will consume more alcohol when socially stressed than individuals that have low social anxiety symptoms (MacDonald, Baker, Stewart, & Skinner, 2000; Morris, Stewart, & Ham, 2005; Sher & Levenson, 1982). Motivational models of substance use suggest that using substances to cope with psychological distress, such as social anxiety, is related to higher levels of use (Cooper, 1994; Piper, Piasecki, Federman, Bolt, Smith, Fiore, & Baker, 2004). Broadly speaking, motivational models of alcohol use rest on two fundamental ideas. First, all of the models have the notion that people drink in order to attain certain valued outcomes, such as reduction of anxiety (Cox & Klinger, 1988). Second, they share the assumption that drinking behavior motivated by different needs or serving different functions is characterized by unique patterns of antecedents and consequences (Cutter & O'Farrell, 1984). For example, individuals who rely on alcohol to cope with negative emotions presumably have learned to do so because they lack other more adaptive ways of coping with these emotions. Reliance on alcohol, over time, leads to further deterioration in adaptive coping and to increased psychological dependence on alcohol to meet one's needs (Cooper, Russell, & George, 1988). Kidorf and Lang (1999) found increased alcohol consumption in a sample of males and females who were anticipating a social anxiety-provoking task compared to a neutral task and that this was especially true in participants who

scored higher on a measure of trait social anxiety. This adds to previous literature already suggesting that social anxiety is related to coping-motivated drinking (Garcia, 2009; Lewis et al., 2008; Norberg et al., 2010; Stewart et al., 2006; Terlecki & Buckner, 2015). In a recent study on real time social stress response and alcohol use initiation in female adolescents the authors found girls with elevated anticipatory anxiety and greater levels of retrospectively reported social anxiety symptoms appeared to have the greatest and earliest rates of onset of alcohol use (Cloutier, Blumenthal, Trim, Douglas, & Anderson, 2019).

#### *Anxiety Coping Alcohol Use as a Mediator*

Based on the research mentioned previously, it has been seen that higher levels of social anxiety symptoms lead to more sexual victimization experiences, higher use of alcohol leads to more sexual victimization experiences, and people with higher social anxiety symptoms are more likely to consume higher amounts of alcohol. Based on these three relationships it is assumed that alcohol will mediate the relationship between social anxiety and sexual victimization experience. In the 2009 study by Norberg, Norton, and Oliver, it was suggested that women who are high in social anxiety are likely to report negative experiences as a result of alcohol use ( e.g. being taken advantage of sexually, getting into sexual situations that the person later regretted, putting themselves in a risky or dangerous situation) per drinking episode than women low in social anxiety. Women high in social anxiety may drink alcohol when anticipating a social situation which consequently would increase their risk of being sexually victimized. Based on the research described above, the present study proposes a mediational model in which anxiety coping based alcohol consumption mediates the relationship between social anxiety and severity of coercion based sexual victimization. See Figure 1 below.

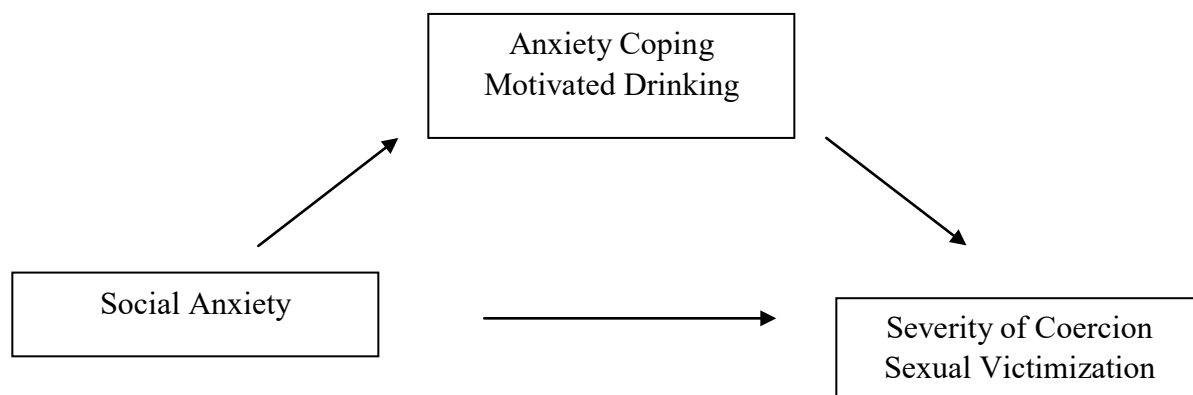


Figure 1: Anxiety Coping Motivated Drinking Mediating the Relationship between Social Anxiety and Severity of Coercion based Sexual Victimization

### *Hispanic Underrepresentation*

Hispanics may be underrepresented when it comes to reports on victimization of all sorts, including sexual victimization. Hispanics face a unique barrier, as a growing body of research has suggested that Hispanics are unlikely to contact law enforcement officials or provide information about victimization to other types of authorities such as social services (Ammar, Orloff, Dutton, & Aguilar-Hass, 2005; Krishnan, Hilbert, VanLeeuwen, & Kolia, 1997; Murdaugh et al., 2004). Research conducted in a predominantly Hispanic community (91.3% Hispanic) in a large city (Brownsville) in South Texas near the border of Mexico, with a large Hispanic immigrant (30.1%) population showed that analyses of their survey data yielded higher estimates of victimization than analyses of official crime data, which could indicate that many residents were reluctant to contact the police (Brown & Benedict, 2005). Specifically, the authors compared their data of 228 high school students in Brownsville, TX with data from the 2001 School Crime Supplement to the National Crime Victimization Survey (NCVS) which showed



that 2 percent of Hispanic students had been violently victimized at school and that 4 percent of Hispanic students had been the victim of a theft at school (DeVoe et al., 2002). In contrast, among the Hispanic students surveyed in 2000 and 2001, 15.8 percent reported having been attacked at school and 62.3 percent reported having had something stolen from them at school (Brown & Benedict, 2005). In a 2015 study on Latina's perception of law enforcement, the authors found that fear of deportation was a significant predictor of Latina's perceptions of the procedural fairness of the criminal justice system, but trust in the police was more important than fear of deportation in Latina's willingness to report violent crime victimization; due to the mistrust in the police, Latinas were less likely to report violent crime victimization and receive any form of law enforcement or support services (e.g. medical, counseling, or social services) (Messing, Becerra, Ward-Lasher, & Androff, 2015). Because of the lack of willingness to report violent crime victimization, the actual rate of victimization might be higher than previously reported prevalence rates. Hispanics make up a large portion of the United States population, 16.3%, and the fact that 16.3% of the population may be afraid to report sexual victimization and seek support services is inexcusable (U.S. Census Bureau, 2010). Being that Latinas may not seek help after a victimization experience, this study aims to help this problem by identifying some of the factors that result in sexual victimization in order to hopefully prevent the experiences before they ever happen.

Hispanics are an underrepresented group in research. The research mentioned in previous paragraphs has been conducted on predominantly White/Caucasian samples with percentages in the high 80's (Benson, Gohm, Gross, 2007; Howard, Potter, Guedj, & Moynihan, 2018; Schry, Maddox, & White, 2016; Schry & White, 2016; Schry & White, 2013); in addition, many of these studies failed to list the percentages of the sample that was Hispanic (Conley et al., 2017;

Creed & Funder, 1998; Fedina, Holmes, & Backes, 2018; Kidorf and Lang; Levenson, Sher, Grossman, Newman, & Newlin, 1980; Livingston, & Koss, 2004; Rothbaum, Foa, Riggs, Murdock, & Walsh, 1992; Sher & Levenson, 1982; Testa, VanZile-Tamsen, Livingston, & Koss, 2004). In a review of 2,536 articles on ethnic representation, it was found that only 61% indicated the ethnicity of the participants (Case, & Smith, 2000). For those articles, they found that Hispanic Americans were underrepresented when compared to the ethnic compositions that the U.S. Census estimated (Case, & Smith, 2000). One report estimated Hispanic representation in National Institutes of Health studies at 7.6% of all research participants (Pinn, Roth, Bates, Wagner, & Jarema, 2009). Most of the previously mentioned studies on sexual victimization and social anxiety had a Hispanic sample falling below 10% (Benson, Gohm, Gross, 2007; Carey, Durney, Shepardson, & Carey, 2015; Goodman, Stikma, & Kashdan, 2018; Howard, Potter, Guedj, & Moynihan, 2018). According to the U.S. Census Bureau, as of April 2010, 16.3% of the population of the United States was Hispanic; in areas near the border, such as Hidalgo County, the percentage reached over 90% of the population (U.S. Census Bureau, 2010). The lack of research on Latinas is especially troubling because Hispanics are at a high risk for sexual victimization; in a 2015 study of 142 Latina women, it was found that 31.2% of the participating women reported rape victimization, 22.7% reported sexual coercion in their lifetime, and 19% percent of the full sample experienced both rape and sexual coercion in their lifetime compared to the 26.3% of Caucasian women who reported an unwanted sexual experience in Gross et al.'s study on sexual violence against women in college (Basile, Smith, Walters, Fowler, Hawk, & Hamburger, 2015; Gross, Winslett Roberts, & Gohm, 2006). In a more recent 2017 study on sexual victimization history and ethnicity, it was found that Hispanic women reported more

instances of sexual coercion than non-Hispanic white women (16.6% vs. 6.8% respectively) (Yeater, Hoyt, Leiting, & Lopez, 2016).

### *Moderating Role of Acculturation*

Acculturation has been suggested as a variable associated with victimization (Brown et al., 2003; Caetano, Schafer, Clark, Cunradi, & Raspberry, 2000; Frias & Angel, 2005; Garcia, Hurwitz, & Kraus, 2005; Harris, Firestone, & Vega, 2005) as well as psychological distress (Burnam, Hough, Karno, et al., 1987; Ortega et al., 2000; Vega et al., 1998) in research focusing on minority groups. Acculturation can be defined as changes in cultural patterns that happen when regular contact with another culture occurs as a result of migration, colonization, or forced relocation (Balls Organista, Marin, & Chun, 2010; Valentine & Mosley, 2000). Such changes may be observed in a number of different domains including attitudes, behaviors, values, and sense of cultural identity. At a fundamental level, acculturation is currently viewed as a bidimensional process (Berry, Phinney, Sam, & Vedder, 2006) but has traditionally been measured as a unidimensional construct (Andrews, Bridges, & Gomez, 2013). In the Bidimensional view of acculturation, the two dimensions consist of affiliation with culture of origin and affiliation with the dominant culture (Berry, 1980). The unidimensional view has the perspective that sees acculturation as assimilation; ethnic minority individuals either conform to the dominant culture or maintain their culture of origin (Gordon, 1964). There is a distinction between acculturation as a group-level phenomenon and acculturation as an individual-level phenomenon; the kinds of changes that take place at the two levels tend to be different (Wright, 2015). Moreover, not every group or individual enters into, participates in, or changes in the same way during acculturation. On the basis of the Bidimensional theory, the assessment of acculturation entails measurement of identification with the society of origin as well as with the

dominant society. Degree of immersion is measured in this study using superficial and intermediate behaviors at the individual level in the domains of language, interaction, food, and media. The majority of studies in acculturation literature have focused on behavioral acculturation, a construct that has become a standard when measuring acculturation (Schwartz, Unger, Zamboanga, & Szapocznik, 2010). Acculturation appears to be a factor that potentially influences the relationships between social anxiety, sexual victimization, and alcohol use. It has been hypothesized that alcohol use tends to be less acceptable for women than men in traditional Latino culture (Alaniz et al., 1999; Fiorentino et al., 2007; Gilbert and Collins, 1997), however, when women become more Americanized they also adopt the more liberal U.S. drinking norms and attitudes. This could increase the strength of the relationship between alcohol use and sexual victimization being that the more they become acculturated to American society the more they drink and the more likely it is that they would be sexually victimized. In a 2017 study on acculturative stress, alcohol use, and alcohol problems the authors found that higher acculturative stress moderated the relationship between alcohol use and alcohol problems, such as passing out or finding yourself in a place you don't remember going (Conn, Ejesei, & Foster, 2017). In a community-based study of Mexican American young adults, lifetime diagnoses of alcohol dependence, substance dependence, and anxiety disorders were associated with elevations in acculturation stress (Ehlers, Gilder, Criado, & Caetano, 2009). It is expected that acculturation will moderate the relationship between anxiety coping motivated drinking and severity of coercion sexual victimization.

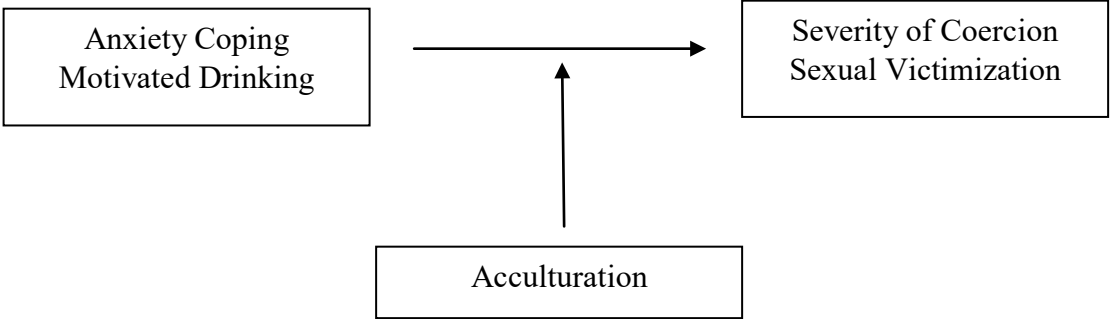


Figure 2: Acculturation Moderating the Relationship between Anxiety Coping Motivated Drinking and Severity of Coercion Sexual Victimization

The moderation of acculturation on the relationship between social anxiety and sexual victimization has not yet been seen in previous literature. However, due to the relatively new research on social anxiety and sexual victimization, this is not surprising. Due to previously seen relationships with acculturation, social anxiety, and sexual victimization (McLaughlin, Hilt, & Nolen-Hoeksema, 2007; Polo, Alegría, Chen, & Blanco, 2011; Rapp, Lau, & Chavira, 2017) in which those Latinas with higher acculturation showed higher instances of sexual victimization and higher impairment due to social anxiety, as well as having higher rates of social anxiety compared to other minority groups, it is expected that acculturation will moderate the relationship between social anxiety and sexual victimization.

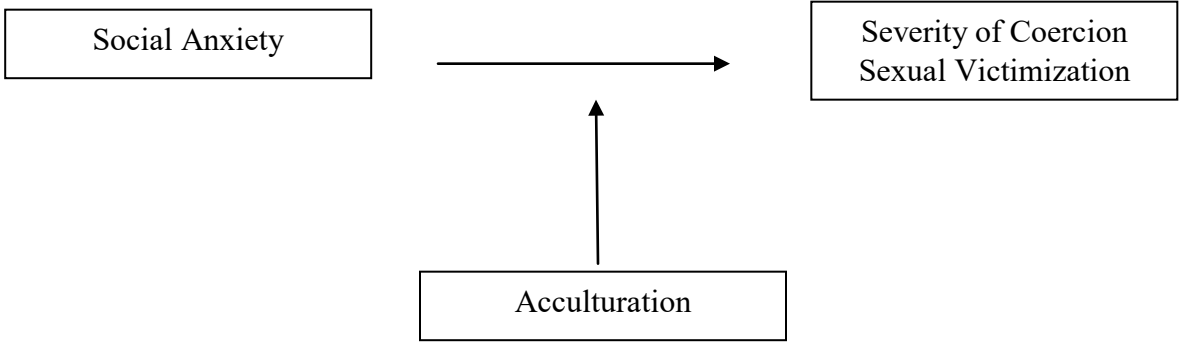


Figure 3: Acculturation Moderating the Relationship between Social Anxiety and Severity of Coercion Sexual Victimization

The current study sought to test models assessing the relationships between social anxiety, sexual victimization, alcohol consumption, and acculturation in a 100% Latina sample. Given the high Latina population in the Rio Grande Valley, as well as the growing Latina/o population in the United States, this research highlights the importance of assessing acculturation and alcohol use when treating Latina college students high in social anxiety to determine whether discussion of alcohol related consequences are warranted, especially sexual victimization. This is especially important due to data on reluctance of some Latina/os to contact law enforcement due to mistrust in the police, concern about their immigration status, or cultural beliefs, reporting rape shames the family, (Davis & Erez, 1998), as well as the increased likelihood of Hispanic women to report symptoms of depression and (PTSD) after being victim to rape or sexual coercion (Basile, Smith, Walters, Fowler, Hawk, & Hamburger, 2015; Messing, Becerra, Ward-Lasher, & Androff, 2015).

### **Brief Summary, Specific Aims, and Hypotheses**

Those high in social anxiety have been seen to be at a higher risk of coercion based sexual victimization and one of the pathways this happens through is increased alcohol use as described by the Stress-Response Dampening Model (MacDonald, Baker, Stewart, & Skinner, 2000; Morris, Stewart, & Ham, 2005; Sher & Levenson, 1982). These findings have been found in multiple studies, but none of them have had a significant Latina sample. This literature gap is inexcusable due to the high risk for sexual victimization that Latinas face (Cuevas, Sabina, & Millosi, 2012). It has previously been seen that having a higher Anglo acculturation can be associated with higher levels of sexual victimization and increased alcohol use (Lui & Zamboanga, 2018; Sabina, Cuevas, & Schally, 2013).

This study sought to not only add to previous research but to expand it to a Latina population and explore the influence of acculturation on the relationship between severity of sexual victimization, levels of social anxiety, and anxiety coping based alcohol use. This study focused solely on women due to the higher instances of sexual victimization reported in women compared to men as noted above (Conley et al., 2017; Mellins et al., 2017).

**Specific Aim #1:** *To expand previous research to the Latina population.* As previously mentioned, the majority of the research on social anxiety, sexual victimization, and alcohol consumption and their relation to each other has been performed on almost exclusively non-Hispanic white populations. The following hypotheses were examined: Hypothesis 1a) social anxiety levels would be positively associated with more severe types of sexual victimization, specifically coercion based sexual victimization and rape experiences, Hypothesis 1b) social anxiety levels would be positively associated with alcohol consumption, specifically anxiety coping based alcohol consumption, Hypothesis 1c) anxiety coping based alcohol consumption would be positively associated with severity of coercion based sexual victimization experiences.

**Specific Aim # 2:** *To test the influence of acculturation on the relationship between severity of sexual victimization, levels of social anxiety, and anxiety coping based alcohol consumption.* Acculturation has been seen to have unique effects in Latina/os when it comes to social anxiety, alcohol use, and sexual victimization. The following hypotheses were tested: Hypothesis 2) the relationship between social anxiety and severity of coercion sexual victimization would be mediated by anxiety coping motivated drinking (Figure 1), and Hypothesis 3) the relationship between anxiety coping motivated drinking and severity of coercion based sexual victimization would be moderated by acculturation (Figure 2 showing the moderation part only) and the relationship between social anxiety and severity of coercion based

sexual victimization would be moderated by acculturation (Figure 3 showing the moderation part only). See Figure 4 that depicts the full model.

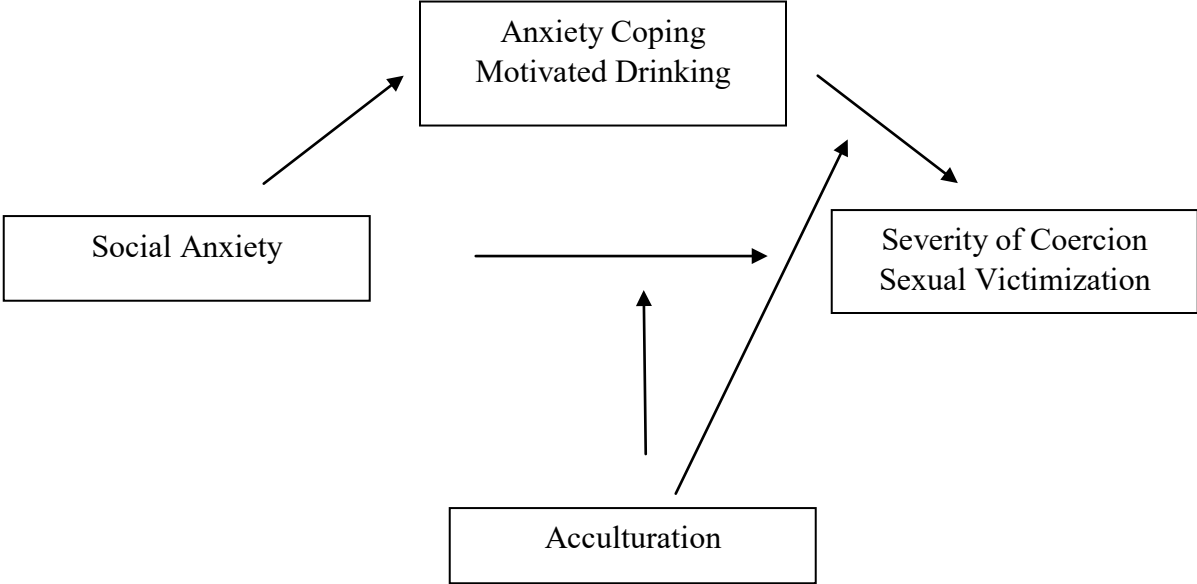


Figure 4: Acculturation Mediating and Anxiety Coping Motivated Drinking Moderating the Relationship between Social Anxiety and Severity of Coercion Sexual Victimization



## CHAPTER II

### METHODOLOGY

#### **Procedure**

This study was first reviewed and approved by the University of Texas Rio Grande Valley (UTRGV) Institutional Review Board (IRB). Participants were recruited from the UTRGV via SONA, a cloud-based participant management software in which students go to look for research participation opportunities in order to fulfill mandatory research credit requirements or for extra credit. Anyone, regardless of gender or sexual victimization experience, could register for the study. From SONA the participants would click a link to the Qualtrics website in which they would be given the online informed consent form to sign electronically which informed them of any anticipated risks, afterwards they were able to take the assessment online (Qualtrics, Provo, UT). Participants were also recruited in person in psychology classes, some professors would inform the students themselves, some sent their students a flyer online, and others had the researcher go to the classroom to explain the study and answer any questions. The students who were recruited in person were given the hyperlink to the website where they could take the survey. The survey was completed anonymously with no identifying information asked of them. Exclusion criteria for final data analysis were: 1) being male, as the purpose of this study was to focus on females, 2) failing verification questions, 3) identifying as non-Hispanic, 4) non-completion of the survey, and 5) completing the survey in less than 25 minutes. It was decided to use the cutoff of 25 minutes based on Qualtrics

estimations on the length of the survey and in order to ensure the validity of the participant's responses.

### **Participants**

Overall, 586 college students from the UTRGV completed the survey. Of those, 66 were excluded for being male, 28 were excluded due to identifying as non-Hispanic, 7 were excluded for failing the two verification questions, and finally 355 were excluded due to finishing in less than 25 minutes for a final total of 130 participants. One hundred percent of the final sample was Hispanic and female. Of the 130 participants, 82 (63 %) of the participants reported experiencing sexual victimization as an adult. Experiencing sexual victimization was operationalized as either responding "yes" to a question which asked whether the participants had a sexual victimization experience, or receiving a score above zero on the Sexual Experiences Survey-Short Form Victimization (SES-SFV). There were several different patterns involving the SES-SFV and the question that asked whether the participants had a sexual victimization experience. The first involved participants who reported "yes" to the victimization question and had a score above zero on the SES-SFV; these were included in the victimization group. The second involved participants who responded "no" to the victimization question but had a score above zero on the SES-SFV; these were also included in the victimization group. This decision was made based on the possibility that the participants did not think what had happened to them counted as an experience in response to the experience question, but when they came to the SES-SFV which asked about specific instances, they became aware they had experienced those. The third pattern involved those who responded "yes" to the victimization question, but scored a zero on the SES-SFV. These individuals were included in the victimization group because of the possibility that their experiences were not explicitly listed on the SES-SFV. Finally, the last pattern was those

who reported “no” on the victimization question and scored a zero on the SES-SFV, this was the non-victimized/control group.

## **Measures**

All measures were given online.

### *Verification Questions*

Two verification questions were included in the survey to ensure that the participants were giving the questions their complete attention; one towards the beginning “If you are reading each question carefully, select the option "Very" for this question” and one towards the ending “If you are paying attention, select “False”.

### *Sexual Experiences*

Sexual assault experience and severity was measured by the Sexual Experiences Survey-Short Form Victimization (SES-SFV; Koss et al., 2007). This measure asks about experiences of different types of unwanted sexual behaviors (e.g., fondling, attempted or completed oral, vaginal or anal penetration) and tactics used to obtain each outcome (e.g., coercion, intoxication, and threat or use of physical force). Participants indicated how often (0 = never to 3 = 3 or more times) they experienced each unwanted sexual behavior by each tactic (e.g., how often they experienced attempted vaginal sex by coercion (Koss et al., 2007). In order to score the SES-SFV, a scoring method developed by Davis et al., (2014) was utilized. In this method, severity of assault is separated by outcome and tactic such that completed rape by force is rated as more severe than complete rape by incapacitation, which are both rated as more severe than attempted rape by any tactic, which is rated as more severe than sexual contact by any tactic. The levels of internal consistency as measured by Cronbach’s alpha typically fall in the .70s (Koss et al., 2007). Cronbach’s alpha was .92 for the total score on the SES-SFV for this sample and .95 for

the coercion subscale. This study focused on the coercion subscale due to previous literature showing its' relation with social anxiety (Shry & White, 2013).

### *Social Anxiety*

Social anxiety was measured using the Social Interaction Anxiety Scale (SIAS). The SIAS consists of 20 items that are rated from 0 (not at all characteristic or true of me) to 4 (extremely characteristic or true of me). Items are self-statements describing one's representative reaction to situations that involve social interaction in dyads or groups (e.g. "I become tense if I have to talk about myself or my feelings"; "When mixing socially, I am uncomfortable"). The SIAS is scored by summing the ratings (after reversing the 3 positively worded items). Total scores range from 0 to 80, with higher scores representing higher levels of social interaction anxiety; a score of 34 or higher is indicative of social phobia (specific situations of irrational social fears with avoidance and impairment), and a score of 43 or more is indicative of social anxiety (generalized irrational fears across numerous social situations with avoidance and impairment) (Mattick & Clarke, 1998). Cronbach's alphas ranged from .88-.94 for different populations (Mattick & Clarke, 1998). Cronbach's alpha was .88 for the current sample.

### *Acculturation*

Acculturation was measured using the Stephenson Multigroup Acculturation Scale (SMAS). The SMAS is a 32-item scale measuring degree of immersion in both ethnic and dominant societies; it includes an Ethnic Society Immersion (ESI) subscale (17 items) (e.g. "I am informed about current affairs in the United States") and a Dominant Society Immersion (DSI) subscale (15 items) (E.g. "I have many (Anglo) American acquaintances") (Stephenson, 2000). Cronbach's alphas ranged from .94 to .97 for the ESI subscale and from .75 to .90 for the DSI subscale (Stephenson, 2000). Cronbach's alphas for the current sample for the DSI subscale were

.76 and .89 for the ESI subscale. The current study focused on the DSI due to previous literature focusing on dominant immersion as a critical factor when it comes to alcohol use, sexual victimization, and social anxiety. Acculturation has been cited as a factor that could increase Latina's alcohol use and dependence, and chances of developing an anxiety disorder (Conn, Ejesi, & Foster, 2017, Ehlers; Gilder, Criado, & Caetano, 2009).

### *Drinking Motives*

Drinking motives was measured using the Modified Drinking Motives Questionnaire – Revised (DMQ-R). The Modified DMQ-R consists of 28 items, each contributing to one of five subscales: social, coping-anxiety, coping-depression, enhancement, or conformity (Grant et al., 2007). The social subscale consists of questions involving drinking to be social, such as at a party (e.g. “As a way to celebrate”). The coping-anxiety subscale consists of questions regarding drinking to cope with feelings of anxiety (e.g. “Because it helps me when I am feeling nervous”). The coping-depression subscale consists of questions regarding drinking in order to cope with feelings of depression (e.g. “To cheer me up when I'm in a bad mood”). The enhancement subscale consists of questions regarding drinking to feel better or to do things otherwise impossible (e.g. “Because it makes me feel good”). The conformity subscale consists of questions involving drinking because others do it, in order to fit in (e.g. “To fit in with a group I like”). The DMQ-R assesses episodic drinking (how often the participant drinks for a specific reason), using a 5-point Likert scale ranging from 1 (almost never/never) to 5 (almost always/always) for each item. The current study used the coping-anxiety subscale. The subscale internal consistencies (Cronbach's alphas) ranged from .66 (social) to .91 (coping-depression) (Grant et al., 2007). Furthermore, the participants were asked whether they were drinking at the

time of the assault. Cronbach's alpha for the anxiety-coping subscale was .73 for the current sample.

### *Alcohol Use*

Alcohol use was measured by the Alcohol Use Disorders Identification Test (AUDIT). The AUDIT is a self-rated 10-item questionnaire with each item scored 0–4, giving a total score of 40. Several studies have shown its validity and reliability in the detection of hazardous drinking, alcohol misuse, and alcohol dependence (Bohn et al., 1995; Piccineli et al., 1997) (e.g. “How often do you have a drink containing alcohol?”, “How often do you have six or more drinks on one occasion?”) The AUDIT has been shown to have reasonable psychometric properties in college students (Kokotailo et al., 2004). The Cronbach's alpha internal reliability coefficient for the scale was .81 (Kokotailo et al, 2004). Cronbach's alpha was .73 for the current sample.

## CHAPTER III

### ANALYSIS AND RESULTS

#### **Analysis**

The SES-SFV, SIAS, DSI subscale of the SMAS, and the anxiety-coping subscale of the DMQ-R were used in the current analysis. While the participants completed the AUDIT, the scale was not used due to literature pointing towards coping motivated drinking as a factor when looking at those with social anxiety rather than full alcohol use disorders that the AUDIT measures (Garcia, 2009; Lewis et al., 2008; Norberg et al., 2010; Stewart et al., 2006; Terlecki & Buckner, 2015).

To test hypotheses 1a through 1c correlations among social anxiety, coercion based sexual victimization, and anxiety coping based alcohol consumption were obtained by using SPSS version 25 (IBM Corp., 2017). To test Hypotheses 2 and 3, POCESS (Hayes, 2012) was used to analyze whether anxiety coping based alcohol consumption would mediate the positive relationship between social anxiety and severity of coercion based sexual victimization. To obtain 95% bias-corrected confidence intervals for the mediation models, 5,000 bootstrap estimates were used. The model described in Hypothesis 3 (Figure 4) was not tested due to the non-significant results when testing hypothesis 2.

## Results

Table 1: Participant Characteristics

	Victimized Group <i>N</i> = 82 (63.1%)	Non-Victimized Group <i>N</i> = 48 (36.9%)	Group Comparison
Age	<i>M</i> =22.7 ( <i>SD</i> = 5.33)	<i>M</i> =20.8 ( <i>SD</i> = 3.79)	<i>t</i> = -2.164*
<b>Sexual Orientation</b>			
Heterosexual	75 (91.5%)	45 (93.8%)	$X^2 = (3, N = 130) = 2.8, p = .424$
Other	7 (8.5 %)	3 (6.6%)	
<b>Grade Level</b>			
Freshman	15 (18.3%)	14 (29.2%)	$X^2 = (5, N = 130) = 4.32, p = .504$
Sophomore	15 (18.3%)	9 (18.8%)	
Junior	20 (24.4%)	9 (18.8%)	
Senior	27 (32.9%)	11 (22.9%)	
Undergrad 5+	4 (4.9%)	3 (6.3%)	
Masters	1 (1.2%)	2 (4.2%)	
<b>Socioeconomic Status</b>			
Low Income	45 (60%)	24 (60%)	$X^2 = (3, N = 130) = 1.18, p = .757$
Middle Income	26 (34.7%)	13 (32.5%)	
Upper Middle Income	3 (4%)	3 (7.5%)	
High Income	1 (1.3%)	0	

\*= Statistical difference at the .05 level



While there were 130 participants who qualified for analysis, only a subset of those completed all of the measures for each analysis. Notably, of the 130, 45 (35%) did not complete the DMQ-R subscale. Only those who completed all the measures that the specific models were testing were included in the analysis for each model. Specific numbers of completers for each measurement are presented in Table 2 below.

Measure	Victimized Group	Non-Victimized Group	<i>t</i>
	<i>N</i> = 82 (63.1%)	<i>N</i> = 48 (36.9%)	
	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )	
SIAS	27.36 (15.57) n = 78	25.91 (18.33) n = 46	-0.47
SES Total	57.09 (101.01) n = 76	-	-
SES Coercion	33.58 (64.00) n = 78	-	-
SMAS (Dominant)	49.58 (5.24) n = 65	47.07 (7.03) n = 43	-2.13*
DMQ-R (Anxiety)	7.37 (3.23) n = 60	5.64 (2.08) n = 25	-2.47 *

\*= Statistical difference at the .05 level

Twelve (14.6%) of the participants who reported sexual victimization experience reported drinking alcohol at the time of their victimization and 49 (59.8%) reported not drinking alcohol at the time of their victimization. Twenty-one (25.6%) of the participants reported not being victimized even though they reported victimization experience, they selected “no” on the specific question asking if they had ever been sexually victimized but then reported incidents of

sexual victimization on the SES-SFV. The decision to keep these participants in the victimized group is described above in Chapter 2 under the participants section.

### *Correlations*

In the sexually victimized group, social anxiety was significantly correlated positively with coercion based sexual victimization ( $r = .365, p < .05, N = 47$ ) and coping for anxiety based drinking ( $r = .376, p < .01, N = 47$ ). The hypothesis (1a) that higher social anxiety symptom levels would predict more severe coercion based sexual victimization experiences was supported. The hypothesis (1b) that social anxiety symptoms would predict higher anxiety coping based drinking was supported. Finally, coercion based sexual victimization was not significantly correlated with anxiety coping motivated drinking contrary to the hypothesis (1c).

### *Tested Models*

The first model (Figure 1) tested whether anxiety coping motivated drinking mediated the relationship between social anxiety and severity of coercion based sexual victimization (Hypothesis 2), in those who reported sexual victimization experience. While the bivariate relationship between anxiety coping motivated drinking and severity of coercion based sexual victimization was insignificant as seen above, the author wanted to test the model as a whole. For hypothesis 2, the relationship between social anxiety and severity of coercion based sexual victimization was significant, but anxiety coping motivated drinking did not mediate their relationship. Results are presented in Table 3.

Table 3: Anxiety Coping Motivated Drinking Mediating the Relationship Between Social Anxiety and Severity of Coercion Sexual Victimization (Sexually Victimized Group)

Predictors	Anxiety Coping Motivated Drinking					Severity of Coercion Sexual Victimization				
	<i>B</i>	<i>P</i>	<i>Boot SE</i>	Boot 95% CI		<i>B</i>	<i>p</i>	<i>Boot SE</i>	Boot 95% CI	
				<i>LL</i>	<i>UL</i>				<i>LL</i>	<i>UL</i>
Social anxiety	.09	.00	.03	.04	.14	1.38	.02	.57	.24	2.53
Anxiety Coping Motivated Drinking	-	-	-	-	-	-2.49	.35	2.66	-7.81	2.84
Indirect	-	-	-	-	-	-.22	-	.28	-.84	.30
			$R^2 = .176$					$R^2 = .102$		
<i>N</i> =55										

Due to the rejection of hypothesis 2 (Figure 1) because of the lack of the significant relationship between anxiety coping motivated drinking and severity of coercion sexual victimization, Hypothesis 3 (the moderated mediation model, Figure 4) was not tested. However, because moderating effects of acculturation were part of the interest of the study and the relationship between social anxiety and coercion based sexual victimization was significant; acculturation was tested as a moderator for the relationship in those who reported sexual victimization experience. Figure 3 depicts this relationship. Results are presented in Table 4. Acculturation did not have a significant effect on their relationship.

Table 4: Acculturation Moderating the Relationship between Social Anxiety and Coercion Sexual Victimization (Sexually Victimized Group)

Predictors	Severity of Coercion Sexual Victimization			Boot 95% CI	
	<i>B</i>	<i>P</i>	<i>Boot SE</i>	LL	UL
Social Anxiety	1.49	.00	.477	.531	2.44
Acculturation	.547	.69	1.36	-2.19	3.28
Social Anxiety X Acculturation	-.05	.62	.11	-.26	.16

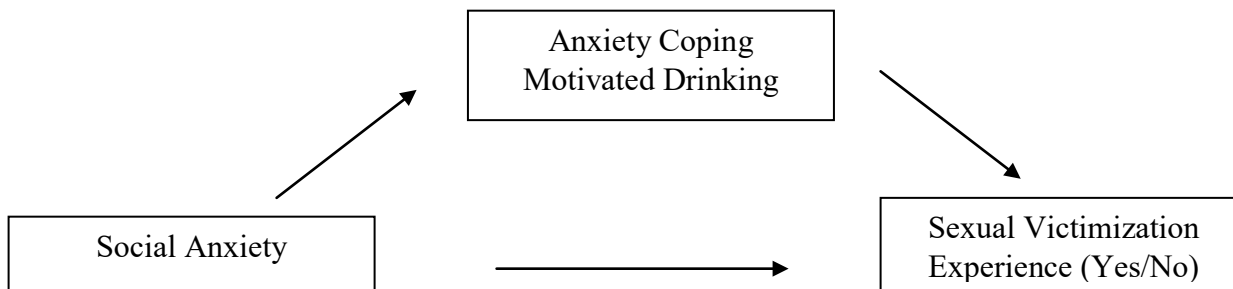
R<sup>2</sup>=.15  
N=60

### Exploratory Analysis

#### *Dichotomous Variable*

It was decided to re-analyze the models using a dichotomous variable comparing the victimized and non-victimized group. The decision to include non-victimized subjects was made due to the relatively small sample size when looking solely at the victimized group, especially compared to the original planned sample size of 200 (see Table 2 for the number of participants in the victimized and non-victimized groups as well as their scores on each of the measures). Correlations were run using SPSS to test whether social anxiety predicted presence or absence of sexual victimization experience, to test whether social anxiety predicted anxiety coping

motivated drinking, and to test if anxiety coping motivated drinking predicted presence or absence of sexual victimization. PROCESS (Hayes, 2012) was used to test whether anxiety coping motivated drinking mediated the relationship between social anxiety and presence/absence of sexual victimization experience.



$N= 81$

Figure 5: Anxiety Coping Motivated Drinking Mediating the Relationship between Social Anxiety and Sexual Victimization Experience (Bivariate Analysis)

### *Correlations*

Social anxiety was not correlated with presence/absence of sexual assault experience ( $r = .081$   $p = .47$   $N=81$ ). Anxiety coping motivated drinking was correlated with presence/absence of sexual victimization experience ( $r = .269$   $p < .05$   $N= 81$ ). Social anxiety was positively correlated with anxiety coping motivated drinking ( $r = .305$   $p < .01$   $N= 81$ ). While social anxiety did not predict sexual victimization experience in the dichotomous analysis, the mediational model was still tested, as Hayes states "It is possible for X to exert an effect on Y indirectly through M even if one cannot establish through hypothesis test that the total effect is different from zero" (Hayes & Little, 2018).

Results are presented in Table 5. Social anxiety was not significantly associated with presence or absence of sexual victimization. There was a linear path in which social anxiety predicted anxiety coping motivated drinking, which in turn predicted presence or absence of sexual victimization experience.

Table 5: Anxiety Coping Motivated Drinking Mediating the Relationship Between Social Anxiety and Sexual Victimization Experience (Dichotomous Analysis)

Predictors	Anxiety Coping Motivated Drinking					Sexual Victimization Experience				
	<i>B</i>	<i>P</i>	<i>Boot SE</i>	Boot 95% CI		<i>B</i>	<i>p</i>	<i>Boot SE</i>	Boot 95% CI	
				<i>LL</i>	<i>UL</i>				<i>LL</i>	<i>UL</i>
Social anxiety	.06	.01	.02	.02	.10	.00	.95	.02	-.03	.03
Anxiety Coping Motivated Drinking	-	-	-	-	-	.26	.02	.11	.03	.48
Indirect	-	-	-	-	-	.02	-	.01	.00	.05
			$R^2 = .09$							

*N*=81

## CHAPTER IV

### DISCUSSION

The current study sought to explore the relationships between social anxiety, sexual victimization, acculturation, and anxiety coping motivated drinking (Figure 4) in Hispanic women. To the author's knowledge this is the first study to examine the hypothesized relationship among these variables in a Latina sample. Social anxiety predicted severity of sexual victimization, but not presence or absence of sexual victimization experience. While alcohol did not predict severity of sexual victimization experience, it did predict presence or absence of sexual victimization experience. The role of alcohol use as a coping strategy seems to be important when it comes to increasing the likelihood that an individual with high social anxiety symptoms will get into a situation in which a coercion based sexual victimization experience is more likely to occur.

Hypothesis 1a that stated higher social anxiety symptoms would predict more severe coercion based sexual victimization experiences was supported. It seems that previous research is expandable to the Latina population. The prevailing theory is that those who experience higher levels of social anxiety symptoms have difficulty effectively communicating or fail to attempt to communicate their objections when they are in sexual situations that are risky or undesired (Schry & White, 2013).

Hypothesis 1b that stated social anxiety would be positively correlated with anxiety coping motivated alcohol use was supported. This seems to support the motivational models of

substance use which suggest that using substances to cope with psychological distress, such as social anxiety, is related to higher levels of use (Cooper, 1994; Piper, Piasecki, Federman, Bolt, Smith, Fiore, & Baker, 2004). Hypothesis 1c that stated that higher levels of alcohol use would predict more severe coercion based sexual victimization experiences was not supported. The low number of the sexually victimized participants who reported drinking at the time of their victimization (14.6%) indicates that alcohol use may not be as much of a risk factor for more severe sexual victimization for Latinas as it is for non-Hispanic whites. Anxiety coping motivated alcohol use may not increase the severity of coercion sexual victimization in Latinas, as it does in other populations. Because Latinas are at a high risk for sexual victimization it is important to identify other risk factors in order to reduce victimization risk in this population (Gross et al., 2015). A possible reason of why this hypothesis was not supported is the relatively low number of participants who answered the alcohol use portion of the survey. The lower numbers of those reporting alcohol use could be explained by Gender Schema Theory, which asserts people are socialized to adopt behaviors they perceive as gender congruent (Bem, 1981). This theory is implicated in research suggesting Latina women are discouraged from alcohol use (Fiorentino, Berger, & Ramirez, 2007). It could be that the Latina women felt discouraged when reporting alcohol use due to the gender stereotypes and therefore underreported. The low response rate on the alcohol measures could also be due to the relatively young age of the participants, with over half (52.4%) of the sample being under the age to legally purchase and consume alcohol in the United States. The participants could have been hesitant to report drinking if they were under the legal drinking age which could mean that the reported alcohol use numbers in this study may not have been representative of actual college students at the UTRGV. Anxiety coping motivated drinking did not mediate the relationship between social



anxiety and coercion based sexual victimization (hypothesis 2, Figure 1). This could be due to the reasons mentioned previously (low responding on the DMQ-R), or it could be that social anxiety has more to do with coercion based sexual victimization severity regardless of alcohol consumption in the Latina population. In the Latina population, alcohol did not seem to be an underlying reason why higher social anxiety symptoms led to more severe coercion sexual victimization. This specific relationship may only be applicable to certain populations as the majority of the past studies that found this were conducted on non-Hispanic participants. While this is only one study, the unique findings do take into question previous studies' generalizability to different populations. These findings highlight the need for different models across ethnic groups.

Acculturation did not moderate the relationship between social anxiety and severity of coercion based sexual victimization. This suggests that regardless of acculturation levels, Latinas with high social anxiety symptoms are highly vulnerable to coercion based sexual victimization. Social anxiety symptoms as a risk factor for more severe coercion based sexual victimization seem to be applicable to college Latinas, which highlights the severe impact that social anxiety symptoms can have on college students regardless of cultural immersion.

The current study performed several exploratory analyses in addition to the planned analyses to examine the hypothesized relationship. There were some mixed results in the exploratory analysis. First of all, social anxiety did not predict presence/absence of sexual victimization experience. It could be that individuals who are high in social anxiety symptoms are less likely to get into as many situations that would put them at risk for a sexual victimization experience. Social anxiety was positively correlated with anxiety coping based drinking behavior. This is expected as previously mentioned, the Motivational Models of substance use

suggest that using substances to cope with psychological distress (such as social anxiety) is related to higher levels of use (Cooper, 1994; Piper, Piasecki, Federman, Bolt, Smith, Fiore, & Baker, 2004). Finally, anxiety coping based drinking behavior was positively correlated with presence or absence of sexual victimization experience. This was also not surprising as previous literature has suggested that higher use of alcohol confers a particularly large risk for sexual assault victimization in women (Benson, Gohm, Gross, 2007; Gidycz, Van Wynsberghe, Edwards, 2008; Howard, Griffin, & Boekeloo, 2008; Messman-Moore, Coates, Gaffey, & Johnson, 2008). It appears that when it comes to presence or absence of sexual victimization, previous findings are applicable to the Latina population.

Anxiety coping motivated drinking was tested as a mediator between social anxiety and presence or absence of sexual victimization (Figure 5, Table 5). The results suggest that elevated social anxiety may be a risk factor of sexual victimization only when socially anxious Latinas use alcohol as an anxiety coping strategy. It may be that without the addition of alcohol those individuals with high social anxiety symptoms are not comfortable enough to be in social situations that increase the likelihood of sexual victimization. However, once they use alcohol as a coping mechanism to be in social situations, they are more at risk to be exposed to situations in which sexual victimization is more likely.

In conclusion, while social anxiety did not predict presence of sexual victimization experience, it did predict severity of coercion based sexual victimization experiences. Ineffective assertiveness techniques have been suggested as one of the factors that increase the severity of sexual victimization experiences in highly socially anxious individuals (Schry & White, 2013). Furthermore, anxiety coping based drinking did not predict severity of coercion sexual victimization experience, but it predicted whether there would be a sexual victimization

experience. The finding that anxiety coping based drinking did not predict severity of coercion sexual victimization experience is contrary to previous findings that were conducted on non-Hispanic ethnicities (Benson, Gohm, Gross, 2007; Gidycz, Van Wynsberghe, Edwards, 2008; Howard, Griffin, & Boekeloo, 2008; Messman-Moore, Coates, Gaffey, & Johnson, 2008). Again, this brings to light the necessity of different models of victimization for different ethnicities. There was evidence that social anxiety could predict presence or absence of sexual victimization if the individual engages in anxiety coping motivated alcohol consumption first. This leads to the conclusion that when it comes to whether or not a sexual victimization experience will occur, social anxiety symptoms are not enough to increase the likelihood of an incident occurring. As previously mentioned, it could be that individuals with high social anxiety symptoms will not seek out situations in which victimization is likely, but once they consume alcohol in order to cope with the anxiety (as the Motivational models of substance abuse suggest) they're more likely to be in those situations and because of the alcohol combined with their anxiety symptoms, more likely to be victimized (Cooper, 1994; Piper, Piasecki, Federman, Bolt, Smith, Fiore, & Baker, 2004). It seems that the alcohol is required in order to increase the likelihood of being victimized, but once the individuals are in situations in which they will be victimized their social anxiety symptoms increase the severity of those experiences.

The results of this study point towards many clinical implications. Although victims of sexual assault are never to blame, identification of potentially modifiable risk factors is still important to help women more effectively avoid and resist sexual victimization attempts. The results emphasize the importance in discussions of alcohol related consequences such as sexual victimization. They also point towards the usefulness of discussing alternative coping methods for those with social anxiety other than alcohol use. This study shows that the relationship

between social anxiety and severity of sexual victimization that has been seen in other ethnic groups in colleges is also a prevalent issue in the Hispanic college community. The fact that the relationship between social anxiety and sexual victimization has been seen in multiple ethnic groups emphasizes how important it is to identify social anxiety symptoms and treat them as soon as possible, not only due to the suffering its symptoms can cause, but also due to the potential consequences if left untreated (increased alcohol use and increased risk of a sexual victimization experience). The high number of individuals with sexual victimization experience (63%), whether artificial or not, highlights the need for adequate and possibly better community resources (e.g. psychological, legal, advocacy services) in the Hispanic college community.

Like all research, this study has some limitations that should be taken into account when interpreting the results. First, it is possible and in fact highly likely that there are many other variables that have an effect on the relationship between social anxiety and sexual victimization, such as the previously mentioned assertiveness. Secondly the participants were a convenience sample taken from a university setting in an area that is over 90% Hispanic, which may affect the generalizability of the results, however, this was intentional due to the low numbers of Hispanic representation in psychological research. The study had a relatively low sample size that was actually used for analysis, however due to the relatively stringent inclusion criteria, the current sample is very reliable. There were an extremely low number of participants in the non-victimized group (36.9%), this could be artificially low in that the SES-SFV was one of the first surveys the participants had to fill out and is lengthy. If the participants did not feel that the survey pertained to them they may have become bored and clicked through the rest of the survey without paying attention and therefore were excluded from the final analysis (finished quicker than 25 minutes/failed a verification question).

Future research should attempt to compare results in those with diagnosed social anxiety and those with only social anxiety symptoms. It should also attempt to have a higher number of participants as well as include those from the community rather than just those in a university setting. Being that acculturation did not seem to have an effect on the relationships in the tested models, acculturative stress would be an interesting variable to reanalyze them with. Finally, while difficult, it would be interesting to replicate this study with suggested changes in a male sample, as this is a population that is underrepresented in sexual victimization research. The unique findings in which anxiety coping motivated drinking was not related to more severe coercion sexual victimization and did not mediate the relationship between social anxiety and severity of coercion based sexual victimization highlights the need for testing alternative models for different ethnic groups.

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